THE CITY COUNCIL OF WATERLOO, IOWA
REGULAR SESSION TO BE HELD AT
Harold E. Getty Council Chambers
Monday, June 15, 2026
5:30 PM

CITY OF WATERLOO
COMMUNITY VISION PLAN

1. Fly the W: To develop a sense of pride and relationship between residents and the City of Waterloo, and then leverage that pride to communicate the City's attributes to external audiences.
2. Elevate Housing: Redevelop, renovate, or improve 800 residences in Waterloo in eight years by providing access to capital.
3. Celebrate and Connect Neighborhoods: To leverage Waterloo's rich tradition of neighborhoods by celebrating and connecting them with the community and region at large.
4. Waterloo Works: Grow a diverse and skilled workforce in Waterloo that connects people and employers for mutual growth.
5. Crossroads Doubledown: Re-energize the Crossroads Mall area into a sports/recreation-themed gravitational center.
6. Power Up Downtown: Keep Waterloo's core downtown evolving to meet the needs of future generations, supporting and showcasing arts and cultural opportunities and creating an experience like no other.
7. Sportstown USA: To generate excitement, develop youth, and drive investment and economic impact from year-round visitors.
8. Community of Opportunity: Eliminate barriers that keep Waterloo residents, and the community as a whole, from reaching its true potential, creating an equitable, thriving, and sustainable community for future generations. Waterloo is a Community of Opportunity, where everyone can prosper.

GENERAL RULES FOR PUBLIC PARTICIPATION REGULAR SESSION AGENDA

A. Iowa Code Chapter 21 gives the public the right to attend council meetings, but it does not require cities to allow public participation except during public hearings. The public is required to follow the rules listed in this article when speaking during any meeting of the city council.

B. At the presiding officer's discretion, individuals may address the presiding officer by stepping to the podium, and after recognition by the presiding officer, shall state their

name, address, and group affiliation, if appropriate, and speak clearly into the microphone.

C. Comments shall be germane and refrain from personal, impertinent, or slanderous remarks.
D. Cell phones and electronic devices shall be set to silent prior to the start of the meeting.

RULES FOR PUBLIC COMMENT SECTION OF THE AGENDA

A. Individuals shall speak one (1) time on only one (1) issue for a maximum of three (3) minutes During the public comment section of the agenda. The public shall not be required to pre-register to speak during public comment. Individuals shall only speak on matters not listed on the regular agenda for that date. Any matter presented shall be directed to the presiding officer and addressed, if necessary, after the meeting.
B. Council members may speak during public comment portion of the agenda after the public has finished speaking
C. City staff shall not be required to provide an immediate answer to a matter presented during a council meeting unless it specifically pertains to an item on the agenda

RULES FOR PUBLIC COMMENT DURING PUBLIC HEARINGS

Individuals may speak during the public comment portion of a scheduled public hearing for a maximum of three (3) minutes or may submit written comments to the city clerk by four o'clock (4:00) P.M. on the day of the public hearing. Groups of citizens with similar viewpoints are encouraged to select a representative to share the viewpoint of the group.

RULES FOR PUBLIC COMMENT DURING AGENDA ITEMS

At the discretion of the presiding officer, individuals may speak for a maximum of three (3) minutes when the council discusses agenda items. This section does not apply to businesses or parties directly involved in agenda items.

Roll Call.

Prayer or Moment of Silence.

Pledge of Allegiance, Steve Schmitt, Ward 1 Council Member.

Approval of Agenda as proposed or amended.

Approval of Minutes of the May 29, June 2, and the June 11, 2026, Council Special Sessions, and the June 1, 2026, Council Regular Session, as proposed or amended.

CONSENT AGENDA

The consent agenda is reserved for routine resolutions and motions, acted upon by roll call vote on a single motion without discussion. Council shall either vote yea or nay when the roll is called. Council members may request that an item be removed from the consent agenda and considered separately. Such a request does not require a second. The public shall be prohibited from requesting that items listed on the consent agenda be removed and considered separately. The public may contact council members with questions regarding consent agenda

items. 1-4A-16(A)(8).

1. Bills Payment, Finance Committee Invoice Summary Report, a copy of which is on file in the office of the City Clerk.

2. Resolution authorizing fund transfers, as listed in Exhibit "A" as required by law.

3. Resolution approving preliminary plans, specifications, form of contract, etc., setting date of bid opening as July 16, 2026, and date of public hearing as July 20, 2026, in conjunction with the FY 2023 Cattle Congress Sanitary Sewer Lift Station Reconstruction, Contract No. 1075, and instruct the City Clerk to publish notice.

4. Resolution approving a three percent salary increase for non-bargaining employees effective July 1, 2026.

5. Motion to approve Application for Fireworks Display: July 3rd 2026 Celebration, Main Street Waterloo. Park Avenue Bridge, beginning at 9:45 p.m. with July 5th rain date.

6. Motion to approve Application for Fireworks Display: July 5, 2026, Bamboo Ridge Campground, 4550 La Porte Road, beginning at 10:00 p.m. with July 6th rain date.

7. Motion to accept and place on file the arbitrage results reflecting that a rebate earnings payment of $190,495.59 is due to the Internal Revenue Service for the General Obligation Bonds Series 2023A.

8. Motion to approve network equipment and services Request For Proposals for the City fiber backbone project.

9. Motion approving an Exception to Burning Yard Waste Application by Dales Petroleum, Service to perform flaring of LP tanks for John Deere on property located not of the John Deere Sercie Part Building, June 16-19, 2026.

10. Motion to approve the hiring of **Andrew Shimp** from the current Civil Service List to the position of Solid Waste Technician in the Sanitation, effective June 16, 2026.

11. Motion to approve the hiring of **Keith Sammons** from the current Civil Service List to the position of Sewer Maintenance Worker in the Waste Management Services, Publice Works, effective June 16, 2026.

12. **Rajane Grant,** Board/Commission: Cultural and Arts Commission, Expiration Date: June 15, 2029, New appointment.

13. Communication from the Building Inspections Department on the notice of the conclusion of employment of Jeffrey Siebel, Property Safety Inspector, effective May 29, 2026, with recommendation of approval of payout of $974.66 for unused benefits.

14. Communication from the Building Department on the notice of the conclusion of employment of Gregory Ahlhelm, Building Official, effective May 18, 2026, with recommendation of approval of payout of $7,782.54 for unused benefits.

15. Communication from the Leisure Services Department on the notice of the conclusion of

employment of Joel Schares, Assistant Arena Manager, effective May 22, 2026, with recommendation of approval of payout of $3,489.15 for unused benefits.

16. Communication from the Library Department on the notice of the conclusion of employment of Adria Ebersole, Library Assistant, effective May 7, 2026, with recommendation of approval of payout of $3,091.74 for unused benefits.

17. Communication from the Police Department on the notice of the conclusion of employment of Corbin Payne, Police Lieutenant, effective May 19, 2026, with recommendation of approval of payout of $39,539.83 for unused benefits.

18. Motion to receive and file Board of Adjustment minutes for April 2026.

19. Motion to receive and file Planning, Programming, and Zoning Commission minutes of April 2026.

20. Motion to receive and file Historic Preservation Commission minutes of April 2026.

21. **Liquor Licenses**
    Benevolent & Protective Order of Elks #290, 407 E. Park Avenue, Class C w/Sunday Sales (Ownership Update x 3) Exp. 06/30/2027.
    Broadway Liquor, 821 Broadway Street, Class E w/Sunday Sales (Renewal) Exp. 06/10/2027.
    Cedar Valley Irish Cultural AS, 330 E. 4th Street, Class C w/Outdoor Service and Sunday Sales (New-5-Day) Exp. 08/03/2026.
    Chaser's Pub, 3005 University Avenue, Class E w/Outdoor Service and Sunday Sales (Renewal) Exp. 07/07/2026.
    Doughy Joey's, 300 W. 4th Street, Class C w/Outdoor Service and Sunday Sales (Renewal) Exp. 02/07/2027.
    Family Dollar Store #32879, Class B w/Sunday Sales, (New) Exp. 05/14/2027.
    Hickory House, 3154 Park Road, Class C w/Sunday Sales, (Renewal) Exp. 05/23/2027.
    Highway 63 Diner, 3030 Marnie Road, Class C w/Sunday Sales, (Renewal) Exp. 06/30/2027.
    Hungry Charlie's/Fester's Pub, 324 E. 4th Street, Class C w/Sunday Sales, (Ownership Update) Exp. 07/21/2026.
    Kwik Stop 4, 515 Broadway Street, Class E w/Sunday Sales, (Renewal) Exp. 05/07/2027.
    Linn Mart, 926 Linn Street, Class E w/Sunday Sales, (Renewal) 05/15/2027.
    Newton's Paradise Cafe, 128 E. 4th Street, Class C w/Outdoor Service and Sunday Sales, (Modify Privileges Outdoor Service) Exp. 01/31/2027.
    Poppy's Sports Pub, 2026 Bopp Street, Class C w/Outdoor Service and Sunday Sales, (Renewal) Exp. 06/05/2027.
    Steamboat Gardens, 1740 Falls Avenue, Class C w/Sunday Sales, (Renewal) Exp. 06/13/2027.
    Sunnyside Country Club, 1600 Olympic Drive, Class F w/Outdoor Service and Sunday Sales, (Renewal) Exp. 04.13.2027.
    WCA Building Amphitheatre, 225 Commercial Street, Class C Special, (Temporary Unlicense Portion) Exp. 07/05/2026.

22. **Cigarette/Tobacco/Nicotine/Vapor Permits**
    7 Star Liquor & Tobacco, 2844 University Avenue (Retail Tobacco).
    Behar Bar, 312 W. 4th Street (Retail Tobacco).

Casey's General Store #2427, 3035 Logan Avenue, (Retail Tobacco).
Casey's General Store #2866, 51 E. Tower Park Drive, (Retail Tobacco).
Casey's General Store #2867, 2424 Ranchero Road (Retail Tobacco).
Casey's General Store #2879, 3260 University Avenue, (Retail Tobacco).
Casey's General Store #2880, 1604 La Porte Road, (Retail Tobacco).
Casey's General Store #3880, 1900 W. Ridgeway Avenue, (Retail Tobacco).
Family Dollar #25600, 611 Broadway Street, (Retail Tobacco).
Family Dollar #32879, 1608 University Avenue, (Retail Tobacco).
Family Dollar #10944, 2206 Kimball Avenue, (Retail Tobacco).
Hometown Foods, 1010 E. Mitchell Avenue (Retail Tobacco).
Jim Lind Service, 230 E. Mitchell Avenue (Retail Tobacco) (New).
Karma Bar, 309 W. 4th Street (Retail Tobacco).
Kwik Stop 4, 515 Broadway Street (Retail Tobacco)
Love's Travel Stop #702, 3301 Greyhound Drive Ste. A (Retail Tobacco).
Marshall BWS, 2060 Sovia Drive, Ste. 112 (Retail Tobacco).
New Star, 1020 Franklin Street (Retail Tobacco).
Pink Cloud Smoke Shop, 3026 Ansborough Avenue (Retail Tobacco).
Pink Cloud Smoke Shop, 3026 Ansborough Avenue, (Device Permit).
Prime Mart 7, 1309 Lafayette street, (Retail Tobacco).
Prime Mart 7, 1309 Lafayette street, (Device Permit).
R Smoke Plus Waterloo, 3620 Kimball Avenue, (Device Permit).
The Spot #3, 117 E. San Marnan Drive, (Retail Permit).
Tobacco & Vape, 3821 University Avenue, (Device Permit).
UNI Mart, 1615 Bishop Avenue, (Retail Tobacco).
Walmart #1496, 1334 Flammang Drive, (Retail Tobacco).
West Side Convenience/West Side Liquor (Retail Tobacco).
XO Food & Liquor, 428 Franklin Street, (Retai Tobacco).
Yesway #1022, 1976 Franklin Street, (Retail Tobacco).

23. Bonds.

RESOLUTIONS

1. Resolution approving the Agreement with Ramp Business Corporation for the purpose of making available a Purchasing Card Program, Expense Tracking, and Travel Platform in the amount of $5,500.00, and authorizing the Mayor to execute said document.

   Submitted by: Bridgett Wood, Finance Director

2. Resolution approving the renewal of a three-year software contract with Fifth Asset, Inc., DBA DebtBook, for the purpose of debt management, lease management, and subscription management, and authorizing the Finance Manager to execute said document.

   Submitted by: Bridgett Wood, Finance Director

3. Resolution Appointing Paying Agent, Note Registrar, and Transfer Agent, Approving the Paying Agent and Note Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement, for the $3,500,000.00 Sewer Revenue Capital Loan Notes, Series 2026A.

   Submitted by: Bridgett Wood, Finance Director

4. Resolution approving and authorizing a form of Loan Agreement and authorizing and providing for the issuance of Sewer Revenue Capital Loan Note 2026A $3,500,000.00 and providing for a method of payment of the Notes; Approval of the Tax Exemption Certificate.

   Submitted by: Bridgett Wood, Finance Director

5. Resolution Appointing Paying Agent, Note Registrar, and Transfer Agent, Approving the Paying Agent and Note Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement, for the $10,300,000 General Obligation Bonds, Series 2026B.

   Submitted by: Bridgett Wood, Finance Director

6. Resolution authorizing and providing for the issuance, and levying a tax to pay the $10,300,000 General Obligation Bonds, Series 2026B and approval of the Tax Exemption Certificate and Continuing Disclosure Certificate.

   Submitted by: Bridgett Wood, Finance Director

7. Resolution Appointing Paying Agent, Note Registrar, and Transfer Agent, Approving the Paying Agent and Note Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement, $1,700,000.00 2026C Taxable General Obligation Bonds.

   Submitted by: Bridgett Wood, Finance Director

8. Resolution authorizing and providing for the issuance, and levying a tax to pay the $1,700,000 Taxable General Obligation Bonds, Series 2026C and approval of the Continuing Disclosure Certificate.

   Submitted by: Bridgett Wood, Finance Director

9. Resolution approving a Professional Services Agreement with Employee and Family Resources of Des Moines, Iowa, in the amount of $13,389.75, to continue to provide an Employee Assistance Program, and authorizing the Mayor to execute said document.

   Submitted by: Lance Dunn, Human Resources Director

10. Resolution approving a School Resource Officer Agreement with the Waterloo Community School District to provide six School Resource Officers in the schools in the amount of $406,293.00 for FY 2027, $426,608.00 for FY 2028, $447,938.00 for FY29 and $470,335.00 for FY 2030, including funding for Officer training, and authorizing the Mayor and City Clerk to execute said document.

    Submitted by: Rob Duncan, Chief of Police

11. Resolution approving Supplemental Agreement No.1 to a Professional Services Agreement originally executed October 17, 2022, with AECOM Technical Services, Inc., of Waterloo, Iowa, in an amount not to exceed $385,100.00 in conjunction with the Cattle Congress Lift Station and Force Main Project Contract No. 1075, and authorizing the Mayor to execute said document.

    Submitted by: Randy Bennett, Public Works Division Manager

12. Resolution Approving a Professional Services Agreement with B32 Engineering Group of Hudson, Wisconsin, to design, provide bid assistance, and construction observation of

installation of new ice plant refrigeration equipment and related equipment at Young Arena, and authorizing the Mayor to execute said document.

Submitted by: Todd Derifield, Leisure Services Director

13. Resolution approving a Temporary Easement Agreement in the amount of $328.00 with Joseph Gbelley Armah and Johnet J. Dosee, located at 1431 Edgewood Drive, in conjunction with the Katoski Drive/Huntington Road Reconstruction Project, and authorizing the Mayor and City Clerk to execute said document.

    Submitted by: Noel Anderson, Community Planning and Development Director

14. Resolution approving a Temporary Easement Agreement in the amount of $1,877.00, with SHRI GAYATRI MA, Inc., located at 2056 La Porte Road and Parcel No. 8813-02-277-026, in conjunction with the La Porte Road Phase III Reconstruction Project, and authorizing the Mayor and City Clerk to execute said document.

    Submitted by: Noel Anderson, Community Planning and Development Director

15. Resolution approving a Temporary Easement Agreement in the amount of $100.00 with Timothy L. Hintz, located at 1297 South Hackett Road, in conjunction with the Katoski Drive/Huntington Road Reconstruction Project, and authorizing the Mayor and City Clerk to execute said document.

    Submitted by: Noel Anderson, Community Planning and Development Director

16. Resolution approving a Development and Minimum Assessment Agreement with Plumb Supply Company, LLC, in the amount of $1,630,700.00 for the expansion of an approximately 20,000 square-foot commercial building, five years at fifty percent tax rebates, and authorizing the Mayor and City Clerk to execute said documents.

    Submitted by: Noel Anderson, Community Planning and Development Director

17. Resolution approving documents, and adopt and levy the Final Schedule of Assessments, in conjunction with the FY 2026 Sidewalk Repair Assessment Program - Zone 5A, Contract No. 1127, and instruct the City Clerk to publish notice.

    Submitted by: Jamie Knutson, City Engineer

18. Resolution approving a Site Lease for City-Owned Property Agreement with Croell, Inc., in the amount of $10,000.00, for placing and operating a portable concrete batch plant, and authorizing the Mayor and City Clerk to execute said document.

    Submitted by: Jamie Knutson, City Engineer

19. Resolution approving a Permanent Easement Agreement with Love's Travel & Country Stores, Inc., to serve as a drainage easement, in conjunction with the FY 2024 Sergeant Road Trail Repairs, and authorizing Mayor and City Clerk to execute said document.

    Submitted by: Jamie Knutson, City Engineer

20. Resolution approving an Improvement Fund Award Agreement with the Iowa Flood Mitigation Board in the amount of $1,315,000.00, for repairs to the Virden Creek Dam, and authorizing the Mayor to execute said document.

Submitted by: Jamie Knutson, City Engineer

ORDINANCES

1. **Ordinance establishing grades for the City of Waterloo FY 2026 Sidewalk Repair Assessment Program – Zone 5A, Contract No. 1127.**

   Motion to receive, file, consider, and pass for the first time an ordinance establishing grades for the City of Waterloo FY 2026 Sidewalk Repair Assessment Program – Zone 5A, Contract No. 1127.
   Motion to suspend the rules.
   Motion to receive, file, consider, and pass for the second and third times and adopt said ordinance.

   Submitted by: Jamie Knutson, City Engineer

PUBLIC COMMENTS

Iowa Code Chapter 21 gives the public the right to attend council meetings but it does not require cities to allow public participation except during public hearings. The City of Waterloo encourages the public to participate during the Oral Presentations by following the rules listed on the front of the agenda.

ADJOURNMENT

Motion to adjourn.

Kelley Felchle
City Clerk

May 29, 2026

The City Council of the City of Waterloo, Iowa, met in Special Session at Harold E. Getty Council Chambers, Waterloo, Iowa, at 11:00 AM, on Friday, May 29, 2026.

Pre-Meeting Items

Roll Call.

Mayor Dave Boesen in the Chair. Roll Call: Mr. Morrow, Ms. Berry, Mr. Salamanca, Mr. Martin and Mr. Simon. Mr. Schmitt and Ms. Creighton-Smith were absent.

Approval of Agenda as proposed or amended.

Salamanca/Berry
that the agenda as proposed be approved. Voice vote-Ayes: Five. Motion carried.

OTHER COUNCIL BUSINESS

Motion approving a new Class C Retail Alcohol License with outdoor service for Smitty's Bar, 709 Jefferson Street, expiration date 5/25/2027.

Martin/Berry
Voice vote-Ayes: Five. Motion carried.

ADJOURNMENT

Salamanca/Berry
that the council adjourn at 11:11 a.m. Voice vote-Ayes: Five. Motion carried.

_____
Kelley Felchle
City Clerk

June 2, 2026

The City Council of the City of Waterloo, Iowa, met in Special Session at Harold E. Getty Council Chambers, Waterloo, Iowa, at 5:00 PM, on Tuesday, June 2, 2026.

Pre-Meeting Items

Roll Call.

Members present: Mayor Boesen in the Chair. Roll Call: Mr. Schmitt, Mr. Morrow, Ms. Berry, Mr. Salamanca, Mr. Martin and Mr. Simon. Ms. Creighton-Smith was absent.

Approval of Agenda as proposed or amended.

Simon/Morrow
that the agenda as presented be approved. Voice vote-Ayes: Six. Motion carried.

Maggie Burger, Speer Financial, provided an overview of the Sewer Revenue Capital Loan Notes sale of $10,300,000.00 General Obligation Bonds Series 2026B and sale of $1,700,00.00 General Obligation Bonds, Series 2026C.

RESOLUTIONS

Resolution directing the acceptance of a proposal to purchase $3,500,000* (subject to adjustment) Sewer Revenue Capital Loan Notes Series 2026A.

Morrow/Martin
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-312.

Resolution directing sale of $10,300,000.00* (Subject to Adjustment Per Terms of Offering) General Obligation Bonds, Series 2026B.

Morrow/Martin
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-313.

Resolution directing sale of $1,700,000.00* (Subject to Adjustment Per Terms of Offering) Taxable General Obligation Bonds, Series 2026C.

Morrow/Martin
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-314.

ADJOURNMENT

Simon/Martin
that the council adjourn at 5:21 p.m. Voice vote-Ayes: Six. Motion carried.

_____

Kelley Felchle
City Clerk

ITEMS TO INCLUDE ON AGENDA
FOR THE COUNCIL MEETING ON JUNE 2, 2026

CITY OF WATERLOO, IOWA

$3,500,000* (Subject to Adjustment) Sewer Revenue Capital Loan Notes, Series 2026A

- Resolution Directing the Acceptance of a Proposal to Purchase $3,500,000* (Subject to Adjustment) Sewer Revenue Capital Loan Notes, Series 2026A.

NOTICE MUST BE GIVEN PURSUANT TO IOWA CODE CHAPTER 21 AND THE LOCAL RULES OF THE CITY.

June 2, 2026

The City Council of the City of Waterloo, State of Iowa, met in _____ session, in the Council Chambers, City Hall, 715 Mulberry Street, Waterloo, Iowa, at _____ _____.M., on the above date. There were present Mayor Dave Boesen, in the chair, and the following named Council Members:

_____

Absent: _____

Vacant: _____

* * * * * * *

Council Member _____ introduced the following Resolution entitled "RESOLUTION DIRECTING THE ACCEPTANCE OF A PROPOSAL TO PURCHASE $3,500,000* (SUBJECT TO ADJUSTMENT) SEWER REVENUE CAPITAL LOAN NOTES, SERIES 2026A" and moved that it be adopted. Council Member _____ seconded the motion to adopt, and the roll being called thereon, the vote was as follows:

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared the Resolution duly adopted as follows:

RESOLUTION NO. _____

RESOLUTION DIRECTING THE ACCEPTANCE OF A PROPOSAL TO PURCHASE $3,500,000* (SUBJECT TO ADJUSTMENT) SEWER REVENUE CAPITAL LOAN NOTES, SERIES 2026A

WHEREAS, the City of Waterloo, sometimes hereinafter referred to as the City, is a municipal corporation duly incorporated, organized and existing under and by virtue of the Constitution and laws of the State of Iowa; and

WHEREAS, it is deemed necessary that the City should enter into a Loan Agreement and borrow the amount of $3,500,000* (Subject to Adjustment) as authorized by Sections 384.24A and 384.83, Code of Iowa as amended; and

WHEREAS, proposals have been requested and received from financial institutions offering to enter into such Loan Agreement; and

WHEREAS, after a review of all the proposals received, it has been determined that the best and most favorable proposal is that of _____ of _____, _____; and

WHEREAS, it is the intention of this City Council to enter into a Loan Agreement in accordance with said proposal dated _____, 2026.

NOW THEREFORE, BE IT RESOLVED, BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. That this City Council does hereby accept the attached proposal of _____ of _____, _____, and takes additional action to permit the entering into of a Loan Agreement.

Section 2. The Mayor and City Clerk are authorized and directed to proceed on behalf of the City to enter into such Loan Agreement, to negotiate the final terms of a Loan Agreement to take all action necessary to permit the entering into of a Loan Agreement on a basis favorable to the City and acceptable to the Purchaser, and to proceed to meet the conditions of this accepted proposal.

PASSED AND APPROVED this 2nd day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

(Attach Copy of Terms of Proposal)

CERTIFICATE

STATE OF IOWA)
) SS
COUNTY OF BLACK HAWK)

I, the undersigned City Clerk of the City of Waterloo, State of Iowa, do hereby certify that attached is a true and complete copy of the portion of the records of the City showing proceedings of the Council, and the same is a true and complete copy of the action taken by the Council with respect to the matter at the meeting held on the date indicated in the attachment, which proceedings remain in full force and effect, and have not been amended or rescinded in any way; that meeting and all action thereat was duly and publicly held in accordance with a notice of meeting and tentative agenda, a copy of which was timely served on each member of the Council and posted on a bulletin board or other prominent place easily accessible to the public and clearly designated for that purpose at the principal office of the Council pursuant to the local rules of the Council and the provisions of Chapter 21, Code of Iowa, upon reasonable advance notice to the public and media at least twenty-four hours prior to the commencement of the meeting as required by law and with members of the public present in attendance; I further certify that the individuals named therein were on the date thereof duly and lawfully possessed of their respective City offices as indicated therein, that no Council vacancy existed except as may be stated in the proceedings, and that no controversy or litigation is pending, prayed or threatened involving the incorporation, organization, existence or boundaries of the City or the right of the individuals named therein as officers to their respective positions.

WITNESS my hand and the seal of the Council hereto affixed this _____ day of _____, 2026.

_____
City Clerk, City of Waterloo, State of Iowa

(SEAL)

4896-7657-8734-1\11310-180

ITEMS TO INCLUDE ON AGENDA
FOR THE COUNCIL MEETING ON JUNE 2, 2026

CITY OF WATERLOO, IOWA

$10,300,000* (Subject to Adjustment per Terms of Offering) General Obligation Bonds, Series 2026B

- Receipt of bids.
- Resolution directing sale.

NOTICE MUST BE GIVEN PURSUANT TO IOWA CODE CHAPTER 21 AND THE LOCAL RULES OF THE CITY.

June 2, 2026

The Finance Director of the City of Waterloo, State of Iowa, or her designee, met in City Hall, 715 Mulberry Street, Waterloo, Iowa, at 10:30 A.M., on the above date, to open sealed bids received, access electronic bids and to refer the sale of the Bonds to the best and most favorable bidder for cash, subject to approval by the City Council at 5:00 P.M. on the above date.

The following persons were present:

_____

_____

_____

* * * * * * * *

This being the time and place for the opening of bids for the sale of $10,300,000* (Subject to Adjustment per Terms of Offering) General Obligation Bonds, Series 2026B, the meeting was opened for the receipt of bids for the Bonds. The following actions were taken:

1. Sealed bids were filed and listed in the minutes while unopened, as follows:

Name & Address of Bidders:

(Attach List of Bidders)

2. The City Clerk then declared the time for filing of sealed bids to be closed and that the sealed bids be opened. The sealed bids were opened and announced.

3. Electronic bids received were accessed and announced as follows:

Name & Address of Bidders:

(Attach List of Bidders)

4. The best bid was determined to be as follows:

Name & Address of Bidder: _____

True Interest Rate (as-bid): _____%

Net Interest Cost (as-bid): $_____

In consultation with Speer Financial, Inc., the City's Municipal Advisor, the City considered the adjustment of the aggregate principal amount of the Bonds and each scheduled maturity thereof in accordance with the Terms of Offering and the following actions were taken:

Final Par Amount as adjusted: $_____

Purchase Price as adjusted: $_____

All bids were then referred to the Council for action.

June 2, 2026

The City Council of the City of Waterloo, State of Iowa, met in _____ session, in the Council Chambers, City Hall, 715 Mulberry Street, Waterloo, Iowa, at _____ _____.M., on the above date. There were present Mayor Dave Boesen, in the chair, and the following named Council Members:

_____

Absent: _____

Vacant: _____

* * * * * * *

Council Member _____ introduced the following Resolution entitled "RESOLUTION DIRECTING SALE OF $10,300,000* (SUBJECT TO ADJUSTMENT PER TERMS OF OFFERING) GENERAL OBLIGATION BONDS, SERIES 2026B," and moved its adoption. Council Member _____ seconded the motion to adopt. The roll was called and the vote was,

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared the following Resolution duly adopted:

RESOLUTION DIRECTING SALE OF $10,300,000* (SUBJECT TO ADJUSTMENT PER TERMS OF OFFERING) GENERAL OBLIGATION BONDS, SERIES 2026B

WHEREAS, bids have been received for the Bonds described as follows and the best bid received (with permitted adjustments, if any) is determined to be the following:

$10,300,000* (SUBJECT TO ADJUSTMENT PER TERMS OF OFFERING) GENERAL OBLIGATION BONDS, SERIES 2026B

Bidder: _____ of _____

The terms of award:

Final Par Amount as adjusted: $_____

Purchase Price as adjusted: $ _____

True Interest Rate: _____%

Net Interest Cost: $_____

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. That the bid for the Bonds as above set out is hereby determined to be the best and most favorable bid received and, the Bonds are hereby awarded as described above.

Section 2. That the statement of information for Bond bidders and the form of contract for the sale of the Bonds are hereby approved and the Mayor and Clerk are authorized to execute the same on behalf of the City.

Section 3. That the notice of the sale of the Bonds heretofore given and all acts of the Clerk done in furtherance of the sale of the Bonds are hereby ratified and approved.

PASSED AND APPROVED this 2nd day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

CERTIFICATE

STATE OF IOWA)
) SS
COUNTY OF BLACK HAWK)

I, the undersigned City Clerk of the City of Waterloo, State of Iowa, do hereby certify that attached is a true and complete copy of the portion of the records of the City showing proceedings of the Council, and the same is a true and complete copy of the action taken by the Council with respect to the matter at the meeting held on the date indicated in the attachment, which proceedings remain in full force and effect, and have not been amended or rescinded in any way; that meeting and all action thereat was duly and publicly held in accordance with a notice of meeting and tentative agenda, a copy of which was timely served on each member of the Council and posted on a bulletin board or other prominent place easily accessible to the public and clearly designated for that purpose at the principal office of the Council pursuant to the local rules of the Council and the provisions of Chapter 21, Code of Iowa, upon reasonable advance notice to the public and media at least twenty-four hours prior to the commencement of the meeting as required by law and with members of the public present in attendance; I further certify that the individuals named therein were on the date thereof duly and lawfully possessed of their respective City offices as indicated therein, that no Council vacancy existed except as may be stated in the proceedings, and that no controversy or litigation is pending, prayed or threatened involving the incorporation, organization, existence or boundaries of the City or the right of the individuals named therein as officers to their respective positions.

WITNESS my hand and the seal of the Council hereto affixed this _____ day of _____, 2026.

_____
Kelley Felchle, City Clerk, City of Waterloo, State of Iowa

(SEAL)

4899-3071-4795-1\11310-181

ITEMS TO INCLUDE ON AGENDA
FOR THE COUNCIL MEETING ON JUNE 2, 2026

CITY OF WATERLOO, IOWA

$1,700,000* (Subject to Adjustment per Terms of Offering) Taxable General Obligation Bonds, Series 2026C

- Receipt of bids.
- Resolution directing sale.

NOTICE MUST BE GIVEN PURSUANT TO IOWA CODE CHAPTER 21 AND THE LOCAL RULES OF THE CITY.

June 2, 2026

The Finance Director of the City of Waterloo, State of Iowa, or her designee, met in City Hall, 715 Mulberry Street, Waterloo, Iowa, at 11:00 A.M., on the above date, to open sealed bids received, access electronic bids and to refer the sale of the Bonds to the best and most favorable bidder for cash, subject to approval by the City Council at 5:00 P.M. on the above date.

The following persons were present:

_____

_____

_____

* * * * * * * *

This being the time and place for the opening of bids for the sale of $1,700,000* (Subject to Adjustment per Terms of Offering) Taxable General Obligation Bonds, Series 2026C, the meeting was opened for the receipt of bids for the Bonds. The following actions were taken:

1. Sealed bids were filed and listed in the minutes while unopened, as follows:

Name & Address of Bidders:

(Attach List of Bidders)

2. The City Clerk then declared the time for filing of sealed bids to be closed and that the sealed bids be opened. The sealed bids were opened and announced.

3. Electronic bids received were accessed and announced as follows:

Name & Address of Bidders:

(Attach List of Bidders)

4. The best bid was determined to be as follows:

Name & Address of Bidder: _____

True Interest Rate (as-bid): _____%

Net Interest Cost (as-bid): $_____

In consultation with Speer Financial, Inc., the City's Municipal Advisor, the City considered the adjustment of the aggregate principal amount of the Bonds and each scheduled maturity thereof in accordance with the Terms of Offering and the following actions were taken:

Final Par Amount as adjusted: $_____

Purchase Price as adjusted: $_____

All bids were then referred to the Council for action.

June 2, 2026

The City Council of the City of Waterloo, State of Iowa, met in _____ session, in the Council Chambers, City Hall, 715 Mulberry Street, Waterloo, Iowa, at _____ _____.M., on the above date. There were present Mayor Dave Boesen, in the chair, and the following named Council Members:

_____

Absent: _____

Vacant: _____

* * * * * * *

Council Member _____ introduced the following Resolution entitled "RESOLUTION DIRECTING SALE OF $1,700,000* (SUBJECT TO ADJUSTMENT PER TERMS OF OFFERING) TAXABLE GENERAL OBLIGATION BONDS, SERIES 2026C," and moved its adoption. Council Member _____ seconded the motion to adopt. The roll was called and the vote was,

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared the following Resolution duly adopted:

RESOLUTION DIRECTING SALE OF $1,700,000* (SUBJECT TO ADJUSTMENT PER TERMS OF OFFERING) TAXABLE GENERAL OBLIGATION BONDS, SERIES 2026C

WHEREAS, bids have been received for the Bonds described as follows and the best bid received (with permitted adjustments, if any) is determined to be the following:

$1,700,000* (SUBJECT TO ADJUSTMENT PER TERMS OF OFFERING) TAXABLE GENERAL OBLIGATION BONDS, SERIES 2026C

Bidder: _____ of _____

The terms of award:

Final Par Amount as adjusted: $_____

Purchase Price as adjusted: $ _____

True Interest Rate: _____%

Net Interest Cost: $_____

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. That the bid for the Bonds as above set out is hereby determined to be the best and most favorable bid received and, the Bonds are hereby awarded as described above.

Section 2. That the statement of information for Bond bidders and the form of contract for the sale of the Bonds are hereby approved and the Mayor and Clerk are authorized to execute the same on behalf of the City.

Section 3. That the notice of the sale of the Bonds heretofore given and all acts of the Clerk done in furtherance of the sale of the Bonds are hereby ratified and approved.

PASSED AND APPROVED this 2nd day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

CERTIFICATE

STATE OF IOWA)
) SS
COUNTY OF BLACK HAWK)

I, the undersigned City Clerk of the City of Waterloo, State of Iowa, do hereby certify that attached is a true and complete copy of the portion of the records of the City showing proceedings of the Council, and the same is a true and complete copy of the action taken by the Council with respect to the matter at the meeting held on the date indicated in the attachment, which proceedings remain in full force and effect, and have not been amended or rescinded in any way; that meeting and all action thereat was duly and publicly held in accordance with a notice of meeting and tentative agenda, a copy of which was timely served on each member of the Council and posted on a bulletin board or other prominent place easily accessible to the public and clearly designated for that purpose at the principal office of the Council pursuant to the local rules of the Council and the provisions of Chapter 21, Code of Iowa, upon reasonable advance notice to the public and media at least twenty-four hours prior to the commencement of the meeting as required by law and with members of the public present in attendance; I further certify that the individuals named therein were on the date thereof duly and lawfully possessed of their respective City offices as indicated therein, that no Council vacancy existed except as may be stated in the proceedings, and that no controversy or litigation is pending, prayed or threatened involving the incorporation, organization, existence or boundaries of the City or the right of the individuals named therein as officers to their respective positions.

WITNESS my hand and the seal of the Council hereto affixed this _____ day of _____, 2026.

_____
Kelley Felchle, City Clerk, City of Waterloo, State of Iowa

(SEAL)

4918-7969-0923-1\11310-183

June 1, 2026

The City Council of the City of Waterloo, Iowa, met in Regular Session at Harold E. Getty Council Chambers, Waterloo, Iowa, at 5:30 PM, on Monday, June 1, 2026.

Pre-Meeting Items

Roll Call.

Mayor Dave Boesen in the Chair. Mr. Schmitt, Mr. Morrow, Ms. Berry, Mr. Salamanca, Mr. Martin and Mr. Simon. Ms. Creighton-Smith was absent.

Prayer or Moment of Silence.

Pledge of Allegiance, Kelley Felchle, City Clerk.

Approval of Agenda as proposed or amended.

Simon/Martin
that the agenda as amended, by removing Resolution #11, be approved. Voice vote-Ayes: Six. Motion carried.

Approval of Minutes of the May 18, 2026, Council Regular Session as proposed or amended.

that the minutes of the May 18, 2026, Regular Council Session be approved as presented. Voice vote-Ayes: Six. Motion carried.

CONSENT AGENDA

Simon/Salamanca
that the following items on the consent agenda be received and placed on file, including the payment of bills for May 26, 2026, in the amount of $20,847,501.86and June 1, 2026, in the amount of $3,911,417.45, be received and placed on file. Roll Call vote-Ayes: Six. Motion carried.

Bills Payment, Finance Committee Invoice Summary Report, a copy of which is on file in the office of the City Clerk.

Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-292.

Resolution approving the request of Dan Holschlag for a waiver for a concrete driveway, located at 1103 Upton Avenue (approach on Aladdin Street), with the elimination of the sidewalk section due to inability to meet grade requirements.

Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-293.

Resolution approving preliminary plans, specifications, form of contract, etc., setting date of bid opening as June 25, 2026, and date of public hearing as July 20, 2026, in conjunction with Asbestos Abatement Services, Contract AB-2026-06-01P (1442 Sycamore Street, former Rath buildings), and instruct the City Clerk to publish notice.

Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-294.

Resolution setting the date of public hearing as July 6, 2026, to approve the final selection of route and authorizing to acquire or condemn necessary property for right-of-way, permanent easements, and temporary easements related to the Katoski Drive/Huntington Road reconstruction, generally located east and south of 1350 Katoski Drive, extending to the west city limits line, and instruct the City Clerk to publish public notice.

Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-295.

Resolution approving award of hotel/motel tax council discretionary funds to the Americans for Independent Living, in the amount of $20,000.00, for the Field of Honor Project, commemorating America's 250th Anniversary and honoring veterans, active military personnel, and those who have served our nation.

Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-296.

Motion to approve Change Order No. 01 with K and W Electric, Inc., of lump sum modification, for a net increase of $38,822.50, in conjunction with Broadway Traffic Adaptive Project, Contract No. 785, and authorizing the Mayor and City Clerk to execute said document.

Communication from the Street Department on the notice of the conclusion of employment of Haris Tricic, Equipment Operator II, effective May 1, 2026, with recommendation of approval of payout of $4,279.22 for unused benefits.

Motion to receive and file Leisure Services Commission Board minutes of April 14, 2026.

Motion to receive and file Airport Board minutes of April 13, 2026.

Sara Varda, Board/Commission: Civil Service Commission, Expiration Date: June 1, 2032, New appointment.

Emily Hanson, Board/Commission: Waterloo Convention and Visitors Bureau, Expiration Date: June 1, 2029, New appointment.

Liquor Licenses

American Legion, 728 Commercial Street, Class C w/Sunday Sales, (Ownership Update) Exp:06/14/2026.
CVS Pharmacy 8544, 1825 E. San Marnan Drive, Class E w/Sunday Sales (Renewal) Exp:05/31/2027.
Edo's Sports Bar, 110 E. 11th Street, Class C w/Sunday Sales, (Renewal) Exp:05/07/2027.
Fraternal Order of Eagles No. 764, 202 E, 1st Street Class F w/Sunday Sales (Ownership Update) Exp:07/14/2026.
Hickory House, 315 Park Road, Class C w/Sunday Sales (Ownership Updates) Exp:05/23/2027.
Metro Mart 1, 3201 W. 4th Street, Class B w/Sunday Sales (Renewal) Exp:07/06/2027.
Metro Mart 4, 2332 Falls Avenue, Class E w/Sunday Sales (Renewal) Exp:06/30/2027.
National Cigar Store/Sycamore Convenience, 617-619 Sycamore Street, Class E w/Sunday Sales, (Renewal) Exp:03/11/2027.
Walgreens 10855, 1850 Logan Avenue, Class E w/ Sunday Sales (Renewal) Exp:06/16/2027.
Wal-Mart Supercenter 1496, 1335 Flammang Drive, Class E w/Sunday Sales (Premises Update) Exp:09/30/2026.

Cigarette/Tobacco/Nicotine/Vapor Permits

BJ's Sports Bar and Billiards, 110 IDA Street (Retail Tobacco)
Club Ambassador, 313 W. 5th Street (Machine)
K-ZAR, 1761 Independence Avenue, (Retail Tobacco)
Logan Avenue Convenience Store, 735 Logan Avenue (Retail Tobacco)
Logan Avenue Convenience Store, 735 Logan Avenue (Device Permit)
Ray's Supermarket, 1975 Franklin Street (Retail Tobacco)
Smoke.O.S., 1509 Flammang Drive (Retail Tobacco)
Walgreens No. 10855, 1850 Logan Avenue (Retail Permit)
Walgreens No. 3590, 3910 University Avenue (Retail Permit)

RESOLUTIONS

Resolution approving an Employment Agreement with Rob Duncan for the position of Police Chief, and authorizing the Mayor to execute said document.

Schmitt/Simon
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-297.

Resolution approving a Cost Optimization Engagement Agreement with Merchant Cost Consulting LLC, for analyzing merchant services accounts and provide comprehensive cost optimization, advisory, audit, negotiation, and vendor management services across our merchant services, and authorizing the Mayor to execute said document.

Schmitt/Simon
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-298.

Mr. Morrow requested an overview of the item.

Bridgett Wood, Finance Director, provided an explanation of the agreement.

Resolution approving an Educational Services Contract with Grout Museum, Inc., in the amount of $625,000.00, to provide educational services and enhance the quality of life for the residents of Waterloo, Iowa, from July 1, 2026 - June 30, 2027, and authorizing the Mayor to execute said document.

Schmitt/Simon
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-299.

Mr. Salamanca requested an overview of the agreement.

Bridgett Wood, Finance Director, explained that the purpose of the agreement is to define the public purpose of funding the Grout Musueum.

Resolution approving award of Parking Operations and Management Services RFP to PCI Municipal Services LLC, and approving an agreement for parking operations management with said company with a start date of July 1, 2026, with a five year term and renewal options as listed in said agreement, and authorizing Mayor and City Clerk to execute said document.

Berry/Morrow
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-300.

Mr. Morrow thanked the Mayor for allowing him to participate in the parking discussion and shared some benefits of the new agreement.

Mayor Boesen commented that we will be getting more services than we have been receiving.

Mr. Schmitt questioned if the parking conversation is dead or would we have an opportunity to continue conversations.

Mayor Boesen commented that we can always revisit it, but there is not a current conversation that he is aware of.

Resolution approving a Second Amendment and Collateral Assignment of the Development Agreement with BKKS Holdings, LLC and Farmers State Bank, and authorizing the Mayor to execute said document.

Berry/Morrow
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-301.

Resolution approving First Amendment to the Development Agreement with Perry and Michelle Gamblin, originally executed June 3, 2024, extending the timeline by twelve months for the construction of a minimum twenty-four-foot by twenty-four-foot accessory structure, and authorizing the Mayor and City Clerk to execute said document.

Berry/Morrow

Mr. Salamanca requested an update on the need for the extension.

Noel Anderson, Community Planning and Development Director, provided an overview of the agenda item.

Ms. Berry explained that she had a conversation with the homeowner today and shared that they really need this garage to safely store their items. She commented that they are in the audience and are willing to discuss their request.

Mr. and Mrs. Gamblin, 127 Conger, explained that the purpose of the project is to create a larger garage for their property for necessary storage. He explained that they currently have to park on the street and want to safely store them in a garage. They explained why there was a delay in the original timeline. Mr. Gamblin asked if they could purchase the property outright at a low price in case they are not able to complete the development in the new timeline, should it be approved.

Mayor Boesen shared that they would need to discuss this with Noel Anderson, and if an agreement is reached, we would need to rescind this development agreement and present a new one for the sale and conveyance of the lot.

Martin/Morrow
to table indefinitely. Roll Call vote-Ayes: Six. Motion carried.

Resolution approving a Development and Minimum Assessment Agreement with Black River Bells, LLC, for the construction of an approximately 2,000 square-foot commercial building with a minimum assessed value of $1,045,000.00, including CURA tax abatement, located at 2065 Logan Avenue, and authorizing the Mayor and City Clerk to execute said document.

Salamanca/Schmitt
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-302.

Resolution approving a Development and Minimum Assessment Agreement with Highlands Enterprises, LLC, for the renovation of property located at 4000 University, including fifteen years at fifty percent rebates and a minimum assessed value of $5,500,000.00, and authorizing the Mayor and City Clerk to execute said documents.

Salamanca/Schmitt
Roll Call vote-Ayes: Four. Nays: Two (Berry, Simon). Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-303.

Forest Dillavou, 1725 Huntington Road, shared that the building is already gutted and doesn't understand why the council is needed as the department heads are making decisions.

Noel Anderson, Community Planning and Development Director, provided an overview of the item.

Chris Williams, Highlands Enterprises, LLC, 12911 W. 105th Terrace, Overland Park, KS, shared that they are in the process of updating the former Hy-Vee and said that the V.A. is

occupying a portion of the building to expand their services to the local veterans with a clinic. They are currently cleaning out the remaining 44,000 vacant square feet and have been dealing with a problem with the waterline. He described the various issues they have been working through and explained that there have been four waterline breaks in the last five months and each time the clinic must shut down, and that part of this is to help offset some of those unanticipated costs.

Mr. Salamanca requested an update of what is happening at the building currently.

Chris Williams shared that they are working to clean out the coolers left behind by Hy-Vee and clear everything out because there is no likely any use for those with future tenants.

Mr. Salamanca clarified that what the developer is doing now is separate from what people are assuming is happening.

Chris Williams shared that they are in the demolition phase of the project.

Mr. Martin asked if there were potential tenants they have been talking to.

Chris Williams confirmed and further explained that they are not currently in Waterloo, so this would be a new location for them.

Ms. Berry asked if Mr. Williams could identify who that potential client might be.

He shared that he would not be able to do so at this time.

Resolution approving a Contract with Midwest Cleaning Pros, of Waverly, Iowa, in the amount of $103,848.00 annually, in conjunction with the cleaning of City Hall, Carnegie Annex, Waterloo Police Training Center, Veteran's Memorial Hall, and Parking Ramp attached to the Waterloo Building, and authorizing the Mayor and City Clerk to execute said document.

Salamanca/Schmitt
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-304.

Resolution approving an Acquisition Contract and accepting a deed to sell real property to the City of Waterloo, from Jonathan Swarts a/k/a Jonathon Swartz, in the amount of $60,000.00, for property located at 1708 and 1716 Lafayette Street and the lot between, and authorizing the Mayor and City Clerk to execute said documents.

Morrow/Schmitt
Roll Call vote-Ayes: One. Nays: Five (Morrow, Berry, Salamanca, Martin, Simon). Motion failed. Resolution No. 2026-305.

Mr. Martin questioned who would be responsible for the abatement and demolition.

Noel Anderson, Community Planning and Development Director, commented that the city would be responsible and provided the benefit the city would see with this project.

Mr. Simon requested clarification of the properties and questioned the return value to the city.

Noel Anderson provided clarification.

Mr. Schmitt commented that he would like to see something new done to this area.

Mr. Salamanca asked why there was such a gap between the value of what Beacon shows and what we are asking.

Noel Anderson provided an explanation.

Forest Dillavou, 1725 Huntington Road, commented that his problem with this is that these properties are located in TIF districts, and it does nothing to help the community.

Megan Butler, 818 Clough Street, commented that we should be helping people get rid of properties they have inherited and where they had nothing to do with the dilapidation.

Noel Anderson commented on the TIF district.

Mr. Morrow asked if there was an expectation of when this might be developed.

Noel Anderson said that there are always interested parties, and it just takes time to get through the process.

Mr. Simon commented that he is not opposed to buying a property from an individual, but his concern is the slow process of the 657A process for surrounding properties.

Resolution approving a Permanent Easement Agreement with Love's Travel & Country Stores, Inc., to serve as a drainage easement, in conjunction with the FY 2024 Sergeant Road Trail Repairs, and authorizing Mayor and City Clerk to execute said document.

This item was removed by amendment.

Resolution approving an Exchange Agreement with Peterson Contractors, Inc., of Reinbeck, Iowa, to allow the exchange of topsoil for fill material in the WARP subdivision, and authorizing the Mayor to execute said document.

Morrow/Schmitt
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-306.

Mr. Morrow provided an overview of his understanding of the agreement and requested clarification if the city is getting a 2-1 ratio of topsoil.

Mr. Knutson shared that it was a large stockpile of topsoil, but explained that it was actually mostly sand with very little value. He explained that we would be paying trucking costs to bring that in and this would save the City from those costs.

Mr. Morrow requested clarificaton that the topsoil is not quality topsoil.

Mr. Knutson confirmed that it is not.

Resolution approving Supplemental Agreement No. 1 with AECOM, of Waterloo, Iowa, in the

amount of $54,200.00, in conjunction with the FY 2025 Biennial Bridge Review Program, and authorizing the Mayor to execute said document.

Morrow/Schmitt
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-307.

Resolution approving a Cooperative Agreement with the Iowa Department of Transportation, in the amount of $710,000.00, in conjunction with the FY 2027 Edwards Street Stormwater Lift Station Upgrades, Contract No. 1158, and authorizing the Mayor and City Clerk to execute said document.

Schmitt/Salamanca
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-308.

Mr. Salamanca requested an overview of the agenda item.

Jamie Knutson, City Engineer, provided an overview of the project and the funding agreement.

Resolution approving Professional Services Agreement with Strand Associates, Inc., of Madison, Wisconsin, in an amount not to exceed $128,000.00, for Design Services, Bidding-Related Services, and Construction-Related Services, in conjunction with final Effluent Building Electrical Updates at the Wastewater Treatment Plant, and authorizing the Mayor to execute said documents.

Schmitt/Salamanca
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-309.

Resolution approving a Construction-Related Services Agreement with AECOM Technical Services, Inc., of Waterloo, Iowa, in the amount of $385,800.00, in conjunction with the Rehabilitate Runway 18/36 Outside of Runway 12/30 Safety Area, FAA AIP Project No. 3-19-0094-060, and authorizing the Mayor to execute said document.

Morrow/Simon
Roll Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-310.

Resolution approving a Professional Services Agreement with HDR Engineering, Inc., of Cedar Rapids, Iowa, in the amount of $13,525.00, for a concept statement in conjunction with the Ridgeway Avenue and Hammond Avenue Roundabout, and authorizing the Mayor and City Clerk to execute said document.

Morrow/Simon
Call vote-Ayes: Six. Motion carried. Resolution adopted and upon approval by Mayor assigned No. 2026-311.

Mr. Morrow questioned if we have the expertise in-house to do this work.

Safia Elahi, Traffic Operations Director, shared that there are no full-time staff currently available to allocate to this project. She further shared that there are three grants for this

project, so there is a timeline.

ORDINANCES

An ordinance amending the City of Waterloo Traffic Code by amending subsection (88) Kimball Avenue, of section 543, thru streets.

Martin/Salamanca
to receive, file, consider, and pass for the first time an ordinance amending the City of Waterloo Code of Ordinances Section 543 (88). Roll Call vote-Ayes: Six. Motion carried.

Safia Elahi, Traffic Operations Director, provided an overview of the ordinance change for both items 1 and 2.

Martin/Salamanca
to suspend the rules. Roll Call vote-Ayes: Six. Motion carried.

Martin/Salamanca
to consider and pass for the second and third times and adopt said ordinance. Roll Call vote-Ayes: Six. Motion carried. Ordinance adopted and upon approval by Mayor assigned No. 5838.

An ordinance amending the City of Waterloo Traffic Code by amending subsection (29) Kimball Avenue and Mitchell Avenue, of section 544, All-way stop intersection.

Morrow/Schmitt
to receive, file, consider, and pass for the first time an ordinance amending the City of Waterloo Code of Ordinances Section 544 (29). Roll Call vote-Ayes: Six. Motion carried.

Mike Henning, 138 Sidehill Drive, commented that he does not see a need for a stop sign on Kimball, but said there is a need for better safety at Shaulis and Kimball.

Safia Elahi, Traffic Operations Director, provided an overview of the traffic studies that were done at this location and the results showed that a stop sign is the quickest way to address the safety issue and noted that they will continue to work on a long-term solution.

Eileen McFee, 204 Lichty, explained that she was involved in an accident there a few months ago. She would like to see continuity at all the intersections, including Shaulis. She provided a number of suggestions.

Barbara Henning, 138 Sidehill Drive, questioned when the traffic study was conducted.

Ms. Berry questioned if lights on the stop sign would help make people slow down.

Safia Elahi explained that the crash data shows people are stopping and that some drivers assumed it was a 4-way stop, others misjudged the gap between cars after stopping and traveling forward. Of the eleven crashes, only one involved someone running the stop sign.

Mr. Morrow commented that there were extensive discussions on this matter at his ward meeting and asked if we could consider making changes in steps and if there will be another

traffic study after the stop signs are in place.

Mr. Simon asked if we could install signs for drivers who do not need to stop warning them to watch for turning traffic.

Mr. Schmitt commented that he travels through this intersection on a daily basis and noted that the dip in the road does inhibit drivers' ability to see what is ahead. He concurred with Mr. Simon about adding signage.

Safia Elahi commented that after we make changes to traffic flow, we follow up with another study to see if any changes need to be made.

Ms. Berry questioned if the study showed the age of the drivers involved in the accidents.

Safia Elahi explained the study included all ages and all times of day.

Mayor Boesen shared from experience that crossing Kimball is nearly impossible at certain times of the day.

Morrow/Schmitt
to suspend the rules. Roll Call vote-Ayes: Six. Motion carried.

Morrow/Schmitt
to consider and pass for the second and third times and adopt said ordinance. Roll Call vote-Ayes: Six. Motion carried. Ordinance adopted and upon approval by Mayor assigned No. 5839.

PUBLIC COMMENTS

Mayor Boesen provided comments on the data center project process and invited all interested parties to attend the planning and zoning meetings and express their opinions, either positive or negative. He further read the Rules for Public Comments.

Andrew Glasrud, 1121 Midland / Karla Elfritz, 2518 Morrow Street / Judy Miller, At Large Board Member of Main Street Waterloo, 512 Mulberry Street / Blake Smith, 221 Gilbert Street / Jim O'Reagan, 607 Sycamore / Kyle Squires, 625 Sheridan Road / Don Styles 1657 Golden Valley / Jonathan Grieder, 2719 Edgemont Avenue / LA Jefferson, Jr., 733 1/2 W. 3rd Street / Andrew Ott, 344 Maryland / Megan Butler, 818 Clough Street / Jay Groute, 2229 Edgemont Ave. / Aaron Stacey Roberts, 411 Almond / Melissa Hind, 604 Kirkwood / Kendall Fuller, 2303 Olive Street, Cedar Falls / Melissa Denning, 1007 Baltimore Street / Elsie Kent, 820 Knoll Avenue / Phyllis Osterling, 4342 Ansborough / Samuel Gomez, 2122 W. 7th Street / Chrisita Young, 1821 E. 4th Street / Carol Tjaden, 147 Summit Avenue / Amy Ellingson, 810 Conger Street /Blair Boynton, 6236 Kimball / Marla Fagen, 1146 Ackermant / Renae Carson, 1108 Vine Street

Simon/Martin
to close public comment. Voice vote-Ayes: Six. Motion carried.

Mr. Morrow read a prepared statement regarding the cost of moving City Hall to a new location.

Mr. Schmitt commented that he and many other council members were caught off guard and unaware of the data center until a short time ago. He shared that there would be future

conversations and meetings to allow the public to express their opinions. He further spoke about the dilapidated housing and buildings all over the city, and said he will be making an effort to make changes and improve our city.

Ms. Berry shared that she appreciates all the comments made tonight and commented that she too knows very little about this data center and asked the public to show grace and understanding as the council learns more about the project.

Mr. Simon thanked those people who had reached out to him and said he appreciated the information he was getting so he could make educated decisions.

Mayor Boesen also thanked everyone for their opinions and encouraged everyone to attend the planning and zoning meetings.

Simon/Martin
to close public comments. Voice vote-Ayes: Six. Motion carried.

ADJOURNMENT

Schmitt/Simon
that the council adjourn at 7:53 p.m. Voice vote-Ayes: Six. Motion carried.

_____
Kelley Felchle
City Clerk

June 11, 2026

The City Council of the City of Waterloo, Iowa, met in Special Session at Harold E. Getty Council Chambers, Waterloo, Iowa, at 1:30 PM, on Thursday, June 11, 2026.

Pre-Meeting Items

Roll Call.

Mayor Dave Boesen in the Chair. Roll Call: Mr. Schmitt, Mr. Morrow, Ms. Berry, Mr. Martin and Mr. Simon. Ms. Creighton-Smith and Mr. Salamanca were absent.

Approval of Agenda as proposed or amended.

Martin/Morrow
that the agenda as proposed be approved. Voice vote-Ayes: Five. Motion carried.

OTHER COUNCIL BUSINESS

Motion to approve a Class C Premises Update Alcohol License, with outdoor service, for WCA Building & Amphitheatre, 225 Commercial Street, expiration date 06/21/2026.

Morrow/Martin
Voice vote-Ayes: Five. Motion carried.

ADJOURNMENT

Martin/Morrow
that the council adjourn at 1:35 p.m. Voice vote-Ayes: Five. Motion carried.

_____
Kelley Felchle
City Clerk

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT
Finance Department

MEETING DATE
June 15, 2026

AGENDA ITEM TITLE
Resolution authorizing fund transfers, as listed in Exhibit "A" as required by law.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS
1. Fund Transfers Resolution Exhibit A FYE26

City of Waterloo
June 30, 2026
Fund Transfers - Exhibit A

TO	FROM	PURPOSE, PER STATE LAW	ACTUAL
General Fund	Trust & Agency Fund	Transfer Employee Benefits Levied in the Trust & Agency Fund to the General Fund	**$ 13,830,312.00**
			$ 13,830,312.00
General Fund	Local Option Sales Tax	Transfer Local Option revenue per revenue purpose statement approved by voters in 2024	**$ 1,200,000.00**
			$ 1,200,000.00
General Fund	Sanitation Fund	Transfer Employee Benefits to the General Fund	**$ 28,478.00**
			$ 28,478.00
Debt Service Fund	Tax Increment Financing Fund	Transfer TIF revenue to reimburse the TIF share of General Obligation Bond principal and interest	**$ 6,330,000.00**
Debt Service Fund	Sewer Fund	Transfer sewer revenue to reimburse the sewer share of General Obligation Bond principal and interest	**$ 2,087,598.00**
Debt Service Fund	General Fund	Transfer Hotel Motel revenue to reimburse a share of General Obligation Bond principal and interest per Ordinance 5758	**$ 300,000.00**
Debt Service Fund	Iowa Reinvestment District Fund	Reimburse Debt Service Fund for reinvestment district funds received to be used to pay principal on the 2017C bond issue	**$ 174,086.00**
			$ 8,891,684.00
Grants Fund	General Fund	Spent in ARPA from June 1, 2025-May 31, 2026	**$ 4,603,586.94**
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for administrative expenses in the San Marnan TIF district.	$ 16,878.00
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for property cleanup in the Rath TIF district.	$ 107,167.58
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for administrative expenses in the Rath TIF district.	$ 17,706.86
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for administrative expenses in the Crossroads TIF district.	$ 27,713.09

City of Waterloo
June 30, 2026
Fund Transfers - Exhibit A

TO	FROM	PURPOSE, PER STATE LAW	ACTUAL
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for property aquisition in the Crossroads TIF district.	$ 12,331.17
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for administrative expenses in the Northeast Site TIF district.	$ 100,610.49
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for wetland restoration in the Northeast TIF district.	$ 417,054.87
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for engineering studies in the Northeast Site TIF district.	$ 112,534.56
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for property aquisition in the Northeast TIF district.	$ 1,116,000.00
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for administrative expenses in the Schoitz TIF district.	$ 60,000.00
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for administrative expenses in the Martin Road TIF district.	$ 3,315.50
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for Byrnes Park renovation expenses in the Martin Road TIF district.	$ 300,000.00
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for property cleanup in the Martin Road TIF district.	$ 196,080.00
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for the installation of utility hookups in the Leversee area in the East Waterloo Unified (Midport) TIF district.	$ 1,409,142.88
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for the design and construction of Warp Road in the Leversee area in the East Waterloo Unified (Midport) TIF district.	$ 2,033,103.57
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for airport fence relocation in the East Waterloo Unified (Midport) TIF district.	$ 454,878.48
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for engineering studies in the East Waterloo Unified (Midport) TIF district.	$ 29,993.45
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for administrative expenses in the East Waterloo Unified (Midport) TIF district.	$ 2,720.46
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for property acquisition in the East Waterloo Unified (Logan) TIF district.	$ 51,059.00

City of Waterloo
June 30, 2026
Fund Transfers - Exhibit A

TO	FROM	PURPOSE, PER STATE LAW	ACTUAL
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for Gates Park renovation expenses in the East Waterloo Unified (Logan) TIF district.	$ 2,750,000.00
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for the front footage water line project in the East Waterloo Unified (Logan) TIF district.	$ 41,640.00
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for property demolition in the East Waterloo Unified (Logan) TIF district.	$ 183,591.50
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for administrative expenses in the East Waterloo Unified (Logan) TIF district.	$ 107,577.86
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for platting and design services in the East Waterloo Unified (Logan) TIF district.	$ 43,067.22
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for administrative expenses in the University Avenue TIF district.	$ 2,105.50
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for engineering and construction of University Avenue in the University Avenue TIF district.	$ 62,697.91
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for engineering studies in the University Avenue TIF district.	$ 78,638.69
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for property acquisitions in the University Avenue TIF district.	$ 16,482.00
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for property cleanup in the Riverfront (Downtown) TIF district.	$ 373,387.46
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for property acquisition and economic development grants in the Riverfront (Downtown) TIF District.	$ 84,097.00
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for implementation expenses in the Riverfront (Downtown) TIF District.	$ 81,429.17
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for an economic development grant for the CV Sports Courts in the Riverfront (Downtown) TIF District.	$ 2,000,000.00
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for design and feasability of the Whitewater Course in the Riverfront (Downtown) TIF District.	$ 93,732.00

City of Waterloo
June 30, 2026
Fund Transfers - Exhibit A

TO	FROM	PURPOSE, PER STATE LAW	ACTUAL
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for the 4/5/6th St Conversion study in the Riverfront (Downtown) TIF District.	$ 50,738.17
Capital Projects Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for administrative expenses in the Riverfront (Downtown) TIF District.	$ 30,075.00
	Subtotal - TIF Projects Only		$ 12,467,549.44
General Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for salaries in the San Marnan TIF district.	$ 21,399.52
General Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for salaries in the Rath TIF district.	$ 30,299.24
General Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for salaries in the Crossroads TIF district.	$ 37,592.51
General Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for salaries in the NE Site TIF district.	$ 17,022.11
General Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for salaries in the Martin TIF district.	$ 21,326.19
General Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for salaries in the East Waterloo Unified (Midport) TIF district.	$ 47,574.89
General Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for salaries in the East Waterloo Unfied (Logan) TIF district.	$ 17,349.18
General Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for salaries in the Schoitz TIF district.	$ 584.94
General Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for salaries in the University Ave TIF district.	$ 11,663.28
General Fund	Tax Increment Financing Fund	Transfer TIF increment funds to reimburse for salaries in the Riverfront (Downtown) TIF district.	$ 51,560.14
	Subtotal - TIF Administration		$ 256,372.00
	Subtotal - TIF Projects & Admin		$ 12,723,921.44
	TOTAL TRANSFERS		$ 41,277,982.38

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Randy Bennett, Public Works Division Manager
Waste Management Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving preliminary plans, specifications, form of contract, etc., setting date of bid opening as July 16, 2026, and date of public hearing as July 20, 2026, in conjunction with the FY 2023 Cattle Congress Sanitary Sewer Lift Station Reconstruction, Contract No. 1075, and instruct the City Clerk to publish notice.

RECOMMENDED COUNCIL ACTION

Approve the resolution approving preliminary plans, specifications, form of contract, etc., setting date of bid opening as July 16, 2026, and date of public hearing as July 20, 2026, in conjunction with the FY 2023 Cattle Congress Sanitary Sewer Lift Station Reconstruction, Contract No. 1075.

SUMMARY STATEMENT AND BACKGROUND INFORMATION

This project consists of construction of the Cattle Congress lift station and force Maine near the Cedar River in Waterloo, Iowa. The project includes demolition and reconstruction of the Cattle Congress LIft Station (with a natural gas generator for back-up power), a force main to pump the flow to the east along the South Riverside Trail to an existing force main manhole north-west of Conger Street.

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. AECOM - Cont 1075 - FY23 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION - PLANS
2. AECOM - Cont 1075 - FY23 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION - SPECS

FY 2023

CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION

IOWA ONE CALL
1-800-292-8989 | 811
www.iowaonecall.com
Know what's below. Call before you dig.

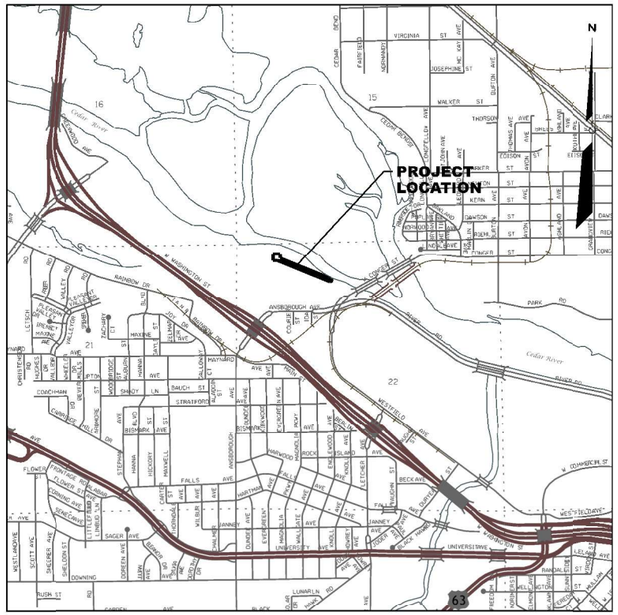
CITY CONTRACT NO. 1075

WATERLOO, IOWA

JUNE 2026

CONSTRUCTION AND MAINTENANCE TO BE IN ACCORDANCE WITH ALL APPLICABLE REGULATORY REQUIREMENTS AND STANDARDS.

VICINITY MAP
NTS


N
PROJECT LOCATION
VIRGINIA ST
JOSEPHINE ST
WALKER ST
THORSON AVE
TOSSON ST
HAWTHORNE ST
KERN AVE
LAWSON ST
DONNER AVE
HYDE AVE
HIPPLE ST
BUTLER AVE
CLARK
CEDAR
FAIRFIELD
BERNARD
CROCKER AVE
CROCKER PARK
BUFFALO AVE
WASHINGTON AVE
ANDREWS ST
ANDERSONVILLE RD
ANDERSONVILLE PARK
PARK RD
Cedar River
RAINBOW DR
WASHINGTON ST
LEITCH
MAYNARD
MAYNARD AVE
COACHMAN
COACHMAN DR
BAUCH ST
STRATFORD
SHADY LN
HAWKINS
HAWKINS RD
ELK RUN
ELK RUN RD
CRESTVIEW
CRESTVIEW DR
DOWNERS PL ST
FALLS AVE
FALLS
HICKORY
MAXWELL
HANNA
CARTER
MORNINGSIDE
MORNINGSIDE AVE
WILBUR
WILBUR AVE
FARNEY
FARNEY AVE
UNIVERSITY AVE
UNIVERSITY
LUWARLN
LUWARLN RD
BECKER AVE
BECKER
FLOWER
FLOWER AVE
FRONTIER
FRONTIER AVE
LITTLE BEAR
LITTLE BEAR AVE
SAGER AVE
SAGER
DOWNING
DOWNING ST
RUSH ST
WEST RIDGE
SCOTT AVE
SACKETT AVE
SACKETT
CHELCOM ST
DORIEN AVE
LEARN AVE
LEARN
CLOVER AVE
CLOVER
CLOVER LN
CLOVER PL
CLOVER CT
CLOVERDALE
CLOVERDALE AVE
CLOVERDALE CT
CLOVERDALE PL
CLOVERDALE DR
CLOVERDALE RD
CLOVERDALE TER
CLOVERDALE CIR
CLOVERDALE LN
CLOVERDALE PKWY
CLOVERDALE BLVD
CLOVERDALE WAY
CLOVERDALE ALLEY
CLOVERDALE PLACE
CLOVERDALE COURT
CLOVERDALE DRIVE
CLOVERDALE ROAD
CLOVERDALE TERRACE
CLOVERDALE CIRCLE
CLOVERDALE LANE
CLOVERDALE PARKWAY
CLOVERDALE BOULEVAR

SYMBOLS LEGEND

	Evergreen Tree		Fire Hydrant
	Deciduous Tree		Luminaire
F	Fruit Tree		Traffic Signal
SB	Shrub (Bushes)		Power Pole
	Timber		Power Pole with Light
	Hedge		Electrical Highline Tower
	Stump	HH	Hand Hole
	Swamp	EP	Electrical Pedestal
	Board Fence	TP	Telephone Pedestal
# #	Chain Link Fence	TVP	Television Pedestal
×	Barbwire Fence		Telephone Pole
W	Existing Water Line		Telegraph Pole
San.	Existing Sanitary Sewer Line		Satellite TV Dish
T	Existing Telephone Line	TB	Telephone Booth
FO	Exist. Fiber Opt Telephone Line	WP	Wood Post
St.S.	Existing Storm Sewer Line	GP	Gate Post
G	Existing Gas Line		Guardrail (Beam or Cable)
E	Existing Power Line	GV	Gas Valve
TV	Cable Television Line	WV	Water Valve
	Railroad	MM	Mile Marker Post
	Railroad	SIGN	Sign
RRS	Railroad Signal		Right of Way Rail
RRB	Railroad Box		Concrete Monument
	Section Corner		Well
	Section Line		Beehive Intake
	Ownership Arrow		Existing Intake
	Corporation Line		Proposed Intake
	Dike		Existing Manhole
	Terrace		Proposed Manhole
	Earth Dam or Dike (Existing)	RD	Roof Drain
	Earth Dam or Dike (Proposed)	FP	Flag Pole
	Tile Outlet	G/W	Guy Wire
	Edge of Water	G/P	Guy Pole
	Existing Drainage		Lot Corner Found
	Proposed Drainage		Lot Corner Set
			Monitoring Well
			Guard Post
		B-2	Soil Boring

NOTE:

1. THIS IS A STANDARD LEGEND. NOT ALL OF THE INFORMATION SHOWN ON THIS LEGEND IS USED IN THESE CONTRACT DRAWINGS.

SECTION DESIGNATION

SECTION DESIGNATIONS USE LETTERS.

DRAWING NUMBER (REPLACED WITH A LINE IF TAKEN AND SHOWN ON SAME SHEET)

DETAIL DESIGNATION

DETAIL DESIGNATIONS USE NUMBERS.

DRAWING NUMBER (REPLACED WITH A LINE IF TAKEN AND SHOWN ON SAME SHEET)

PLAN NOTE DESIGNATION

10 PLAN NOTE, SEE LIST ON SAME DRAWING.

INDEX OF DRAWINGS

SHEET NO.	DRAWING NO.	DESCRIPTION
		01 - GENERAL
1	01-G-01	TITLE SHEET AND LOCATION MAP
2	01-G-02	INDEX OF DRAWINGS AND CIVIL SYMBOLS
3	01-G-03	ESTIMATED QUANTITIES
4	01-G-03A	ESTIMATE REFERENCE NOTES
5	01-G-04	CIVIL GENERAL NOTES
6	01-G-05	CIVIL - SWPPP
7	01-G-06	GENERAL ARCHITECTURAL AND STRUCTURAL LEGEND
8	01-G-07	ELECTRICAL ABBREVIATIONS AND SYMBOLS
9	01-G-08	ELECTRICAL ONE-LINE DIAGRAM AND SCHEMATIC SYMBOLS
		02 - CIVIL
10	02-C-01	LOCATION PLAN
11	02-C-02	GEOMETRY PLAN
12	02-CFM-01	PLAN AND PROFILE STA. 0+00 TO STA 5+80
13	02-CFM-02	PLAN AND PROFILE STA. 5+80 TO STA. 9+20
14	02-CR-01	SANITARY LIFT STATION SITE REMOVAL PLAN
15	02-CR-02	SANITARY LIFT STATION SITE REMOVAL PLAN AND SECTIONS
16	02-CR-03	SANITARY LIFT STATION SITE REMOVAL PROFILE
17	02-CF-01	SANITARY LIFT STATION NEW FACILITIES PLAN
18	02-CF-02	SANITARY LIFT STATION NATURAL GAS PIPING PLAN
19	02-CG-01	SANITARY LIFT STATION GRADING PLAN
20	02-CE-01	SANITARY LIFT STATION ELECTRICAL SITE PLAN
		10 - ARCHITECTURAL/ STRUCTURAL/ ELECTRICAL
21	10-SM-01	SANITARY LIFT STATION SITE REMOVAL PLAN AND SECTIONS
22	10-SM-02	SANITARY LIFT STATION PLAN
23	10-SM-03	SANITARY LIFT STATION SECTION
24	10-SM-04	SANITARY LIFT STATION SECTION
25	10-SM-05	SANITARY LIFT STATION DETAILS
26	10-SM-06	GENERATOR PAD FOUNDATION PLAN
27	10-SM-07	GENERATOR PAD FOUNDATION SECTION
28	10-E-01	ELECTRICAL PLANS
29	10-E-02	ELECTRICAL EQUIPTMENT BUILDING ELECTRICAL PLAN
30	10-E-03	ELECTRICAL EQUIPTMENT BUILDING ELEVATIONS
		99 - DETAILS
31	99-C-01	CIVIL DETAILS
32	99-S-01	STRUCTURAL STANDARD DETAILS
33	99-S-02	STRUCTURAL STANDARD DETAILS
34	99-E-01	ELECTRICAL ONE-LINE DIAGRAM
35	99-E-02	ELECTRICAL DETAILS
36	99-E-03	ELECTRICAL DETAILS

DRN	DES	CHK	APP	REV	DESCRIPTION	DRN	CHK	DATE
					BID SET	KJD	NAS	6/2026
					PRELIMINARY PLAN SET	TDA	NAS	11/2025

VERIFY SCALE IF PLAN SHEET IS REDUCED — 1-INCH

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

INDEX OF DRAWINGS AND CIVIL SYMBOLS

DATE: MAY 2026
PROJECT NO: 60696351
FILENAME: G-001-004.Dgn
SHEET NO: 2
DRAWING NO: 01-G-02

ESTIMATED QUANTITIES

ITEM NO.	SUDAS CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ASBUILT QUANTITY
1	11020-A	MOBILIZATION	LS	1.0	
2	2010-D-1	TOPSOIL, ON-SITE, 6 INCHES	CY	248.6	
3	2010-E	EXCAVATION, CLASS 10 - EMBANKMENT-IN-PLACE	CY	400.0	
4	2010-I	SUBGRADE TREATMENT, GEOFABRIC	SY	175.0	
5	2010-J	SUBBASE, MODIFIED, 11'	SY	224.8	
6	2010-M	COMPACTION TESTING	LS	1.0	
7	3010-D	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL	CY	2872.4	
8	3010-H	TRENCH COMPACTION TESTING	LS	1.0	
9	4010-C-1	SANITARY SEWER FORCE MAIN, TRENCHED, PVC, 10-INCHES	LF	512.8	
10	4010-C-1	SANITARY SEWER FORCE MAIN, TRENCHED, DUCTILE IRON, 10-INCHES	LF	5.5	
11	4010-C-2	SANITARY SEWER FORCE MAIN, TRENCHLESS, PVC, 10-INCHES	LF	300.0	
12	4010-L	SANITARY SEWER ABANDONMENT, FILL AND PLUG, 10-INCHES	LF	815.3	
13	4050-G-3	BYPASS PUMPING	LS	1.0	
14	4060	FORCE MAIN TESTING	LS	1.0	
15	5010-C-2	FORCE MAIN FITTING	LB	720.0	
16	6010-G-1	CONNECTION TO EXISTING MANHOLE	EA	1.0	
17	7030-H-3	DRIVEWAY, GRANULAR, 6-INCHES	TON	172.9	
18	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1.0	
19	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 1	AC	0.4	
20	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 4	AC	0.2	
21	9040-A-1	SWPPP PREPARATION	LS	1.0	
22	9040-A-2	SWPPP MANEGEMENT	LS	1.0	
23	9060-D	REMOVAL AND REINSTALLATION OF EXISTING FENCE,CHAINLINK, GALVANIZE	LF	40.0	
24	9080-A	CONCRETE STEPS, TYPE A	SF	115.5	
25	9080-B	HANDRAIL, 32-INCHES	LF	22.0	
26	9080-C	SAFETY RAIL	LF	44.8	
27	10010-A	DEMOLITION WORK - WET WELL	LS	1.0	
28	10010-A	DEMOLITION WORK - LIFT STATION BUILDING AND EQUIPMENT	LS	1.0	
29	11050-A	CONCRETE WASHOUT	LS	1.0	
30	AS PER PLANS	SANITARY SEWER MANHOLE ABANDONMENT	EA	5.0	
31	AS PER PLANS	LIFT STATION WET WELL	LS	1.0	
32	AS PER PLANS	PREFABRICATED OPERATOR'S BUILDING	LS	1.0	
33	AS PER PLANS	BYPASS MANHOLE	LS	1.0	
34	AS PER PLANS	SITE ELECTRICAL	LS	1.0	
35	AS PER PLANS	STAND-BY GENERATOR	LS	1.0	
36	AS PER PLANS	BOLLARDS	EA	6.0	
37	AS PER PLANS	STRUCTURAL CONCRETE RETAINING WALL - GENERATOR PAD AND STAIRS	CY	30.2	
38	AS PER PLANS	STRUCTURAL CONCRETE PAD - GENERATOR	CY	8.1	
39	AS PER PLANS	COMPACTING BACKFILL - GRADING	CY	400.0	

VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

REV	DESCRIPTION	DRN	CHK	DATE
	PRELIMINARY PLAN SET	TDA	NAS	11/2025
	BID SET	KJD	NAS	6/2026

DRN | DES | CHK | APP

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

ESTIMATED QUANTITIES

DATE: MAY 2026
PROJECT NO: 60696351
FILENAME: G-001-004.Dgn
SHEET NO: 3
DRAWING NO: 01-G-03

ESTIMATE OF REFERENCE NOTES

1	MOBILIZATION - LUMP SUM PRICE SHALL BE AS DEFINED IN SUDAS 11020.1.08. MEASUREMENT AND PAYMENT SHALL BE IN ACCORDANCE WITH SUDAS 11020.1.08.A.
2	TOPSOIL, ON-SITE, 6 INCHES - UNIT PRICE SHALL INCLUDE STRIPPING AND STOCKPILING OF 6-INCHES OF TOPSOIL; PREPARING THE TOPSOIL PLACEMENT AREA BY TILLAGE OR RIPPING; RE-SPREADING THE TOPSOIL; ADDITIONAL TILLAGE TO ADDRESS COMPACTION DURING PLACEMENT; AND REMOVAL OF CLODS, ROOTS, STONES, AND OTHER UNDESIRABLE MATERIALS. COMPLY WITH SUDAS 3010.2.04.
3	EXCAVATION, CLASS 10 - EMBANKMENT-IN-PLACE - UNIT PRICE SHALL INCLUDE SITE PREPARATION FOR, AND THE CONSTRUCTION OF EMBANKMENT FOR THE GENERATOR ACCESS RAMP AND AROUND GENERATOR PAD.
4	SUBGRADE TREATMENT, GEOFABRIC - UNIT PRICE SHALL INCLUDE FURNISHING, PLACING, AND INCORPORATING THE GEOTEXTILE ENGINEERING FABRIC FOR THE GENERATOR ACCESS RAMP.
5	SUBBASE, MODIFIED, 11' - UNIT PRICE SHALL INCLUDE FURNISHING, PLACING, COMPACTING, AND TRIMMING TO THE PROPER GRADE MODIFIED SUBBASE FOR FILL UNDERNEATH GENERATOR PAD, STAIRS AND BETWEEN RETAINING WALLS.
6	COMPACTION TESTING - LUMP SUM PRICE SHALL INCLUDE, BUT NOT LIMITED TO, LABOR, EQUIPMENT, AND MATERIALS FOR COMPLETING COMPACTION TESTING AS REQUIRED AT THE LIFT STATION SITE.
7	REPLACEMENT OF UNSUITABLE BACKFILL MATERAL - UNIT PRICE SHALL INCLUDE REMOVAL, HAULING, AND DISPOSAL COSTS OF THE UNSUITABLE MATERIAL AND THE FURNISHING, HAULING, AND PLACING OF THE SUITABLE REPLACEMENT BACKFILL MATERIAL. UNIT PRICE DOES NOT INCLUDE LANDFILL COSTS FOR CONTAMINATED MATERIALS.
8	TRENCH COMPACTION TESTING - LUMP SUM PRICE SHALL INCLUDE, BUT NOT LIMITED TO, LABOR, EQUIPMENT, AND MATERIALS FOR COMPLETING TRENCH COMPACTION TESTING AS REQUIRED ALONG THE FORCE MAIN.
9	SANITARY SEWER FORCE MAIN, TRENCHED, PVC, 10-INCHES - UNIT PRICE SHALL INCLUDE TRENCH EXCAVATION; DEWATERING; FURNISHING AND INSTALLING PIPE; FURNISHING, PLACING, AND COMPACTING BEDDING AND BACKFILL; WYES AND OTHER FITTINGS; PIPE JOINTS; TESTING; AND INSPECTION. INSTALL WITH TRACER WIRE.
10	SANITARY SEWER FORCE MAIN, TRENCHED, PVC, 10-INCHES - UNIT PRICE SHALL INCLUDE TRENCH EXCAVATION; DEWATERING; FURNISHING AND INSTALLING PIPE; FURNISHING, PLACING, AND COMPACTING BEDDING AND BACKFILL; WYES AND OTHER FITTINGS; PIPE JOINTS; TESTING; AND INSPECTION.
11	SANITARY SEWER FORCE MAIN, TRENCHLESS, PVC, 10-INCHES - UNIT PRICE SHALL INCLUDE FURNISHING AND INSTALLING PIPE; TRENCHLESS INSTALLATION MATERIALS AND EQUIPMENT; PIT EXCAVATION; DEWATERING; PLACING AND COMPACTING BACKFILL MATERIAL; PIPE CONNECTIONS; TESTING; AND INSPECTION. INSTALL CARRIER PIPE WITH TRACER WIRE IN A 1" CONDUIT. CARRIER PIPE MATERIALS SHALL COMPLY WITH SUDAS 5010.2.01A.1, 2.b AND 3.
12	SANITARY SEWER ABANDONMENT, FILL AND PLUG, 10-INCHES - UNIT PRICE SHALL INCLUDE TRENCH EXCAVATION (IF NECESSARY), CUTTING PIPE (IF REQUIRED), FURNISHING AND PLACING PIPE FILL MATERIAL, FURNISHING AND PLACING PLUG MATERIALS, AND PLACING AND COMPACTING BACKFILL MATERIAL. FILL PIPE WITH FOAMED CELLULAR CONCRETE PER SUDAS 5010 AND 3010 2.06.D.
13	BYPASS PUMPING - LUMP SUM PRICE SHALL INCLUDE DEVELOPMENT AND SUMBITTAL OF THE BYPASSING PLAN, ALL STAFFING, EQUIPMENT, AND APPURTENANCES NECESSARY TO ACCOMPLISH THE APPROVED BYPASSING PLAN, INCLUDING RESERVE EQUIPMENT.
14	FORCE MAIN TESTING - LUMP SUM PRICE INCLUDES, BUT IS NOT LIMITED TO, LABOR, EQUIPMENT AND MATERIALS FOR SANITARY SEWER FORCE MAIN TESTING PER THE REQUIREMENTS OF SUDAS SECTION 4060, 3.05 FORCE MAIN TESTING
15	FORCE MAIN FITTING - UNIT PRICE SHALL INCLUDE FURNISHING AND INSTALLING FITTINGS, RESTRAINED JOINTS, ANCHOR BLOCKS, THRUST BLOCKS AND POLYETHYLENE WRAP PER SUDAS 5010. MATERIALS OF CONSTRUCTION SHALL BE COMPATIBLE WITH WASTEWATER. FITTINGS SHALL CONFORM TO AWWA C153 / ANSI A21.53.
16	CONNECTION TO EXISTING MANHOLE - UNIT PRICE SHALL INCLUDE EXCAVATION AND BACKFILL, CORING OR CUTTING INTO THE EXISTING MANHOLE, REMOVAL OF EXISTING FILLET, PIPE CONNECTIONS, REPLACEMENT OF FILLET, GROUT, AND WATERSTOP (WHEN REQUIRED).
17	DRIVEWAY, GRANULAR, 6-INCHES - UNIT PRICE SHALL INCLUDE ALL LABOR AND EQUIPMENT REQUIRED FOR THE EXCAVATION AND PREPARATION TO SUBGRADE AND FILL FOR DRY WELL STRUCTURE. COMPLY WITH SUDAS 2010 AND 7030 2.08 CLASS A ROADSTONE.
18	TEMPORARY TRAFFIC CONTROL - LUMP SUM PRICE SHALL INCLUDE FURNISHING MISCELLANEOUS TRAFFIC CONTROL DEVICES, SUCH AS SIGNS, BARRICADES, FLASHERS, PYLONS AND FLAGGERS REQUIRED FOR CONSTRUCTION ACTIVITIES. CONTRACTOR'S TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENTS OF THE CURRENT EDITION OF MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS) IN EQUIPMENT AND PLACEMENT. COMPLY WITH SUDAS 8030. THE PRICE INCLUDES SETUP, REMOVAL AND MAINTENANCE OF THE REQUIRED TRAFFIC CONTROL DEVICES. ROADS SHALL REMAIN OPEN TO TRAFFIC THROUGHOUT CONSTRUCTION UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
19	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 1 - UNIT PRICE SHALL INCLUDE REMOVAL OF ROCK AND OTHER DEBRIS FROM THE AREA; REPAIRING RILLS AND WASHES; PREPARING THE SEEDBED; FURNISHING AND PLACING SEED OF TYPE 1 PERMANENT LAWN MIXTURE, INCLUDING ANY TREATMENT REQUIRED; FURNISHING AND PLACING FERTILIZER AND MULCH; AND FURNISHING WATER AND OTHER CARE DURING THE CARE PERIOD.
20	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 1 - UNIT PRICE SHALL INCLUDE REMOVAL OF ROCK AND OTHER DEBRIS FROM THE AREA; REPAIRING RILLS AND WASHES; PREPARING THE SEEDBED; FURNISHING AND PLACING SEED OF TYPE 1 PERMANENT LAWN MIXTURE, INCLUDING ANY TREATMENT REQUIRED; FURNISHING AND PLACING FERTILIZER AND MULCH; AND FURNISHING WATER AND OTHER CARE DURING THE CARE PERIOD.
21	SWPPP PREPARATION - LUMP SUM PRICE SHALL INCLUDE DEVELOPMENT OF A SWPPP BY THE CONTRACTOR MEETING LOCAL AND STATE AGENCY REQUIREMENTS, FILING THE REQUIRED PUBLIC NOTICES, FILING A NOTICE OF INTENT FOR COVERAGE OF THE PROJECT UNDER THE IOWA DNR NPDES GENERAL PERMIT NO. 2, AND PAYMENT OF ASSOCIATED NPDES PERMIT FEES. SUBMIT SWPPP TO THE ENGINEER AND CITY OF WATERLOO ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO APPLYING FOR GENERAL PERMIT NO. 2.
22	SWPPP MANEGEMENT - LUMP SUM PRICE SHALL INCLUDE ALL WORK REQUIRED TO COMPLY WITH THE ADMINISTRATIVE PROVISIONS OF THE IOWA DNR NPDES GENERAL PERMIT NO. 2; INCLUDING RECORD KEEPING, DOCUMENTATION, UPDATING THE SWPPP, FILING THE NOTICE OF DISCONTINUATION, ETC. ITEM ALSO INCLUDES WEEKLY INSPECTIONS REQUIRED TO SATISFY THE PROVISIONS OF GENERAL PERMIT NO. 2, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
23	REMOVAL AND REINSTALLATION OF EXISTING FENCE, CHAINLINK, GALVANIZE - UNIT PRICE SHALL INCLUDE REMOVING VEGETATION; REMOVING ALL FENCE FABRIC, APPURTENANCES, POSTS, AND GATES; REMOVAL OF CONCRETE ENCASEMENT FROM POSTS; STORAGE OF THE REMOVED FENCING MATERIALS TO PREVENT DAMAGE; REINSTALLATION OF THE POSTS, GATES, AND FABRIC, INCLUDING ALL APPURTENANCES; AND REPLACEMENT OF ANY FENCE PARTS THAT ARE NOT ABLE TO BE SALVAGED AND REINSTALLED. REPLACE ITEMS DAMAGED FROM CONTRACTOR'S OPERATIONS WITH NEW MATERIALS, AT NO ADDITIONAL COST TO THE CONTRACTING AUTHORITY.
24	CONCRETE STEPS, TYPE A - UNIT PRICE SHALL INCLUDE LABOR AND EQUIPMENT REQUIRED TO INSTALL TYPE A CONCRETE STEPS, CONCRETE REINFORCEMENT, EXPANSION JOINT MATERIAL, AND PREPARATION OF SUBGRADE.
25	HANDRAIL, 32-INCHES - UNIT PRICE SHALL INCLUDE LABOR AND EQUIPMENT REQUIRED TO INSTALL HANDRAIL POSTS, MOUNTING HARDWARE, AND FINISHINGS.
26	SAFETY RAIL - UNIT PRICE SHALL INCLUDE LABOR AND EQUIPMENT TO INSTALL POSTS, CONCRETE FOR GROUND MOUNTING, PICKETS, MOUNTING HARDWARE, EPOXY GROUT, AND FINISHING.
27	DEMOLITION WORK - WET WELL - LUMP SUMP PRICE SHALL INCLUDE REMOVAL OF TOP 14-FEET RISER SECTION OF EXISTING 38-INCH WET WELL, REMOVAL OF SLAB AND MANHOLE COVER, REMOVAL OF BAR SCREEN AND GUIDE, REMOVAL OF 10-INCHES THICK SLAB AND BEAM, REMOVAL OF EXISTING FILLET, AND THE REMOVAL OF ALL PIPING AND TUBING. EXTREME CARE SHALL BE USED TO PREVENT ANY FURTHER DAMAGE TO THE EXISTING STRUCTURE. PRICE TO INCLUDE PROPER DISPOSAL OF DEBRIS OFF-SITE.
28	DEMOLITION WORK - LIFT STATION BUILDING AND EQUIPMENT - LUMP SUMP PRICE SHALL INCLUDE DEMOLITION OF EXISTING LIFT STATION BUILDING, REMOVAL OF STAIRS, REMOVAL OF LANDING, REMOVAL OF DUCT PIPING, REMOVAL OF ALL FORCE MAIN PIPING AND APPURTENANCES, AND THE REMOVAL OF PUMPS, RISERS, AND POST. EXTREME CARE SHALL BE USED TO PREVENT ANY FURTHER DAMAGE TO THE EXISTING STRUCTURE. PRICE TO INCLUDE PROPER DISPOSAL OF DEBRIS OFF-SITE.
29	CONCRETE WASHOUT - LUMP SUMP PRICE SHALL INCLUDE CONCRETE WASHWATER CONTAINMENT, COLLECTION, AND DISPOSSAL.
30	SANITARY SEWER MANHOLE ABANDONMENT - UNIT PRICE SHALL INCLUDE, BUT NOT LIMITED, REMOVAL OF MANHOLE FRAME AND COVER, AND FILLING MANHOLE INTERIOR WITH FLOWABLE MORTAR. FLOWABLE MORTAR SHALL COMPLY WITH SUDAS 3010 2.06.B.
31	LIFT STATION WET WELL - LUMP SUM PRICE INCLUDES LABOR, EQUIPMENT AND MATERIALS FOR CONSTRUCTION AND INSTALLATION OF THE LIFT STATION WET WELL AND ITS APPURTENANCES. THIS INCLUDES, BUT IS NOT LIMITED TO, CAST-IN-PLACE CONCRETE WELL WITH LID, CONNECTION OF EXISTING WET WELL WALL WITH NEW CONCRETE WELL WALL, INTERIOR LINING EXISTING WETWELL, INTERIOR AND EXTERIOR FORCE MAIN PIPING ASSOCIATED WITH STRUCTURES AND SYSTEM, FITTINGS, SUPPORTS, DRAIN PIPING, VENTS, SUBMERSIBLE PUMP AND RAIL SYSTEMS, ACCESS HATCHES, PUMP REMOVAL SYSTEM, TWO HOISTS AND CRANES WITH MOUNTS, TRASH BASKET DRAIN PAD, PAINTING METALS, STAINLESS STEEL BASKET SCREEN AND RAILS, FLOAT SWITCHES, LEVEL TRANSDUCER SENSOR, ELECTRICAL AND CONTROL EQUIPMENT, TESTING AND START UP, AND MATERIALS ON AND WITHIN LIFT STATION WET WELL.
32	PREFABRICATED OPERATOR'S BUILDING - LUMP SUM PRICE INCLUDES LABOR, BUT IT IS NOT LIMITED TO EQUIPMENT AND MATERIALS FOR THE CONSTRUCTION OF THE PREFABRICATED OPERATOR'S BUILDING, REINFORCED CONCRETE 8-INCHES TOPPING, MASONRY, DOORS AND HARDWARE, SECURITY (LOCKS) INSULATION, ROOFING, LUMBER, INTERIOR AND EXTERIOR FORCE MAIN PIPING ASSOCIATED WITH DRY WELL AND SYSTEM, VALVES AND APPURTENANCES, HVAC AND APPURTENANCES, ELECTRICAL AND CONTROL EQUIPMENT AND MATERIALS, LIGHTING, AND APPURTENANCES ASSOCIATED WITH THE BUILDING.
33	BYPASS MANHOLE - LUMP SUM PRICE INCLUDES LABOR, EQUIPMENT AND MATERIALS FOR THE CONSTRUCTION OF THE BYPASS MANHOLE. WORK INCLUDES, BUT IS NOT LIMITED TO, EXCAVATION AND BACKFILL, GRANULAR FILL, STEEL REINFORCED CONCRETE BASE, PRECAST CONCRETE STRUCTURE, ACCESS HATCH, PLUG VALVES, COUPLING ADAPTOR, PIPING, RISER, VENT, VENT PIPING, DRAIN PIPING, SUMP PUMP AND ASSOCIATED APPURTENANCES.
34	SITE ELECTRICAL - LUMP SUM PRICE INCLUDES LABOR, EQUIPMENT, AND MATERIALS FOR THE CONSTRUCTION AND INSTALLATION OF SITE ELECTRICAL. WORK INCLUDES, BUT IS NOT LIMITED TO, NEW SITE ELECTRICAL AS SHOWN IN THE CONTRACT DOCUMENTS.
35	STAND-BY GENERATOR - LUMP SUM PRICE INCLUDES LABOR, EQUIPMENT AND MATERIALS FOR THE CONSTRUCTION AND INSTALLATION OF THE GENERATOR. WORK INCLUDES, BUT IS NOT LIMITED TO, GAS SERVICE, PRESSURE REGULATOR AND APPURTENANCES, TRANSFER SWITCH, GENERATOR, ASSOCIATED SCADA, AND ASSOCIATED APPURTENANCES.
36	BOLLARDS- UNIT PRICE FOR EACH BOLLARD INCLUDES, BUT IS NOT LIMITED TO, LABOR EQUIPEMENT AND MATERIALS FOR THE INSTALLATION OF BOLLARDS AS INDICATED ON DRAWINGS.
37	STRUCTURAL CONCRETE RETAINING WALL - GENERATOR PAD AND STAIRS - UNIT PRICE SHALL INCLUDE, BUT NOT LIMITED TO ALL LABOR AND EQUIPMENT REQUIRED TO INSTALL A CONCRETE RETAINING WALL WITH REINFORCING STEEL, EXPANSION JOINT, PROPER SUBDRAIN, AND BACKFILL MATERIAL AS SHOWN IN DRAWINGS. EXCAVATION OF RETAINING WALL IS INCIDENTAL.
38	STRUCTURAL CONCRETE PAD - GENERATOR - UNIT PRICE SHALL INCLUDE ALL LABOR AND EQUIPMENT REQUIRED TO INSTALL THE CONCRETE GENERATOR PAD AS SHOWN IN DRAWINGS.
39	COMPACTING BACKFILL - GRADING - UNIT PRICE SHALL INCLUDE ALL LABOR AND EQUIPMENT REQUIRED TO EXTEND THE EXISTING EARTH MOUND AS SHOWN IN THE DRAWINGS .

FORCE MAIN FITTINGS

FITTINGS	UNIT WEIGHT (LBS)	ESTIMATED QUANTITY	ESTIMATED TOTAL WEIGHT (LBS)
10" x 90 DEG BEND	102	0	0
10" x 45 DEG BEND	78	5	390
10" x 22.5 DEG BEND	66	5	330
10" x 11.25 DEG BEND	59	0	0
TOTAL WEIGHT			720

VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	TDA	NAS	11/2025

DES APP DRN

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

ESTIMATE REFERENCE NOTES

DATE MAY 2026
PROJECT NO 60696351
FILENAME G-001-004.Dgn
SHEET NO 4
DRAWING NO **01-G-03A**

GENERAL NOTES

1. CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AND THE 2026 EDITION OF THE IOWA SUDAS (STATEWIDE URBAN DESIGN AND SPECIFICATIONS) SPECIFICATIONS.

2. ARRANGE WITH THE VARIOUS UTILITY COMPANIES FOR SUPPORT OR RELOCATION OF ANY UTILITIES AND/OR UTILITY POLES. ANY CHARGE FOR TEMPORARY SUPPORTING OR RELOCATING ANY UTILITIES AND/OR UTILITY POLES SHALL BE PAID BY THE CONTRACTOR. CONTACT IOWA ONE CALL (1-800-292-8989) FOR EXISTING UTILITIES LOCATIONS PRIOR TO EXCAVATION.

3. WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON DRAWINGS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF CONTRACTOR TO NOTIFY OWNERS OF UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

4. PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS AND SUSPENSION OF THE WORK AND UNTIL COMPLETION AND FINAL ACCEPTANCE THEREOF SUITABLE AND REQUISITE BARRIERS, SIGNS OR OTHER ADEQUATE PROTECTION. PROVIDE, KEEP AND MAINTAIN SUCH LIGHTS, DANGER SIGNALS OR WATCHMEN AS MAY BE NECESSARY TO ENSURE SAFETY OF PUBLIC AS WELL AS THOSE ENGAGED IN THE WORK. BARRICADES AND OBSTRUCTIONS SHALL BE MARKED AT NIGHT BY FLASHING YELLOW SIGNAL LIGHTS, AND KEPT BURNING FROM SUNSET TO SUNRISE. BARRICADES AND LIGHTS SHALL CONFORM TO THE REQUIREMENTS OF "MANUAL IN UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, " U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, LATEST REVISION, AND THE LATEST REVISION OF IOWA DEPARTMENT OF SPECIFICATION FOR TRAFFIC CONTROL FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS."

5. ANY WORK SHOWN ON PLANS BUT NOT INCLUDED IN BID ITEMS SHALL BE CONSIDERED INCIDENTAL TO PROJECT.

6. WORK TO REMAIN WITHIN RIGHT OF WAY (ROW) AND ACQUIRED EASEMENTS FOR THIS PROJECT. WORK INVOLVED IN THIS PROJECT SHALL BE CONSTRUCTED ON CITY OWNED PROPERTY OR EASEMENTS. CONTRACTOR SHALL RESTRICT CONSTRUCTION OPERATIONS TO WITHIN DESIGNATED CONSTRUCTION LIMITS. NO MATERIALS, EXCAVATED MATERIAL, OR EQUIPMENT SHALL BE STORED ON, PARKED ON, DEPOSITED ON, OR DRIVEN OVER ANY PRIVATE PROPERTY UNLESS WRITTEN AUTHORIZATION IS OBTAINED FROM THE PROPERTY OWNER BY THE CONTRACTOR. A COPY OF SUCH WRITTEN AGREEMENT SHALL BE MADE AVAILABLE TO THE CITY AND THE ENGINEER. CONTRACTOR NOT ALLOWED TO STORE EQUIPMENT OR MATERIALS WITHIN THE CLEAR ZONE FOR THE ROADWAY.

7. PROVIDE CONTINUOUS BYPASS PUMPING AT THIS LOCATION DURING CONSTRUCTION. IF DAMAGE OCCURS FROM INTERRUPTION OF THIS SERVICE OR FROM A FAULTY CONNECTION, CONTRACTOR SHALL BE RESPONSIBLE AND REPAIR DAMAGES AT NO COST TO OWNER. TEMPORARY CONNECTION SHALL DISCHARGE INTO MUNICIPAL COLLECTION SYSTEM FOR TREATMENT. TEMPORARY BYPASS PUMPING WILL BE REQUIRED TO MAINTAIN SERVICE. NO SEPARATE PAYMENT FOR BYPASS PUMPING.

8. PROVIDE WATERTIGHT FERNCO OR HYMAX 2 COUPLERS WHERE SEWER PIPE CHANGES FROM ONE MATERIAL TO ANOTHER. NO SEPARATE PAYMENT.

9. WHERE WATER TIGHT LIDS INDICATED ATTACH FRAME TO STRUCTURE AND PROVIDE BOLT DOWN FRAME AND COVER. USE SW-601 TYPE A OR C CASTINGS.

10. MINIMIZE DISRUPTION TO EXISTING STREETS.

11. RESTORE DAMAGED PARKING LOT OR ACCESS ROAD SURFACING CAUSED BY CONTRACTOR NEGLECT IMMEDIATELY AFTER INSTALLATION OF SEWER WITH PERMANENT SURFACE OR TEMPORARY 6" TI IICK CRUSHED STONE SURFACING. MAINTAIN TEMPORARY SURFACE UNTIL PERMANENT SURFACE IS INSTALLED. NO SEPARATE PAYMENT FOR TEMPORARY OR PERMANENT SURFACING.

12. PROVIDE COMPACTED STRUCTURAL BACKFILL FOR TRENCHES BENEATH AND WITHIN 5 FEET OF ALL PCC AND HMA STREET SURFACING AND DRIVEWAYS.

13. FINISH GRADE AND CLEANUP IMMEDIATELY BEHIND EXCAVATION AND BACKFILL OPERATIONS TO MINIMIZE INCONVENIENCE TO PUBLIC AND PRIVATE PROPERTY OWNERS.

14. GRADE ALL AREAS TO DRAIN.

15. PROVIDE DETAILED ANTICIPATED CONSTRUCTION STAGING PLAN IN WRITING AT RECONSTRUCTION CONFERENCE AND UPDATE AS NECESSARY AS CONSTRUCTION PROGRESSES.

16. INSTALL TRACER WIRE ALONG THE FORCE MAIN. TRACER WIRE STATIONS EVERY 500 FEET AND AT FORCE MAIN TERMINATION POINTS.

17. RECONNECT DISTURBED FIELD TILE. RECORD SIZE AND LOCATION AND GIVE INFORMATION TO ENGINEER.

18. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO PROPERTY CAUSED BY THEIR ACTIVITIES. REPAIRS OR REPLACEMENT OF DAMAGED PROPERTY TO BE MADE IN-KIND.

19. PROTECT EXISTING WATERWAYS. DO NOT DISTURB WATERWAYS (DRAINAGE CHANNELS).

20. ANY FENCES REMOVED OR DAMAGED DUE TO CONSTRUCTION ACTIVITIES SHALL BE REPAIRED OR REPLACED IN KIND. COST IS INCIDENTAL TO PROJECT.

21. CONTRACTOR TO MAINTAIN DUST CONTROL DURING CONSTRUCTION ACTIVITIES.

22. ALL EXCAVATIONS MUST BE PROTECTED AT ALL TIMES AND FENCED IN WITH REFLECTIVE MATERIAL OR ILLUMINATED IF LEFT UNATTENDED.

23. EXISTING SANITARY SEWER PIPES TO BE ABANDONED IN PLACE SHALL BE FILLED WITH CELLULAR CONCRETE ACCORDING TO SUDAS 5010. CONTRACTOR SHALL SUBMIT A MIX DESIGN PRIOR TO ORDERING MATERIALS BY PREPARING AT LEAST TWO (2) SETS OF FOUR (4) CYLINDERS TO TEST COMPRESSIVE STRENGTH.

24. DURING DIRECTIONAL DRILLING ACTIVITIES, CARE SHALL BE TAKEN TO PREVENT HYDRAULIC FRACTURING OF THE BOREHOLE (INADVERTENT RETURNS).

25. NOT USED

DEWATERING PLAN

26. DEWATERING WILL BE REQUIRED TO CONTROL GROUNDWATER IN EXCAVATION. CONTRACTOR SHALL BE RESPONSIBLE FOR CHOOSING METHOD OF GROUNDWATER CONTROL. IF CONTRACTOR CHOOSES TO USE DEEP WELLS OR WELL POINTS, THEY SHALL BE DESIGNED, INSTALLED AND OPERATED SO AS TO PREVENT REMOVAL OF ON-SITE MATERIALS. COST OF DEWATERING SHALL BE INCIDENTAL TO THE RESPECTIVE BID ITEMS AND SHALL NOT BE PAID FOR AS EXTRA WORK. CONTRACTOR SHALL SUBMIT PLAN FOR GROUNDWATER CONTROL AT PRECONSTRUCTION CONFERENCE. CONTRACTOR TO SUBMIT NOTICE OF INTENT IN ACCORDANCE TO THE GP9 EXCAVATION DEWATERING PERMIT.

SOIL REMOVAL & PLACEMENT

27. FOR BIDDING PURPOSES ASSUME 100% OF ALL MATERIAL REMOVED ON PROPERTY TO BE UNUSABLE FOR BACKFILL.

28. SALVAGE AND SEPARATELY STOCKPILE EXISTING TOPSOIL AND USE TO FINISH TOP 6" OF TRENCH IN GRASS AREAS.

29. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL EXCESS EXCAVATION. DISPOSAL OF MATERIALS TO BE CONSIDERED INCIDENTAL UNLESS OTHERWISE NOTED. MATERIALS REQUIRING DISPOSAL SHALL BE DISPOSED OF BY THE CONTRACTOR PER ALL LOCAL AND FEDERAL REGULATIONS. COORDINATE WORK WITH THE CITY OF WATERLOO FOR DISPOSAL OF CONTAMINATED SOILS.

30. ALL MATERIAL UTILIZED AS BACKFILL SHALL BE HOMOGENEOUS CLAY, FREE OF ORGANIC MATTER AND DEBRIS AS DESCRIBED BELOW SATISFACTORY IMPERVIOUS MATERIALS CLASSIFIED IN ACCORDANCE WITH ASTM 2487 AS CL, CL-CH OR CH WITH NOT LESS THAN 50 PERCENT BY WEIGHT PASSING THROUGH THE NO. 200 SIEVE WITH THE FINES CLASSIFIED AS CL, CL-CH OR CH.

31. ENGINEER SHALL PERFORM IN-PLACE DENSITY TESTS ON BORE PIT AND BACKFILL MATERIAL TO ENSURE MOISTURE AND DENSITY MEET REQUIREMENTS.

32. FILL FOR THE BORE PITS NEAR THE LEVEE AND AT THE LIFT STATION WILL BE PLACED ACCORDING TO EM-1110-2-1913 IN LOSE 6 TO 9 INCH LIFTS AND COMPACTED TO MINIMUM 95% STANDARD PROCTOR DENSITY AT WITHIN 2% OPTIMUM MOISTURE. NUCLEAR DENSITY TESTING WILL BE USED TO MONITORY IN-PLACE DENSITY. THESE TESTS WILL BE COMPLETED ON EVERY LIFT. IF MOISTURE AND DENSITY HAVE BEEN CONSISTENT AND WITHIN CONTROL LIMITS, TESTING OF EACH LIFT MAY BE WAIVED, BUT TESTS SHOULD BE COMPLETED AT A MINIMUM FREQUENCY OF ONE EVERY 300 CY, AT LEAST ONCE LABORATORY MOISTURE CONTENT WILL BE RUN EACH DAY, OR AT LEAST 1 OF EVERY 10 NUCLEAR TESTS.

33. BACKFILL AROUND ALL PIPING AND STRUCTURES SHOULD BE PLACED BY HAND COMPACTING EQUIPMENT IN 4" LOOSE LIFTS. BACKFILL MATERIALS SHALL BE COMPACTED TO A MINIMUM 90% STANDARD MAXIMUM DRY DENSISTY AT WITHIN 5% OPTIMUM MOISTURE. WHERE HAND COMPACTOR EFFORTS ARE NECESSARY, PLACE COMPACTORS ARE REQUIRED. VIBRATORY SELF-PROFELLED PAT-FOOT ROLLER COMPACTORS FOR COMPACTING THE RECONSTRUCTED EMBANKMENT. NOTES DETAILED HEREIN OVERRIDE ANY SUDAS PROCTOR SPECIFICATION FOR WORK IN AND AROUND THE RAILROAD. SCARIFY SURFACE PRIOR TO PLACEMENT OF EACH LIFT.

34. MODIFIED PROCTOR TESTING (ASTM D1557) SHALL BE COMPLETED FOR EACH SOIL TYPE ENCOUNTERED. INCLUDE TWO PROCTOR TESTS FOR BIDDING PURPOSES.

35. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL EXCESS EXCAVATION. USE METI IODS TO PREVENT OFF SITE TRACKING OF MUD AND DEBRIS. IF TRACKING OCCURS CLEANUP IMMEDIATELY. REMOVE DIRT, MUD, AND DEBRIS FROM ACCESS ROADS AND DRIVEWAYS.

36. RESTORE ALL SURFACES TO ORIGINAL CONDITIONS AFTER IMPROVEMENTS ARE COMPLETED AT NO EXTRA COST TO THE OWNER.

37. PREPARE AREAS FOR SEEDING: FERTILIZE, SEED AND MULCH PER SUDAS SECTION 9010, TYPE 1 SEEDING. ALL UNPAVED DISTURBED AREAS SHALL BE SEEDED. FOLLOW DATES LISTED IN SUDAS FOR SEEDING ACTIVITIES.

38. AFTER SEED BED PREPARATION REMOVE STONES LARGER THAN 1-INCH, STUMPS, ROOTS, BRUSH, WIRE, GRADE STAKES, CONSTRUCTION MATERIALS OR OTHER OBJECTIONABLE MATERIAL. NO SEPARATE PAYMENT FOR THIS WORK.

39. GEOGRAPHIC COORDINATE SYSTEM NAD 1983 STATE PLANE IOWA NORTH FIPS 1401 FEET.

VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

REV	DESCRIPTION	DRN	CHK	DATE
	PRELIMINARY PLAN SET	TDA	NAS	11/2025
	BID SET	KJD	NAS	6/2026

DRN | DES | CHK | APP

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-1467
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

CIVIL
GENERAL NOTES

DATE MAY 2026
PROJECT NO 60696351
FILENAME G-001-004.Dgn
SHEET NO 5
DRAWING NO 01-G-04

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NOTES

PROJECT SITE DESCRIPTION

THE OVERALL PROJECT INCLUDES DEMOLITION AND RECONSTRUCTION OF AN EXISTING SANITARY SEWER LIFT STATION AND INSTALLATION OF APPROXIMATELY 850 FEET OF NEW FORCE MAIN. THE PROJECT IS LOCATED IN WATERLOO, IA. THE PROPOSED SANITARY SEWER PIPING WILL BE INSTALLED USING A COMBINATION OF OPEN TRENCHING AND DIRECTIONAL BORING METHODS. DIRECTIONAL BORING WILL BE REQUIRED AT CROSSINGS OF EXISTING PAVED ROADWAYS AND RAIL ROAD CROSSINGS. THE PROJECT WILL INVOLVE MINIMAL PLACEMENT OF IMPERVIOUS AREA AT THE PROPOSED LIFT STATION LOCATION. ALL OTHER DISTURBED AREAS WILL BE RESTORED TO ORIGINAL VEGETATIVE CONDITIONS. THE OVERALL SITE AREA IS APPROXIMATE 1.5 ACRES WITH AN ESTIMATED 1.0 ACRES BEING DISTURBED FOR CONSTRUCTION ACTIVITIES. RUNOFF FROM THIS PROJECT WILL FLOW FROM THE SITE ULTIMATELY TO THE CEDAR RIVER.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

ALL CONTRACTORS SHALL CONDUCT THEIR OPERATIONS IN A MANNER THAT CONTROLS POLLUTANTS, MINIMIZES EROSION, AND PREVENTS SEDIMENTS FROM ENTERING WATERS OF THE STATE AND LEAVING THE PROJECT AREA. THE CONTRACTOR WILL BE PROVIDED WITH A SWPPP NOTEBOOK WHICH SHALL BE KEPT ON-SITE FOR THE DURATION OF THE PROJECT. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING AND MAINTAINING THE SWPPP NOTEBOOK AND FOR COMPLIANCE AND IMPLEMENTATION OF THE SWPPP FOR THEIR ENTIRE CONTRACT. THIS RESPONSIBILITY SHALL BE FURTHER SHARED WITH SUBCONTRACTORS WHOSE WORK IS A SOURCE OF POTENTIAL POLLUTION. A NPDES GENERAL PERMIT NO. 2 IS REQUIRED FOR THIS PROJECT AND SHALL BE OBTAINED PRIOR TO CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL MEET ALL THE REQUIREMENTS OF THE NPDES GENERAL PERMIT NO. 2 AND THE CITY OF WATERLOO WITH THE MORE STRINGENT REQUIREMENTS CONTROLLING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE POLLUTION CONTROL MEASURES UNTIL PERMANENT STABILIZATION HAS OCCURRED.

GENERAL STORM WATER POLLUTION PREVENTION PLAN NOTES

1. CONTRACTOR SHALL CONTACT THE CITY ENGINEERS OFFICE FOR A PRE-CONSTRUCTION INSPECTION PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THIS MEETING SHALL BE DOCUMENTED WITHIN THE SWPPP NOTEBOOK WHICH SHALL BE KEPT ON SITE AT ALL TIMES.

2. CONTRACTOR AND SUBCONTRACTORS SHALL SIGN NPDES CERTIFICATION FORMS PRIOR TO CONSTRUCTION ACTIVITIES. COPIES OF THESE FORMS SHALL BE KEPT IN THE SWPPP NOTEBOOK.

3. CONTRACTOR SHALL USE STABILIZED CONSTRUCTION ENTRANCES/EXITS TO REDUCE OFF-SITE TRACKING. PROBABLE LOCATIONS ARE SHOWN ON THE PLAN SHEET 02-CF-01 AND THE OVERALL MAP WITHIN THE SWPPP NOTEBOOK. THESE LOCATIONS MAY VARY WITH CONSTRUCTION STAGING AND AT THE ENGINEER'S DISCRETION. ANY CHANGES SHOULD BE NOTED ON THE SWPPP MAP. ANY MATERIAL TRACKED OUTSIDE OF THE PROJECT AREA SHALL BE CLEANED UP BY THE END OF THE WORK DAY OF SUCH OCCURRENCE.

4. SILT FENCE OR EQUIVALENT AND WATTLES (MUST BE APPROVED BY THE ENGINEER) SHALL BE PLACED IN AREAS WHERE SEDIMENT AND OTHER POLLUTANTS HAVE THE POTENTIAL TO ENTER WATERWAYS OR LEAVE THE SITE. REFER TO SHEETS 02-CFM 01, 02 CFM 02 AND 02 CF 01 FOR PROBABLE LOCATION INFORMATION. THESE LOCATIONS MAY VARY BASED ON CONSTRUCTION STAGING AND IF CONDITIONS WARRANT ADDITIONAL FENCING MAY BE REQUIRED. ANY CHANGES TO THE PLAN SHALL BE ADDED TO THE SWPPP SITE MAP AS CONSTRUCTION PROGRESSES. ALL STOCK PILE AREAS SHALL ALSO BE PROTECTED WITH SILT FENCE. REFER TO NOTE 6 FOR MORE INFORMATION REGARDING STOCKPILING OF MATERIAL. ALL INTAKES WITHIN THE PROJECT AREA THAT MAY BE AFFECTED BY SEDIMENT TRANSPORT SHALL BE PROTECTED WITH SEDIMENT FILTER THROUGHOUT CONSTRUCTION.

5. HIGH FLOW SILT FENCE OR EQUIVALENT (MUST BE APPROVED BY THE ENGINEER) SHALL BE USED AS DITCH CHECKS FOR CONCENTRATED AREAS. REFER TO SHEETS 02-CFM-01 AND 02-CFM-02 FOR LOCATION INFORMATION. THESE LOCATIONS MAY VARY AS CONDITIONS WARRANT OR AT THE DISCRETION OF THE ENGINEER.

6. THIS PROJECT TAKES PLACE IN OR NEAR WATERWAYS, DRAINAGEWAYS AND FEMA DELINEATED FLOODPLAINS AND FLOODWAYS. DURING CONSTRUCTION THE CONTRACTOR MAY NOT STOCKPILE MATERIAL WITHIN A DELINEATED FLOODWAY WATERWAY OR DRAINAGEWAY AT ANY TIME. REFER TO SHEETS 02-C-01, 02-CFM-01 AND 02-CFM-02 FOR FLOODWAY LOCATION INFORMATION. THESE AREAS MUST BE KEPT FREE AND CLEAR DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL ALSO NOT DISPOSE OF EXCESS SPOIL MATERIAL RESULTING FROM THE PROJECT WITHIN A DELINEATED FLOODWAY, WATERWAY OR DRAINAGEWAY. AS PART OF THE PROJECT DESIGN NO FILL MATERIAL WILL BE ALLOWED WITHIN THESE AREAS DURING OR AFTER PROJECT CONSTRUCTION.

7. A CONCRETE WASHOUT AREA(S) SHALL BE SET UP ON-SITE AND CLEARLY MARKED DURING ALL PAVING OPERATIONS. THE WASHOUT AREA MUST BE ACCESSIBLE TO CONCRETE TRUCKS DURING WET OR MUDDY CONDITIONS AND MUST HAVE ADEQUATE STORAGE VOLUME TO CONTAIN ALL WASHOUT AND POSSIBLE RAIN. WASHOUTS ARE REQUIRED TO BE USED AND MAINTAINED DURING ALL PAVING ACTIVITIES.

8. IF A PORTA-POTTY IS PLACED ON-SITE IT SHALL BE IN AN AREA THAT WOULD MINIMIZE POLLUTION THROUGH STORM WATER RUNOFF IF A SPILL WERE TO OCCUR. THIS LOCATION MAY VARY WITH CONSTRUCTION STAGING AND SHALL BE ADDED TO THE SWPPP MAP.

9. IF APPLICABLE TO THIS PROJECT DUMPSTERS AND HAZARDOUS MATERIAL/CHEMICAL STORAGE AREAS SHALL BE SET UP AND CLEARLY MARKED ON-SITE. THESE LOCATIONS MAY VARY WITH CONSTRUCTION STAGING AND SHALL BE ADDED TO THE SWPPP MAP.

10. CONSTRUCTION MATERIAL/EQUIPMENT STORAGE AREAS AND EMPLOYEE PARKING SHALL BE SET UP AND CLEARLY MARKED ON-SITE. A PROBABLE LOCATION IS SHOWN ON SHEET 02-C-01 AND 02-CF-01. THIS LOCATION MAY VARY WITH CONSTRUCTION STAGING. ANY CHANGES SHALL BE ADDED TO THE SWPPP MAP.

11. SWPPP SITE INSPECTIONS SHALL BE CONDUCTED AT LEASE ONCE EVERY 7 CALENDAR DAYS. ALL INSPECTIONS SHALL BE JOINT INSPECTIONS BETWEEN THE CONTRACTOR AND THE INSPECTOR. THE CITY OF WATERLOO MAY ALSO BE PRESENT DURING INSPECTIONS. SIGNATURES OF EACH ARE REQUIRED ON EACH INSPECTION FORM. ANY DEFICIENCIES FOUND DURING AN INSPECTION SHALL BE CORRECTED ACCORDING TO NPDES AND CITY OF WATERLOO REQUIREMENTS. ALL CORRECTIVE MEASURES SHALL BE IMPLEMENTED AS SOON AS PRACTICAL, BUT NOT MORE THAN 3 CALENDAR DAYS FROM THE INSPECTION. IF A WRITTEN OR VERBAL NOTIFICATION IS PROVIDED BY THE CITY OF WATERLOO OR OTHER REGULATORY AGENCIES, THE CONTRACTOR MUST IMPLEMENT ALL CORRECTIVE ACTIONS WITHIN 48 HOURS OF THE NOTIFICATION. IF THIS IS NOT POSSIBLE, THE CITY AND/OR REGULATORY AGENCY SHALL BE NOTIFIED IMMEDIATELY AND ARRANGEMENTS SHALL BE MADE ACCORDING TO THE PERMIT REQUIREMENTS.

12. THE CONTRACTOR SHALL NOT DISTURB EXISTING VEGETATION UNLESS NECESSARY FOR CONSTRUCTION ACTIVITIES. CARE SHOULD BE TAKEN TO AVOID DRIVING EQUIPMENT IN AREAS THAT MAY DAMAGE EXISTING VEGETATION UNLESS ABSOLUTELY NECESSARY.

13. IF CONSTRUCTION ACTIVITY IS NOT PLANNED TO OCCUR IN A DISTURBED AREA FOR AT LEAST 14 DAYS TEMPORARY OR PERMANENT SEEDING WILL BE REQUIRED IMMEDIATELY.

14. HYDRAULIC SEEDING AND DOUBLE NETTED WOOD EXCELSIOR MATTING SHALL BE UTILIZED FOR ALL DISTURBED AREA ON THIS PROJECT. THE MATTING WILL BE REQUIRED ON ALL SLOPES 4:1 OR GREATER AND IN ALL APPLICATIONS IN OR NEAR AN EXISTING DRAINAGEWAY OR WATERWAY.

15. IF SWPPP CONTROL LOCATIONS CANNOT BE PRE-DETERMINED BASED ON CONSTRUCTION STAGGING. THE SWPPP MANAGER SHALL ADD THEM TO THE SITE MAP AS THEY ARE IMPLEMENTED.

16. MANHOLE EXCAVATION, DIRECTIONAL DRILLING AND BORE PITS - CONTRACTOR SHALL RESTORE ANY DISTURBANCE TO VEGETATION DUE TO CONSTRUCTION. CONTRACTOR TO PROTECT UNDISTURBED AREAS FROM RUNOFF SEDIMENT FROM EXCAVATION AND STOCKPILES.

DRN	DES	CHK	APP	REV	DESCRIPTION	DRN	CHK	DATE
					BID SET	KJD	NAS	6/2026
					PRELIMINARY PLAN SET	TDA	NAS	11/2025

1-INCH — VERIFY SCALE IF PLAN SHEET IS REDUCED

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-4467
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

CIVIL - SWPPP

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	G-005.Dgn
SHEET NO	6
DRAWING NO	01-G-05

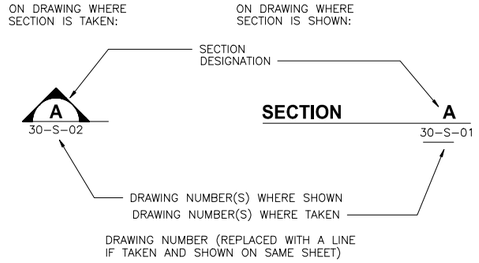
GENERAL LEGEND

DISCIPLINE IDENTIFIER

DISCIPLINE	DISCIPLINE IDENTIFIER	DISCIPLINE STANDARD DETAIL NUMBERS
GENERAL	G	NONE
CIVIL	C	02–000 TO 02–999
ARCHITECTURAL	A	07–000 TO 07–999
STRUCTURAL	S	08–000 TO 08–999
PROCESS–MECHANICAL	M	06–000 TO 06–499
INSTRUMENTATION & CONTROL	N	06–500 TO 06–999
PLUMBING	P	09–400 TO 09–499
HVAC	H	09–000 TO 09–399 & 09–500 TO 09–999
ELECTRICAL	E	30–000 TO 30–999
REMOVALS	R	NONE

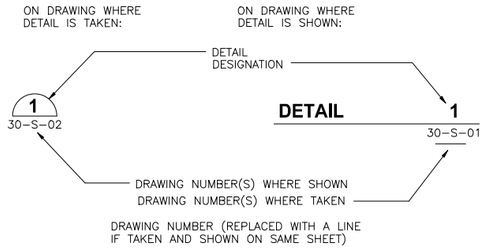
SECTION DESIGNATION

SECTION DESIGNATIONS USE LETTERS

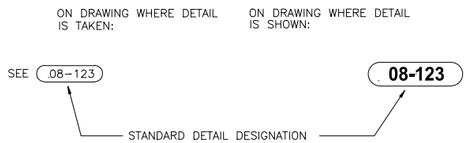


DETAIL DESIGNATION

DETAIL DESIGNATIONS USE NUMBERS

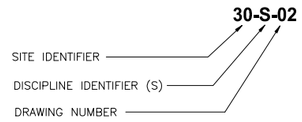


STANDARD DETAIL DESIGNATION



NOTE: STANDARD DETAILS ARE LOCATED ON DRAWINGS THAT HAVE BEEN ASSIGNED A SITE IDENTIFIER OF 99 FOLLOWED BY A DISCIPLINE IDENTIFIER. EXAMPLE: 99–S–01. THESE DRAWINGS ARE PLACED LAST IN THE DRAWING SET.

DRAWING NUMBER DESIGNATION



PLAN NOTE DESIGNATION

1 PLAN NOTE, SEE LIST ON SAME DRAWING

REMOVAL NOTE DESIGNATION

1 REMOVAL NOTE, SEE LIST ON SAME DRAWING

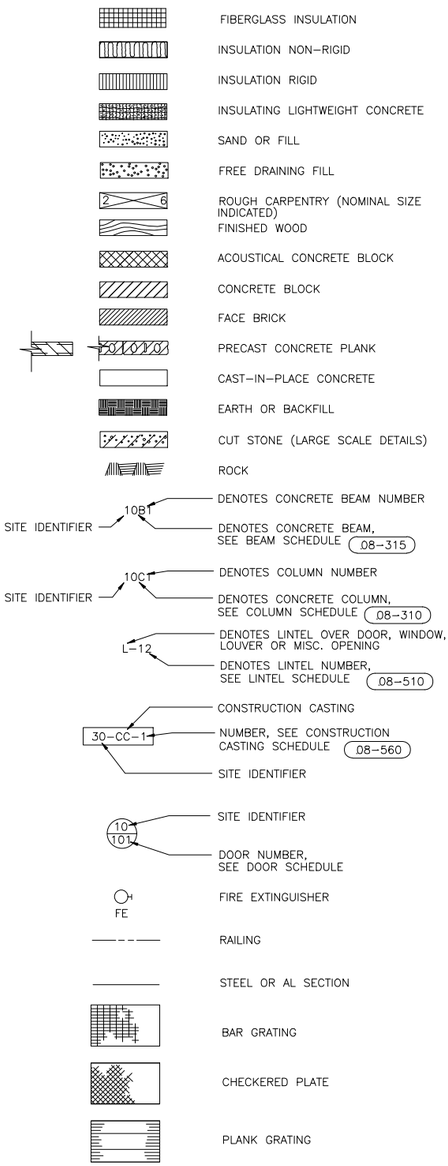
NOTE:
1. THIS IS A STANDARD LEGEND. NOT ALL THE INFORMATION SHOWN ON THIS LEGEND IS USED ON THIS PROJECT.

ARCHITECTURAL AND STRUCTURAL LEGEND

ABBREVIATIONS

ADDL	ADDITIONAL
AL	ALUMINUM
ALT	ALTERNATE
B/	BOTTOM OF
BLDG	BUILDING
BLK	BLOCK
BOT	BOTTOM
℄	CENTERLINE
CLR	CLEAR
COL	COLUMN
CONTR JT	CONTRACTION JOINT
CJT	CONTROL JOINT
CMU	CONCRETE MASONRY UNIT
CONT	CONTINUOUS
CONC	CONCRETE
DBL	DOUBLE
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
EA	EACH
EXT	EXTERIOR
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXP	EXPANSION
EL	ELEVATION
EXP JT	EXPANSION JOINT
EW	EACH WAY
EF	EACH FACE
FE	FIRE EXTINGUISHER
FTG	FOOTING
FD	FLOOR DRAIN
GA	GAUGE
GALV	GALVANIZED
HORZ	HORIZONTAL
HP	HIGH POINT
HVAC	HEATING VENTILATING AND AIR CONDITIONING
INSUL	INSULATION
INT	INTERIOR
LP	LOW POINT
LLV	LONG LEG VERTICAL
LLH	LONG LEG HORIZONTAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MO	MASONRY OPENING
NO. OR #	NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OPNG	OPENING
ℙ	PLATE
PJF	PREFORMED JOINT FILLER
REINF	REINFORCING
RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQD	REQUIRED
R	RISER
RD	ROOF DRAIN
SIM	SIMILAR
SPA	SPACE OR SPACING
SS	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STL	STEEL
SQ	SQUARE
T	TREAD
T/	TOP OF
T/S	TOP OF STEEL
T&B	TOP AND BOTTOM
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
WD	WOOD
WS	WATERSTOP
W/	WITH
WWF	WELDED WIRE FABRIC

SYMBOLS



NOTE:
1. THIS IS A STANDARD LEGEND. NOT ALL THE INFORMATION SHOWN ON THIS LEGEND IS USED ON THIS PROJECT.

1–INCH — VERIFY SCALE IF PLAN SHEET IS REDUCED

DRN	DES	CHK	APP	REV	DESCRIPTION	DRN CHK	DATE
					BID SET	K.D NAS	5/6/2026
					PRELIMINARY PLAN SET	TDA NAS	3/2026

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

GENERAL ARCHITECTURAL AND STRUCTURAL LEGEND

DATE	MAY 2026
PROJECT NO	60696351
FILENAME FILE NO	01–G–06.dwg
SHEET NO	7
DRAWING NO	01-G-06

ABBREVIATIONS

1P – ONE POLE
2P – TWO POLE
3P – THREE POLE
4P – FOUR POLE
1P1W – ONE POLE, ONE WIRE
1P2W – ONE POLE, TWO WIRE
2P2W – TWO POLE, TWO WIRE
2P3W – TWO POLE, THREE WIRE
3P2W – THREE POLE, TWO WIRE
3P3W – THREE POLE, THREE WIRE
3P4W – THREE POLE, FOUR WIRE
4P4W – FOUR POLE, FOUR WIRE
A – AMPERE
AC – ALTERNATING CURRENT
AF – AMP FRAME
AFF – ABOVE FINISHED FLOOR
AFG – ABOVE FINISHED GRADE
AIC – AMPERE INTERRUPTING CAPACITY
AL – ALUMINUM
AS – AMP SWITCH
AT – AMP TRIP
ARCH – ARCHITECT
ATS – AUTOMATIC TRANSFER SWITCH
AUD – AUDIOMETER BOX CONNECTION
A/V – AUDIO VISUAL
BFG – BELOW FINISHED GRADE
BLDG – BUILDING
BP – BRANCH PANEL
C – CONDUIT (GENERIC TERM FOR RACEWAY. PROVIDE AS SPECIFIED.)
CAM – CAMERA
CAT – CATALOG
CATV – CABLE TELEVISION
CB – CIRCUIT BREAKER
CKT – CIRCUIT
COL – COLUMN
CP – CONTROL PANEL
CPT – CONTROL POWER TRANSFORMER
CT – CURRENT TRANSFORMER
CU – COPPER
℄ – CENTERLINE
Δ – DELTA
DC – DIRECT CURRENT
DISC – DISCONNECT
DP – DISTRIBUTION PANELBOARD
DT – DUSTTIGHT
DWG – DRAWING
E – WIRED ON EMERGENCY CIRCUIT
EC – ELECTRICAL CONTRACTOR
EMT – ELECTRIC METALLIC TUBING
EOL – END OF LINE
EP – EXPLOSION PROOF
ETM – ELAPSED TIME METER
EWC – ELECTRIC WATER COOLER
EXIST. – EXISTING
F – FLUSH
FA – FIRE ALARM
FBO – FURNISHED BY OTHERS
FC – FIRE PROTECTION CONTRACTOR
FDN – FOUNDATION
FLA – FULL LOAD AMPS
FMC – FLEXIBLE METALLIC CONDUIT
FRE – FIBERGLASS REINFORCED EPOXY CONDUIT
GC – GENERAL CONTRACTOR
GFCI – GROUND FAULT CIRCUIT INTERRUPTER
GFPE – GROUND FAULT PROTECTION EQUIPMENT
GND – GROUNDED
GRC – GALVANIZED RIGID CONDUIT
GRD – GROUND
GRS – GALVANIZED RIGID STEEL
HH – HANDHOLE
HID – HIGH INTENSITY DISCHARGE
HP – HORSEPOWER
HV – HIGH VOLTAGE
HVAC – HEATING, VENTILATING AND AIR CONDITIONING
HZ – HERTZ (CYCLE) PER SECOND
I&C – INSTRUMENTATION & CONTROL
IAM – INDIVIDUAL ADDRESSABLE MODULE
IG – ISOLATED GROUND
IMC – INTERMEDIATE METAL CONDUIT
JB – JUNCTION BOX
KCMIL – THOUSAND CIRCULAR MILS
K/O – KNOCK–OUT
KVA – KILOVOLT AMPERE
KVAR – KILOVOLT AMPERE REACTIVE
KW – KILOWATT
LCP – LOCAL CONTROL PANEL
LFMC – LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT
LFNC – LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT
LP – LIGHTING PANELBOARD
LS – LIMIT SWITCH
LTG – LIGHTING
LV – LOW VOLTAGE
M – METER
MC – METAL CLAD CABLE
MCB – MAIN CIRCUIT BREAKER
MCC – MOTOR CONTROL CENTER
MDP – MAIN DISTRIBUTION PANEL
MH – MANHOLE
MISC – MISCELLANEOUS
MLO – MAIN LUGS ONLY
MOD – MOTOR OPERATED DISCONNECT SWITCH
MTD – MOUNTED
MTG – MOUNTING
MTR, M – MOTOR
MTS – MANUAL TRANSFER SWITCH
N/A – NOT APPLICABLE
NA – NON–AUTOMATIC
NC – NORMALLY CLOSED
NEC – NATIONAL ELECTRICAL CODE
NEUT, N – NEUTRAL
NF – NON FUSED
NIC – NOT IN CONTRACT
NL – NIGHT LIGHT
NM – NONMETALLIC SHEATHED CABLE
NO – NORMALLY OPEN
NRTL – NATIONALLY RECOGNIZED TESTING LAB
– NUMBER
NTS – NOT TO SCALE
OL – OVERLOAD RELAY
P – POLE
PB – PUSHBUTTON / PULL BOX
PC – PHOTOCELL
PSC – PLUMBING SYSTEM CONTRACTOR
PH ϕ – PHASE
PNL – PANEL(BOARD)
PIV – POST INDICATING VALVE
PP – POWER PANEL
PR – PAIR
PRI – PRIMARY
PT – POTENTIAL TRANSFORMER
PVC – POLYVINYL CHLORIDE CONDUIT
PWR – POWER
REC – RECESSED
RMC – RIGID METAL CONDUIT
RT – RAINTIGHT
RTD – RESISTANCE TEMPERATURE DETECTOR
RSC – RIGID STEEL CONDUIT
S – SURFACE MOUNTED
SB – SPLICEBOX
SEC – SECONDARY
SEL – SELECTOR SWITCH
SIG – SIGNAL
SN – SOLID NEUTRAL
SOL – SOLENOID VALVE
SP – SPARE
SPL – SPLICE
SS – STAINLESS STEEL
STP – SHIELDED TWISTED PAIR
STL – CARBON STEEL
SUSP – SUSPENDED
SW – SWITCH
SWBD – SWITCHBOARD
TC – TELEPHONE CABINET
TCI – TELECOMMUNICATIONS CABLING INSTALLER
TEL/DATA – TELEPHONE / DATA
TEL – TELEPHONE
TERM – TERMINAL(S)
TYP – TYPICAL
UG – UNDERGROUND
U.O.I. – UNLESS OTHERWISE INDICATED
UTP – UNSHIELDED TWISTED PAIR
V – VOLT
VFD – VARIABLE FREQUENCY DRIVE
VT – VAPORTIGHT
Y – WYE
W – WATT
WH – WATTHOUR
WP – WEATHERPROOF
WT – WATERTIGHT
XFMR – TRANSFORMER
XP – EXPLOSION PROOF
ZAM – ZONE ADAPTER MODULE
+72 – MOUNTING UNITS TO CENTERLINE ABOVE FINISHED FLOOR OR GRADE

RECEPTACLES AND OUTLETS NOTATIONS

a – SWITCHED OUTLET, a INDICATES SWITCH CONTROL
B – PEDESTAL MOUNTED ON BENCH TOP
BF – BELOW FLOOR
C – MOUNTED 6" ABOVE COUNTER OR 42" AFF COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
CLG – CEILING MOUNTED
D – DEDICATED DEVICE ON INDIVIDUAL BRANCH CIRCUIT
E – EMERGENCY
EXIST. – EXISTING DEVICE / EQUIPMENT
F – FLUSH FLOOR BOX WITH FIRE / SMOKE RATED PENETRATION
GFCI – GROUND FAULT CIRCUIT INTERUPTER, PERSONAL PROTECTION
GFPE – GROUND FAULT PROTECTION OF EQUIPMENT
H – HORIZONTALLY MOUNTED
IG – ISOLATED GROUND RECEPTACLE WITH SEPARATE GREEN GROUND CONDUCTOR TO ISOLATED GROUND BUS IN PANEL
M – MODULAR FURNITURE SERVICE – PROVIDE FLEXIBLE CONNECTION, COORDINATE EXACT LOCATION WITH FURNITURE PLANS
PED – PEDESTAL MOUNTED WITH TWO HOUR FIRE / SMOKE RATED PENETRATION
PT – POKE THRU WITH TWO HOUR FIRE / SMOKE RATED PENETRATION
S – SURFACE MOUNTED FLOOR BOX
SP – SURGE PROTECTION RECEPTACLE
T – TAMPER RESISTANT SAFETY RECEPTACLE
TL – TWIST–LOCK
W – WALL MOUNTED DEVICE AT 48" AFF UNLESS OTHERWISE INDICATED
WP – WEATHERPROOF RECEPTACLE WITH "NRTL" LISTED COVERPLATE FOR WET LOCATION WITH PLUG INSTALLED. MTD. 48" AFF UNLESS OTHERWISE INDICATED
+XX – DIMENSIONED HEIGHT

LIGHTING SYMBOLS

SURFACE MOUNTED FIXTURE (LETTER DENOTES TYPE)
WALL MOUNTED FIXTURE (LETTER DENOTES TYPE)
EMERGENCY BACKUP FIXTURE (LETTER DENOTES TYPE)
RECESSED FIXTURE (LETTER DENOTES TYPE)
EXIT LIGHT WITH INDICATING DIRECTIONAL ARROW
SUSPENDED FIXTURE (LETTER DENOTES TYPE)
POLE MOUNTED FIXTURE (LETTER DENOTES TYPE)
DUAL HEAD EMERGENCY BATTERY LIGHT
EMERGENCY BATTERY REMOTE LIGHTING HEADS

DEVICE SYMBOLS

OCCUPANCY SENSOR, WALL MOUNTED WITH OFF–AUTO OVERRIDE SWITCH
SINGLE GROUNDED RECEPTACLE – 120V
DUPLEX GROUNDED RECEPTACLE – 120V
DUPLEX GROUNDED RECEPTACLE – 120V MOUNTED 6" ABOVE COUNTER
SINGLE GROUNDED RECEPTACLE – 208V NEMA 6–20R OR NEMA 6–30R
SPECIAL PURPOSE RECEPTACLE, NEMA TYPE AND AMPERE RATING AS INDICATED
JUNCTION BOX
SINGLE POLE SWITCH
TWO POLE SWITCH
3–WAY SWITCH
4–WAY SWITCH

MOTOR SYMBOLS

MANUAL STARTER WITH PILOT LIGHT
SINGLE PHASE MAGNETIC STARTER
COMBINATION MAGNETIC STARTER AND DISCONNECT SWITCH
NON–FUSED DISCONNECT SWITCH (NUMERAL INDICATES SWITCH RATING)
MOTOR
DAMPER MOTOR
CONNECTION TO EQUIPMENT
MOTOR STARTER SWITCH
TOGGLE DISCONNECT SWITCH
RELAY
MAGNETIC CONTACTOR (SIZE AS INDICATED ON DRAWINGS)
THREE PHASE MAGNETIC STARTER
THREE PHASE COMBINATION MAGNETIC STARTER AND DISCONNECT SWITCH
FUSED DISCONNECT SWITCH – 3 POLE UNLESS OTHERWISE INDICATED (UPPER NUMERAL INDICATES SWITCH RATING) (LOWER NUMERAL INDICATES FUSE RATING)
PHOTO CELL
PUSH BUTTON
TIME SWITCH
THERMAL MOTOR SWITCH WITH HANDLE GUARD AND PADLOCK CAPABILITY ("P" INDICATES PILOT LIGHT)

SYSTEM SYMBOLS

SECURITY

CCTV CAMERA (WP – WEATHERPROOF EXTERIOR CAMERA)
ELECTRIC DOOR STRIKE (DR – ELECTRIC DOOR OPENER) (DS – DOOR SWITCH) (DC – SECURITY DOOR CONTACTS)
SECURITY KEYPAD (ML – SECURITY DOOR ALARM MAGNETIC LOCK)
LOUD RINGER
CCTV COAXIAL CABLE OUTLET AND POWER OUTLET (MTV – CCTV MONITOR OULET) (SCP – SECURITY CONTROL PANEL)
MOTION DETECTOR
MASTER INTERCOM AND DIRECTORY UNIT (IC – INTERCOM UNIT)
SECURITY CARD READER (WP – WEATHERPROOF)

FIRE

FIRE ALARM CONTROL PANEL (FAA INDICATES ANNUNCIATOR PANEL) (EVAC INDICATES VOICE EVACUATION PANEL)
HORN AND STROBE (INDOOR)
HORN AND STROBE (OUTDOOR)
BELL AND STROBE
SMOKE DETECTOR
SMOKE DETECTOR (D – DUCT) (A – AREA TYPE USED AT DUCT WORK OPENING) (E – ELEVATOR RECALL) (SC – SELF CONTAINED–SINGLE STATION TYPE) (V – VISUAL AND AUDIBLE SIGNAL)
BEAM SMOKE DETECTOR (R – RECEIVER) (S – SENDING UNIT)
REMOTE STATION FOR DUCT MOUNTED SMOKE DETECTORS
HORN UNIT ONLY (S – STROBE UNIT ONLY)
CARBON MONOXIDE DETECTOR
FLAME DETECTOR
AUTOMATIC HEAT DETECTOR (RATE OF RISE) (F – FIXED TEMPERATURE)
MANUAL PULL STATION
TAMPER SWITCH (FS – WATER FLOW SWITCH) (PS – LOW PRESSURE SWITCH)
METHANE GAS TRANSMITTER @ 54"
METHANE GAS DETECTOR
IONIZATION DETECTOR

COMMUNICATIONS

DATA OUTLET
TELEPHONE/DATA OUTLET
VOLUME CONTROL
MASTER INTERCOM AND DIRECTORY UNIT (IC – INTERCOM UNIT)
TELEPHONE OUTLET (W – WALL MOUNTED)
SPEAKER HORN
SPEAKER
TERMINAL CABINET

SITE SYMBOLS

HANDHOLE
DIRECT BURIAL CABLE
MANHOLE
UNDERGROUND ELECTRICAL DUCT

POWER SYMBOLS

POWER PANEL
MCC SECTION
GENERATOR
METER
METER AND SOCKET (P – PEDESTAL MOUNT) (S – SURFACE MOUNT)
LIGHTING PANEL
TRANSFORMER ("W" – WALL MOUNT)
TRANSFER SWITCH ("MTS" – MANUAL TRANSFER SWITCH) ("ATS" – AUTOMATIC TRANSFER SWITCH)

RACEWAY SYMBOLS

CONDUIT TURNING DOWN OR AWAY FROM OBSERVER
CONDUIT STUB
HOMERUN CIRCUIT OR CONDUCTORS
CONDUIT TURNING UP OR TO OBSERVER
FLEXIBLE CONDUIT CONNECTION

GROUNDING SYMBOLS

MAIN GROUND LOOP (SIZE PER DRAWING)
GROUND TAP (SIZE PER DRAWING)
CADWELD GROUND CONNECTION
GROUND ROD
GROUND TEST STATION
EQUIPMENT GROUND CABLE STUB–UP

MOTOR CONTROL CENTER

BUILDING NO. 10
MCC NO. MCC–1

PANEL BOARDS

BUILDING NO. 10
LIGHTING OR POWER PANEL AS INDICATED LP1–4
PANEL NO.
CIRCUIT NO.

NOTE:

1. THIS LIST OF ABBREVIATIONS AND SYMBOLS SHOWN IS A STANDARD LIST. NOT ALL ABBREVIATIONS AND SYMBOLS ARE USED IN THESE CONTRACT DRAWINGS.

VERIFY SCALE IF PLAN SHEET IS REDUCED
1–INCH

DRN	DES	CHK	APP
KWB	WLP	NS	RH

REV	DESCRIPTION	DRN	CHK	DATE
	PRELIMINARY PLAN SET	TEW	NWP	3/12/2025
	BID SET	KJD	NAS	5/6/2026

AECOM
501 Sycamore Street Suite 222
Waterloo, IA 50703-4497
T 319.232.6531
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

ELECTRICAL ABBREVIATIONS AND SYMBOLS

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	FILE NO 01–G–07.DWG
SHEET NO	8
DRAWING NO	01–G–07

ONE-LINE SYMBOLS

XXAF / YYAT — MOLDED CASE CIRCUIT BREAKER (OPEN)
(XXAF – FRAME SIZE)
(YYAT – TRIP SIZE)

XXAF / YYAT — MOLDED CASE CIRCUIT BREAKER (ENCLOSED)
WITH THERMAL/MAGNETIC PROTECTION
(XXAF – FRAME SIZE)
(YYAT – TRIP SIZE)

XXAF / YY — MOLDED CASE CIRCUIT BREAKER (OPEN)
WITH THERMAL/MAGNETIC PROTECTION
(XXAF – FRAME SIZE)
(YYAT – TRIP SIZE)

A / M — MOLDED CASE CIRCUIT BREAKER (OPEN)
WITH MAGNETIC PROTECTION ONLY

XXAF / YYAT — LOW VOLTAGE DRAWOUT CIRCUIT BREAKER
WITH THERMAL/MAGNETIC PROTECTION
(XXAF – FRAME SIZE)
(YYAT – TRIP SIZE)

FOR / REV, 2a, 1b, 2 (2a,1b) — MAGNETIC STARTER AND MOLDED CASE CIRCUIT
BREAKER IN MOTOR CONTROL CENTER STRUCTURE
(AFD – ADJUSTABLE FREQUENCY DRIVE)
(FVNR – FULL VOLTAGE NON–REVERSING)
(RVNR – REDUCED VOLTAGE NON–REVERSING)
(RVSS – REDUCED VOLTAGE SOLID STATE)
(VSD – VARIABLE SPEED DRIVE)
(2SPD – TWO SPEED)
(AUXILIARY CONTACTS – (2a TWO N.O.)(1b ONE N.C.)
(NUMERAL – NEMA SIZE)
(FOR/REV – FULL VOLTAGE REVERSING)

2 (2a,1b) — COMBINATION MAGNETIC STARTER
WITH MOLDED CASE CIRCUIT BREAKER
IN NEMA RATED ENCLOSURE

52 XXAF / YYAT — PRIMARY DRAWOUT TYPE CIRCUIT BREAKER
(XXAF – FRAME SIZE)
(YYAT – TRIP SIZE)
(52 – ANSI DEVICE NUMBER)

XXA / YYA — DISCONNECT SWITCH AIR BREAK WITH FUSE
(ENCLOSED)
(XXA – FRAME SIZE)
(YYA – TRIP SIZE)

1 (2a,1b) — MAGNETIC STARTER WITH NEMA SIZE INDICATED
(AUXILLIARY CONTACTS–(2a TWO N.O.)(1b ONE N.C.)

A — DISCONNECT SWITCH (ENCLOSED) UNFUSED
(A – AMP SIZE)

A — FUSED CUTOUTS
(A – FUSE RATING)

KVAR — POWER FACTOR CORRECTION
CAPACITOR SIZE AS INDICATED

N, E, L — AUTO/MANUAL
TRANSFER SWITCH

T1 — TRANSFORMER
30 kVA
480–120/208V
3PH, 4W

VFD (2a,1b) — VARIABLE FREQUENCY DRIVE
WITH AUXILIARY CONTACTS

RVSS (2a,1b) — REDUCED VOLTAGE SOLID
STATE STARTER WITH
AUXILARY CONTACTS

2S CP, L, H, 1, L, (2a,1b) — 2 SPEED CONSEQUENT
POLE STARTER WITH
AUXILARY CONTACTS

2S 2W, H, 1, (2a,1b) — 2 SPEED 2 WINDING
STARTER WITH AUXILARY
CONTACTS

F, R, 1, (2a,1b) — REVERSING STARTER WITH
AUXILARY CONTACTS

A — FUSE
(A – FUSE RATING)

(3) — POTENTIAL TRANSFORMER
(3 – QUANTITY)

(3) — CURRENT TRANSFORMER
(3 – QUANTITY)

STRESS CONE

GROUND ROD

GROUND

LIGHTNING ARRESTER AND
GROUNDING TO PROTECT ALL
PHASES

RESISTOR OR MOTOR WINDING
ANTI–CONDENSATION HEATER

GENERATOR

THREE PHASE
WYE CONNECTION

THREE PHASE
DELTA CONNECTION

G — PILOT LIGHT
(G – GREEN)
(R – RED)

MPM — MONITORING PROTECTION
METERING RELAY

MP — MOTOR PROTECTION RELAY

TVSS — TRANSIENT VOLTAGE SURGE
SUPPRESSOR

CT — CURRENT
TRANSFORMER CABINET

N, E, L — AUTO/MANUAL
TRANSFER SWITCH

G — GENERATOR AND LABEL
(ENCLOSED)
KW STANDBY GEN–SET

3 — MOTOR AND LABEL
(3 INDICATES HORSEPOWER)
MOTOR NAME
EQUIP. TAG
CIRCUIT

20 HP — CONNECTION AND LABEL
EQUIP. NAME
EQUIP. TAG
CIRCUIT

LP1 — LIGHTING PANEL AND LABEL
LIGHTING
PANEL BOARD
LP1

A — AMMETER
(AS – AMMETER PHASE SWITCH)
(CM – CUSTOMER METER)
(D – DEMAND METER)
(GD – GROUND DETECTOR)
(HZ – FREQUENCY METER)
(K – KEY INTERLOCK)
(MO – MOTOR OPERATOR)
(P – SYNCHROSCOPE)
(PF – POWER FACTOR METER)
(ST – SHUNT TRIP)
(TWM – TOTALIZING WATT HOUR METER)
(V – VOLTMETER)
(VA – VOLT–AMMETER)
(VAR – VARMETER)
(VS – VOLTMETER PHASE SWITCH)
(W – WATTMETER)
(WM – WATTHOUR METER)

CONTROL STATION
(AM – AUTO–MANUAL)
(CAM – COMPUTER–AUTO–MANUAL)
(CM – COMPUTER–MANUAL)
(DCS – DISTRIBUTED CONTROL SYSTEM)
(DS – DOOR SWITCH)
(ETM – ELAPSED TIME METER)
(FR – FORWARD–REVERSE)
(HLO – HIGH–LOW–OFF SWITCH)
(HOA – HAND–OFF–AUTO)
(HOR – HAND–OFF–REMOTE)
(LOS – LOCK–OUT–STOP)
(LR – LOCAL–REMOTE)
(MA – MANUAL–REMOTE)
(OC – OPEN–CLOSED)
(OCA – OPEN–CLOSED–AUTO)
(OCS – OPEN–CLOSED–STOP)
(OO – ON–OFF MAINTAINED CONTACT)
(OOA – ON–OFF–AUTO)
(PB – PUSHBUTTON)
(SF – SLOWER–FASTER)
(SS – START–STOP MOMENTARY CONTACT)
(USG – ULTRA SONIC GENERATOR)
(ZS – LIMIT SWITCH)

HOA

SCHEMATIC SYMBOLS

A — METER
(A – AMMETER)
(ETM – ELAPSED TIME METER)
(V – VOLTMETER)

CIRCUIT BREAKER

TO BUS, L1, L2, L3 — 3 POLE NON FUSED
DISCONNECT SWITCH

TO BUS, L1, L2, L3 — 3 POLE CIRCUIT BREAKER

TO BUS, L1, L2, L3, A — 3 POLE FUSED
DISCONNECT SWITCH

T1, T2, T3, 3 — 3 PHASE MOTOR
SINGLE SPEED

T1, T2, T3, T11, T12, T13, 3 — 3 PHASE MOTOR
2 SPEED 2 WINDING

L, H, H, H — 2 SPEED CONSEQUENT
POLE STARTER

L, H — 2 SPEED 2 WINDING
STARTER

F, R — FVR STARTER

M — FVNR STARTER

C — COIL

CONTACT
(N.C. – NORMALLY CLOSED)

CONTACT
(N.O. – NORMALLY OPEN)

A — FUSE
(A – FUSE RATING)

OHMS
WATTS — RESISTOR

SOLENOID

GROUND

CURRENT TRANSFORMER

PC — PHOTOCELL

R — PUSH–TO–TEST
PILOT LIGHT

G — PILOT LIGHT
(G – GREEN)
(R – RED)

PUSH BUTTON (START)

PUSH BUTTON (STOP)

T.C. — TIMED DELAY
TIMED CLOSED

T.O. — TIMED DELAY
TIMED OPEN

FLOAT SWITCH

PRESSURE SWITCH

FLOW SWITCH

LIMIT SWITCH

OFF, ON — ON–OFF SELECTOR SWITCH

OFF, AUTO, HAND — HOA SELECTOR SWITCH

H1, H2, H3, H4, TRANSFORMER, X1, X2, GND — CONTROL POWER
TRANSFORMER

NOTE:

1. THIS LIST OF ABBREVIATIONS AND SYMBOLS SHOWN IS A STANDARD LIST. NOT ALL ABBREVIATIONS AND SYMBOLS ARE USED IN THESE CONTRACT DRAWINGS.

DRN									
KWB									
DES									
WLP									
CHK									
NS							K.JD	NAS	5.6.2026
APP							KWB	WAB	5/7/2026
RH	REV	DESCRIPTION					DRN	CHK	DATE

1–INCH — VERIFY SCALE IF PLAN SHEET IS REDUCED

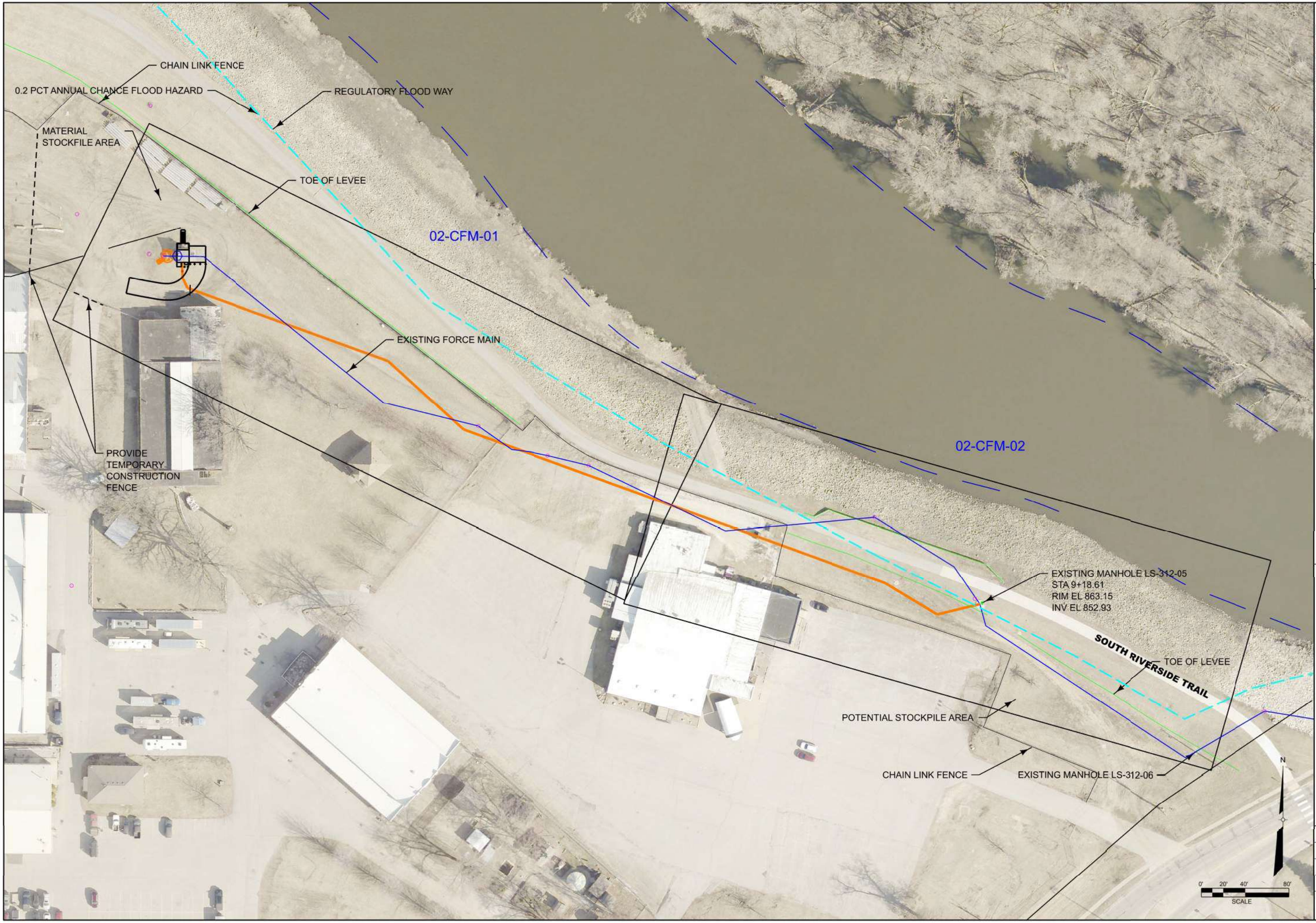
BID SET
PRELIMINARY PLAN SET

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

ELECTRICAL ONE-LINE DIAGRAM AND SCHEMATIC SYMBOLS

DATE	MAY 2026
PROJECT NO	60696351
FILENAME FILE NO	01–G–08.DWG
SHEET NO	9
DRAWING NO	01-G-08



VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

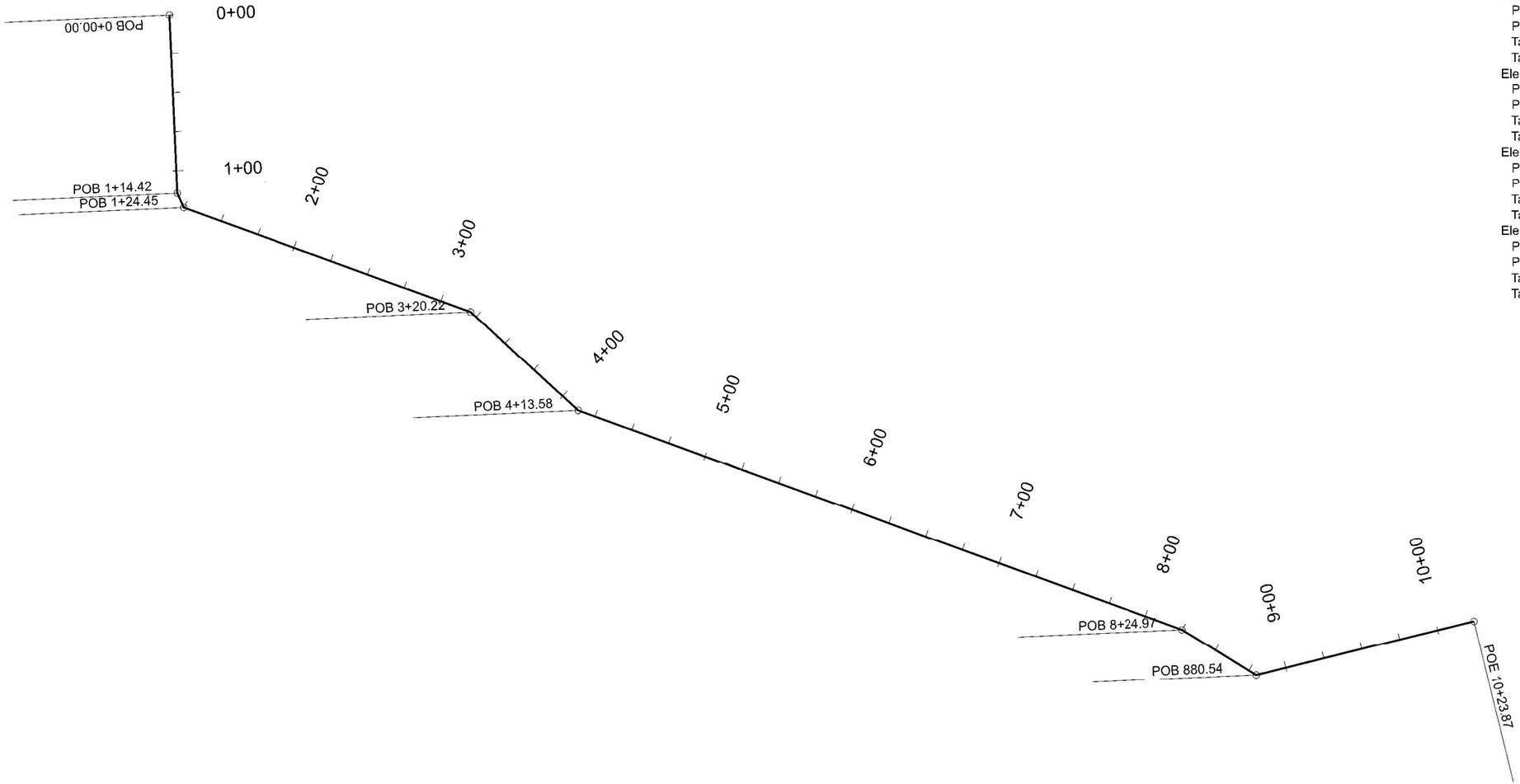
	DES	CHK	APP
		KJD	TDA
		NAS	NAS
		6/2026	11/2025
REV		DRN	CHK
DESCRIPTION			DATE
PRE-LIMINARY PLAN SET			
BID SET			

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-4460
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

LOCATION PLAN

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	C-001.dgn
SHEET NO	10
DRAWING NO	02-C-01



Project Name: Titus-Force Main

	STATION	NORTHING	EASTING
Element: Linear			
POB	0+00.00	3651622.16	5225344.09
PI	1+14.42	3651507.83	5225349.13
Tangent Direction:		S02.522°E	
Tangent Length:		114.42	
Element: Linear			
PI	1+14.42	3651507.83	5225349.13
PI	1+24.45	3651498.71	5225353.29
Tangent Direction:		N45.000°E	
Tangent Length:		10.03	
Element: Linear			
PI	1+24.45	3651498.71	5225353.29
PI	3+20.22	3651431.82	5225537.28
Tangent Direction:		N44.500°E	
Tangent Length:		195.77	
Element: Linear			
PI	3+20.22	3651431.82	5225537.28
PI	4+13.58	3651368.78	5225606.13
Tangent Direction:		S67.500°E	
Tangent Length:		93.36	
Element: Linear			
PI	4+13.58	3651368.78	5225606.13
PI	8+24.97	3651228.22	5225992.77
Tangent Direction:		N67.500°E	
Tangent Length:		411.39	
Element: Linear			
PI	8+24.97	3651228.22	5225992.77
PI	8+80.54	3651199.43	5226040.29
Tangent Direction:		S78.768°E	
Tangent Length:		55.57	
Element: Linear			
PI	8+80.54	3651199.43	5226040.29
PI	10+23.87	3651233.60	5226179.48.58
Tangent Direction:		N45.000°E	
Tangent Length:		143.33	

VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

DRN	DES	CHK	APP

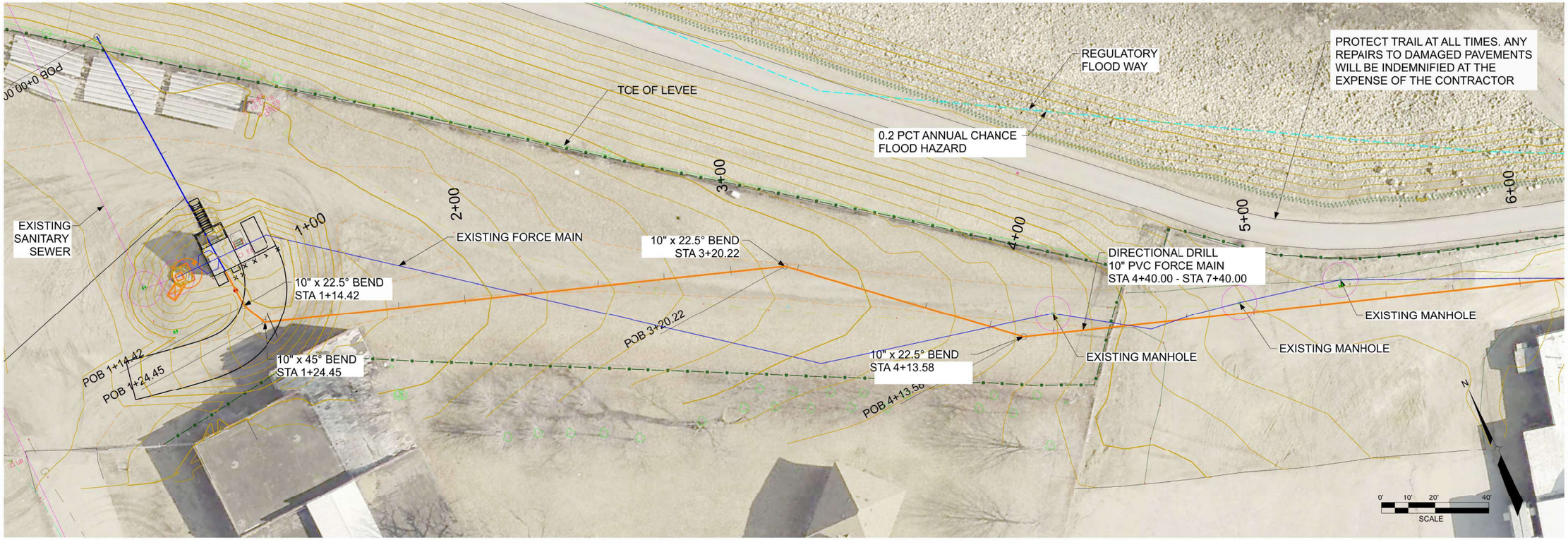
DATE	CHK	DRN	DESCRIPTION	REV
11/2025	NAS	TDA	PRELIMINARY PLAN SET	
6/2026	NAS	KJD	BID SET	

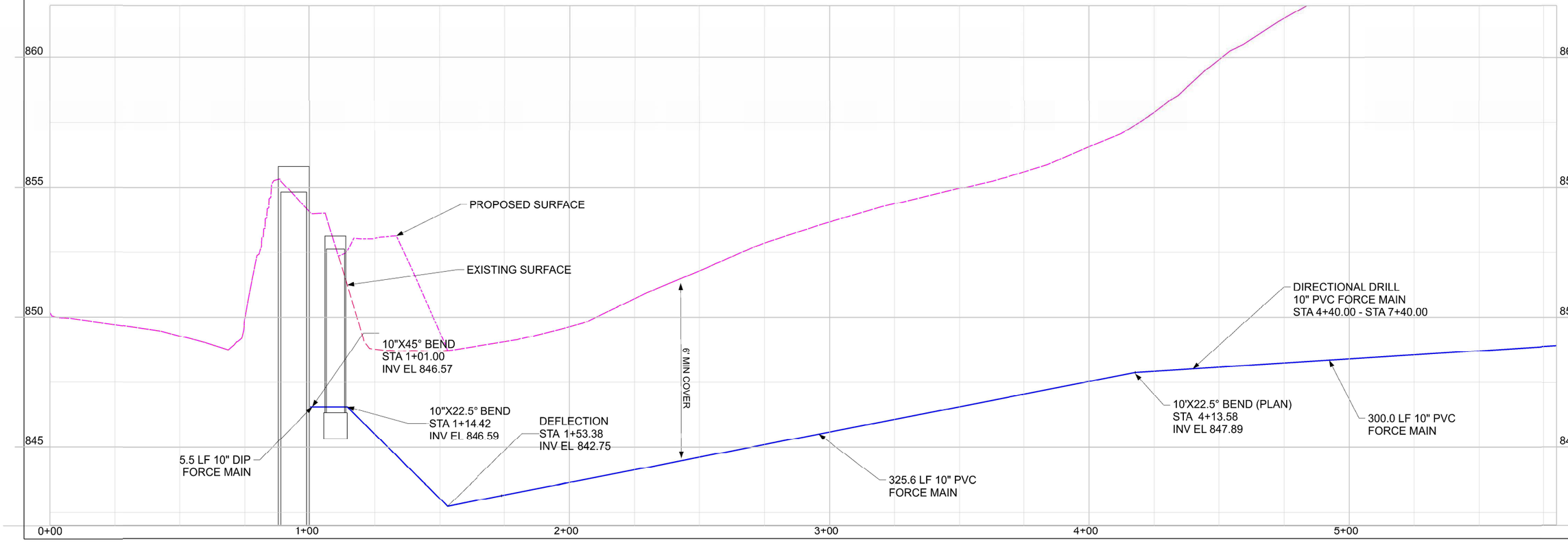
AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

GEOMETRY PLAN

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	C-001.Dgn
SHEET NO	11
DRAWING NO	02-C-02





VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

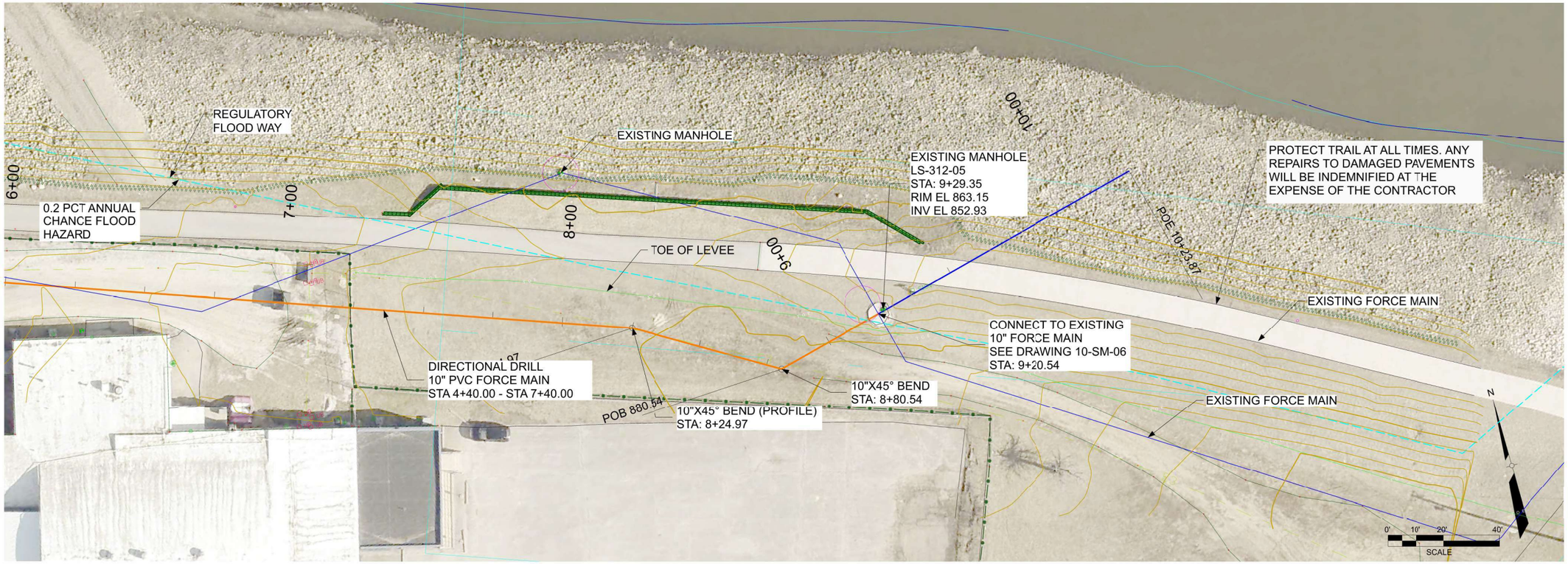
DRN	DES	CHK	APP	REV	DESCRIPTION	DRN	CHK	DATE
					BID SET	KJD	NAS	6/2026
					PRELIMINARY PLAN SET	TDA	NAS	11/2025

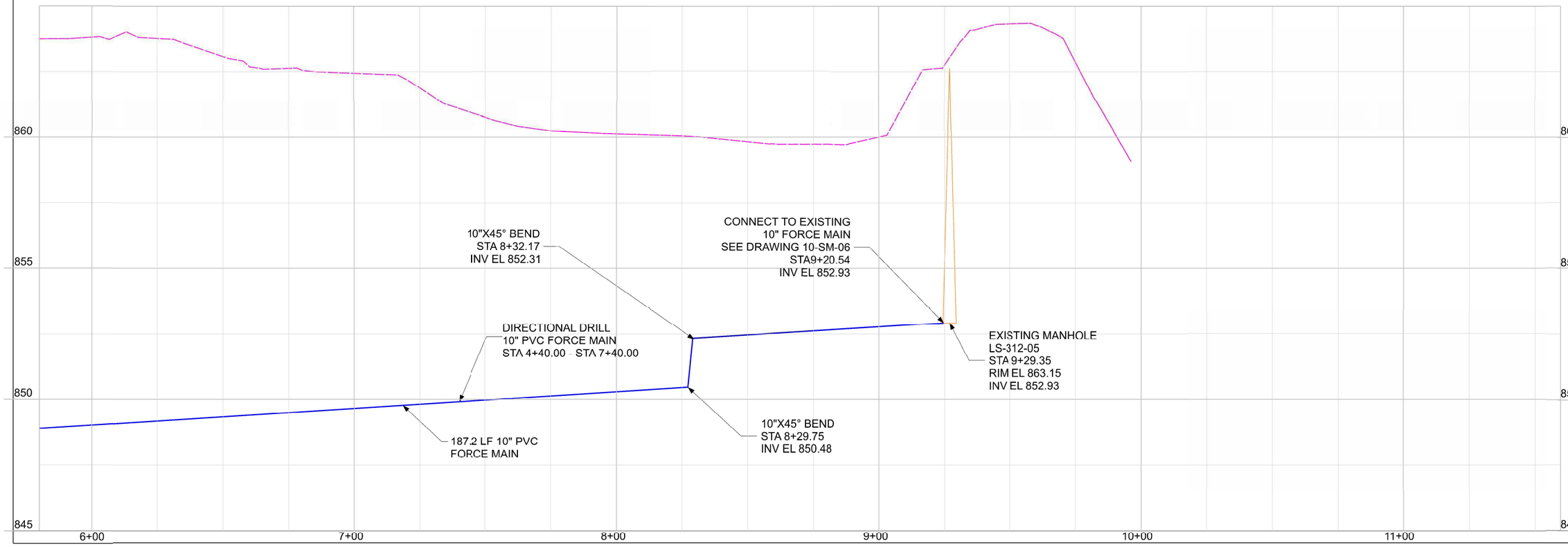
AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

FORCE MAIN PLAN AND PROFILE
STA 1+00.00 to 6+80.00

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	CFM-001-002.Dgn
SHEET NO	12
DRAWING NO	02-CFM-01





VERIFY SCALE IF PLAN SHEET IS REDUCED — 1-INCH —

DRN	DES	CHK	APP
----	----	----	----

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	TDA	NAS	11/2025

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

FORCE MAIN PLAN AND PROFILE
STA 6+80.00 to 9+19.00

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	CFM-001-002.dgn
SHEET NO	13
DRAWING NO	02-CFM-02

1-INCH — VERIFY SCALE IF PLAN SHEET IS REDUCED

DESCRIPTION	DRN	CHK	DATE
PRELIMINARY PLAN SET	TDA	NAS	11/2025
BID SET	KJD	NAS	6/2026

DRN | DES | CHK | APP | REV

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-4480
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

CATTLE CONGRESS - SANITARY LIFT STATION SITE REMOVAL PLAN

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	CR-001-002.dgn
SHEET NO	14
DRAWING NO	02-CR-01

REMOVE EXISTING PUMP STATION OPERATOR BUILDING SUPERSTRUCTURE

REMOVE RAILING

REMOVE PUMP MOTORS

REMOVE AIR COMPRESSOR AND TANK

REMOVE CHECKER PLATE

REMOVE TOP 14' RISER SECTION OF EXISTING WET WELL

REMOVE SLAB AND MANHOLE COVER

REMOVE DUCT

REMOVE STAIR (TYP)

REMOVE LANDING (TYP)

REMOVE BAR SCREEN AND GUIDE

REMOVE SLAB AND BEAM (SHOWN DASHED)

REMOVE ALL PIPING AND APPURTENANCES

REMOVE PIPE AND ALL TUBING

REMOVE PUMP AND RISER

REMOVE EXISTING FILLET. DO NOT DAMAGE BASE SLAB.

REMOVE POST

FILL HOLE WITH SIKAQUICK VOH REPAIR MORTAR OR ENGINEER APPROVED EQUAL. INSTALL HYDROPHILIC GASKET WATERSTOP AROUND WATERSTOP AROUND PERIMETER OF HOLE TO MAKE WATER TIGHT.

FILL HOLE WITH SIKAQUICK VOH REPAIR MORTAR OR ENGINEER APPROVED EQUAL. INSTALL HYDROPHILIC GASKET WATERSTOP AROUND WATERSTOP AROUND PERIMETER OF HOLE TO MAKE WATER TIGHT.

SECTION

OPERATING FLOOR PLAN

WET WELL PLAN (Cut at Elevation 92'-0")

CONCRETE NOTES

Reinforcing: continuous around all corners unless shown otherwise.
Minimum bar splice lap: 28 diameters unless shown otherwise.
Main reinforcing concrete cover: 2" with following exceptions; 3" when deposited against earth; ¾" for walls and slabs not exposed to earth or weather.
Exposed concrete corner chamfer: 1" unless shown otherwise.
Keyway dimensions: depth 1½"; width ⅓ that of member unless shown otherwise.

NOTES:

Checkered plate and/or grating support details: see drawing S-5 in specifications.
Slope floors to drains.
Pipe railing details: see Drawing S-7 in specifications.
Double asterisk (**) indicates size to suit equipment.
Duct work shown on this drawing is schematic and the arrangement may be modified as necessary to clear building members, lighting fixtures, etc.
For Pumping Station location see Site Plan Drawing 2613-S.

REFERENCE DRAWINGS

Index and Vicinity Maps (Legends)	2613-I
Pumping Station No.1 Sheet 2	2613-14
Miscellaneous Details	8619-16
Pumping Station No.1 Electrical	2613-17

WATERLOO, IOWA
SEWERAGE SYSTEM IMPROVEMENTS
PUMPING STATION NO. 1
SHEET 1
STANLEY ENGINEERING COMPANY
MUSCATINE, IOWA CHICAGO, ILLINOIS
DRAWN S.R.D. DATE JUNE 28, 1940 NO. 2613-13 REV 0
CHECKED
REVIEWED
APPROVED

8192 2613-T13

FOR INFORMATION ONLY

DRN	1-INCH — VERIFY SCALE IF PLAN SHEET IS REDUCED			
DES				
CHK				
		KJD	NAS	6/2026
	BID SET	TDA	NAS	11/2025
APP	PRELIMINARY PLAN SET	DRN	CHK	DATE
	DESCRIPTION			
	REV			

AECOM
501 Sycamore Street, Suite 222
Waterloo, IA 50703-1467
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

SANITARY LIFT STATION
REMOVAL PLAN AND SECTION

DATE	MAY 2026
PROJECT NO	60596351
FILENAME	CR-001-002.Dgn
SHEET NO	15
DRAWING NO	02-CR-02

PUMP STATION BUILDING - NORTH AND EAST WALLS

FOR INFORMATION ONLY

DRN	⊢ 1-INCH ⊣ VERIFY SCALE IF PLAN SHEET HS REDUCED				
DES					
CHK			KJD	NAS	6/2026
	BID SET		TDA	NAS	11/2025
APP	PRELIMINARY PLAN SET		DRN	CHK	DATE
	REV	DESCRIPTION			

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-4467
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

SANITARY LIFT STATION
PROFILE

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	CR-001-002.Dgn
SHEET NO	16
DRAWING NO	02-CR-03

0+00

POB 0+00.00

EXISTING SANITARY SEWER

EDGE OF GRAVEL

EDGE OF GRAVEL

3' WIDE STAIRS
W/ HANDRAILS

3'-0"

3'-10"

11 T @ 11"

6'-0"

3'-0"

GENERATOR
ENCLOSURE

INSTALL HANDRAIL ON NORTH
AND EAST SIDES OF GENERATOR PAD.
SEE DETAIL ON 99-C-01

EXISTING CHAIN LINK FENCE

EXISTING SANITARY MANHOLE
NO 2411
RIM EL 850.73'
INV EL 831.93'
15" N, E

WET WELL
SEE DRAWING
10-SM-01

N 3,651,527.89
E 5,225,349.43

15' x 14.5'
GENERATOR PAD

1+00

BOLLARDS (6)
02-110

EXISTING FIBER OPTIC BOX

4'x4' CONCRETE PAD BELOW
TERMINATIONS JUNCTION BOX.
SEE 10-SM-05

EXTEND EXISTING
CONCRETE PLATFORM

EXISTING MANHOLE NO2409
RIM EL 849.78
INV EL 839.63

POB 1+14.42

13.5 SY 8"
REINFORCED
CONCRETE SLAB

EXISTING FORCE MAIN

2+00

POB 1+24.46

ELECTRICAL
EQUIPMENT BUILDING -
SEE DRAWING 10-E-01

NEW GAS SERVICE
METER BY LOCAL
GAS UTILITIES
OFFSET FROM WALL

AIR RELEASE MANHOLE 1
SEE DRAWING 99-C-01

PROPOSED FORCE MAIN

EXISTING CHAIN LINK FENCE

3+00

PROPOSED 2" GAS MAIN

EXISTING FIBER

POB 3+20.22

0' 5' 10' 20'
SCALE

DRN | DES | CHK | APP

1-INCH — VERIFY SCALE IF PLAN SHEET IS REDUCED

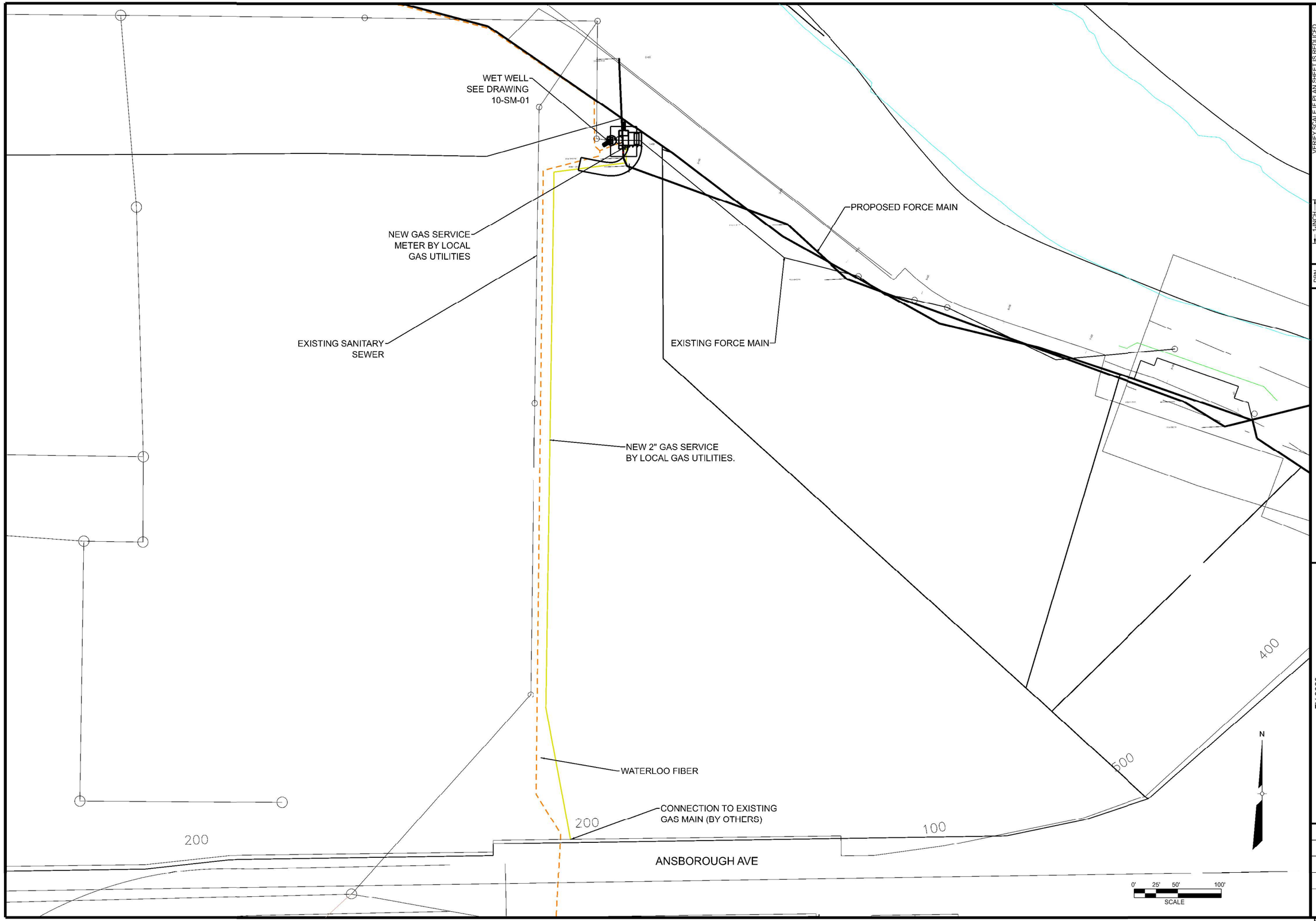
REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	TDA	NAS	11/2025

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

SANITARY LIFT STATION
NEW FACILITIES PLAN

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	CF-001.Dgn
SHEET NO	17
DRAWING NO	02-CF-01



VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

DRN	DES	CHK	APP

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	TDA	NAS	11/2025

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

SANITARY LIFT STATION
NEW GAS MAIN PLAN

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	CF-001.Dgn
SHEET NO	18
DRAWING NO	02-CF-02

0+00

POB 0+00.00

EXISTING SANITARY SEWER

3' WIDE STAIRS W/ HANDRAILS

EDGE OF GRAVEL

EDGE OF GRAVEL

EXISTING CHAIK LINK FENCE

EXISTING SANITARY MANHOLE NO 2411
RIM EL 850.73'
INV EL 831.93'
15" N, E

WET WELL SEE DRAWING 10-SM-01

OPERATOR BUILDING SEE DRAWING

EDGE OF GRAVEL

N 3,651,527.89
E 5,225,349.43

15' X 14.5' GENERATOR PAD

1+00

CONCRETE PAD EL 845.5'

13.5 SY 8" REINFORCED CONCRETE SLAB

EXTEND EXISTING CONCRETE PLATFORM

POB 1+14.42

EXISTING MANHOLE NO2409
RIM EL 849.78
INV EL 839.63

POB 1+24.45

PROPOSED FORCE MAIN

15' WIDE GRAVEL APPROACH, 6" CLASS A ROADSTONE WITH ENGINEERING FABRIC

EXISTING CHAIN LINK FENCE

2+00

3+00

POB 3+20.22

860'

855'

850'

0' 5' 10' 20
SCALE

N

VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

DESCRIPTION	DRN	CHK	DATE
BID SET	KJD	NAS	6/2026
PRELIMINARY PLAN SET	TDA	NAS	11/2025

DRN DES CHK APP REV

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

SANITARY LIFT STATION
GRADING PLAN

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	CG-001.Dgn
SHEET NO	19
DRAWING NO	02-CG-01

GENERAL NOTES

1. REFER TO CIVIL PLAN FOR EXACT LOCATIONS.
2. TURN OVER ANY EQUIPMENT REMOVED FROM SERVICE TO OWNER FOR DISPOSITION. THIS EQUIPMENT IS SHOWN ON REMOVAL PLAN.
3. TYPICAL UNDERGROUND WIRING FROM ELECTRICAL BUILDING TO BE IN PVC CONDUIT UNLESS OTHERWISE NOTED ON DRAWINGS. REFER TO 99-E-02 FOR DETAILS.
4. REFER TO GENERATOR ,MANUFACTURER DRAWINGS FOR SPECIFIC WIRING/INTERCONNECT REQUIREMENTS.
5. REFER TO 16210 OF THE SPECIFICATIONS REGARDING ELECTRICAL SERVICE.

PLAN NOTES

1. NEW GENERATOR LOCATION. LOCATE MINIMUM OF 5' FROM BUILDING EXTERIOR. REFER TO ONE LINE, SPECIFICATIONS, AND 99-E01/E02 FOR MORE DETAILS
2. NEW ELECTRICAL BUILDING - PROVIDE NEW 400A 480V, 3Ph SERVICE PER UTILITY REQUIREMENTS.
3. NEW FLOODLIGHT - REFER TO FIXTURE SCHEDULE AND PANELBOARD SCHEDULE ON 99-E-03. 2#12 #12 GRD IN 3/4 PVC TO SPARE BREAKER IN VENDOR SUPPLIED PANEL IN BUILDING. PROVIDE FLOODLIGHT WITH GFCI OUTLET TO POWER JIB CRANES.
4. EXISTING WETWELL WITH 2 NEW MOTORS, LEVEL SWITCHES, AND LEVEL TRANSDUCER - SEE ONE LINE 99-E-01, SPECIFICATIONS, AND 99-E-02/03.
5. TJB FURNISHED ON BUILDING - SEE 10-E-01.

EXISTING UTILITY TRANSFORMER WITH METERING. REFEED SECONDARY TO NEW UTILITY APPROVED METER CABINET ON EAST SIDE OF VENDOR PROVIDED BUILDING VIA3 500KCMIL W #2 GRD IN 4" PVC UNDERGROUND CONDUIT

NEW VENDOR SUPPLIED PREWIRED - SEE 10-E-01

TYP FIELD ROUTE UG CONDUIT

EXISTING WET WELL WITH 2 NEW PUMPS AND NEW VENDOR SUPPLIED INSTRUMENTATION

TYP FIELD ROUTE UG CONDUITS

EXISTING FIBER OPTIC BOX

- FIELD ROUTE OPTIC PATCH PANEL ON SE CORNER OF OPERATOR BUILDING

UB

ELECTRICAL SITE PLAN

0' 10' 20' 40'

SCALE

N

DRN	KWB
DES	
WLP	
CHK	
NS	
APP	RH

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	K.D	NAS	6/2026
	PRELIMINARY PLAN SET	KWB	WAB	5/22/2025

1—1—INCH—1 VERIFY SCALE IF PLAN SHEET IS REDUCED

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531
WWW.AECOM.COM

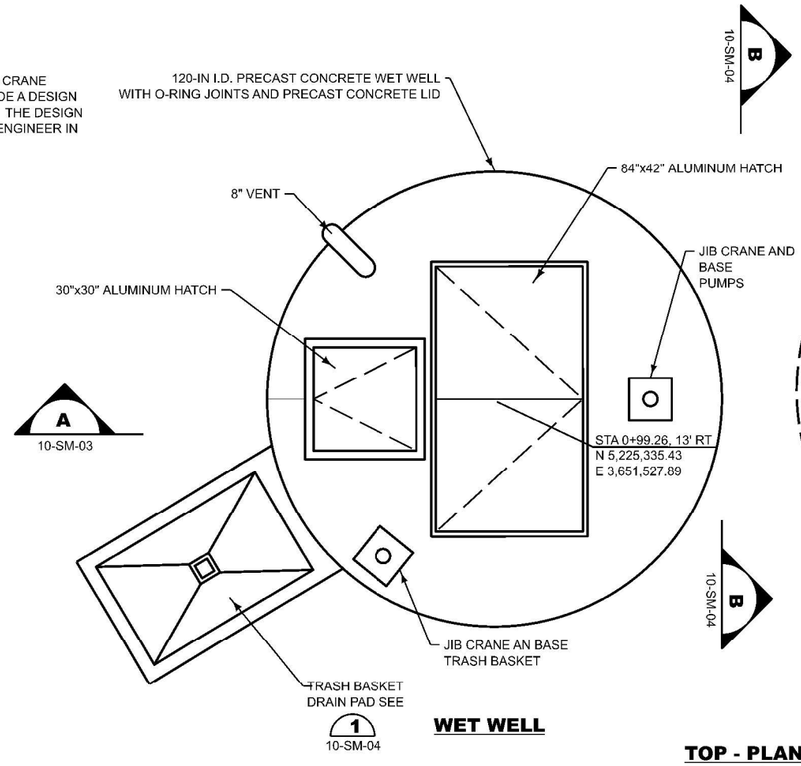
FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

SANITARY LIFT STATION SITE
ELECTRICAL SITE PLAN

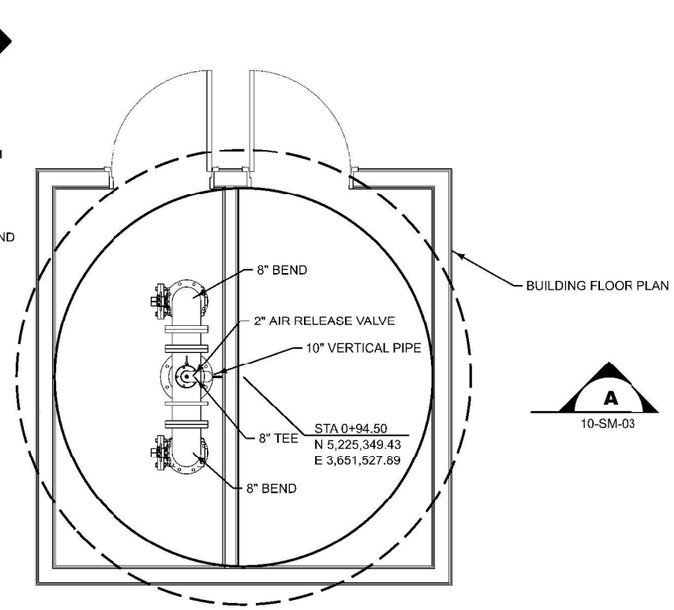
DATE	MAY 2026
PROJECT NO	60696351
FILENAME FILE NO	02-CE-01.DWG
SHEET NO	20
DRAWING NO	02-CE-01

NOTE:

1. VERIFY HATCH SIZES WITH PUMP AND BASKET MANUFACTURER PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO COORDINATE WITH THE PRECAST VAULT SUPPLIER AND JIB CRANE VENDOR FOR REQUIRED DESIGN LOADS. THE PRECAST SUPPLIER TO PROVIDE A DESIGN INCLUDING THE JIB CRANE LOADS FOR THE PRECAST LID ON THE WET WELL. THE DESIGN SHALL BE CERTIFIED FOR THIS APPLICATION BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF IOWA.
3. TRASH BASKET TO CATCH SOLIDS GREATER THAN 2.5" IN DIAMETER.



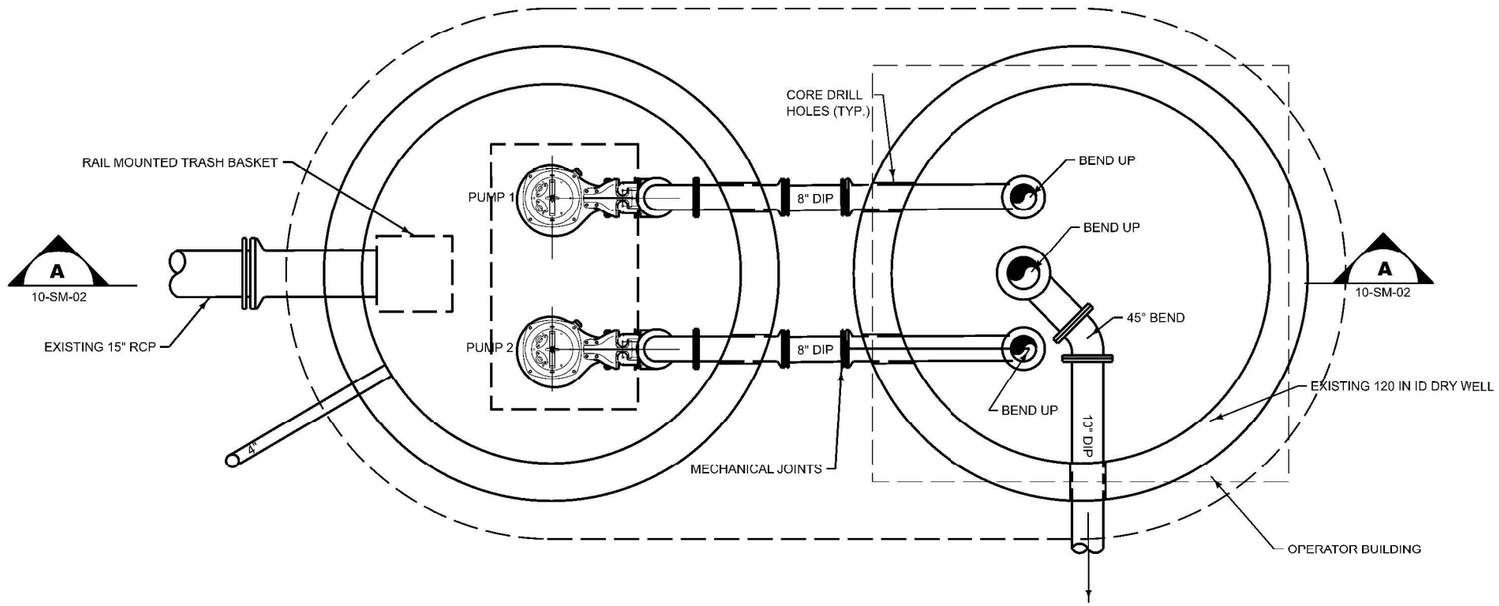
WET WELL



OPERATOR BUILDING

TOP - PLAN 1

0' 2' 4'
SCALE



BOTTOM - PLAN 1

0' 2' 4'
SCALE

VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

DATE	CHK	DESCRIPTION	DRN	CHK	REV
11/2025	NAS	PRELIMINARY PLAN SET	TDA	NAS	
6/2026	NAS	BID SET	KJD	NAS	

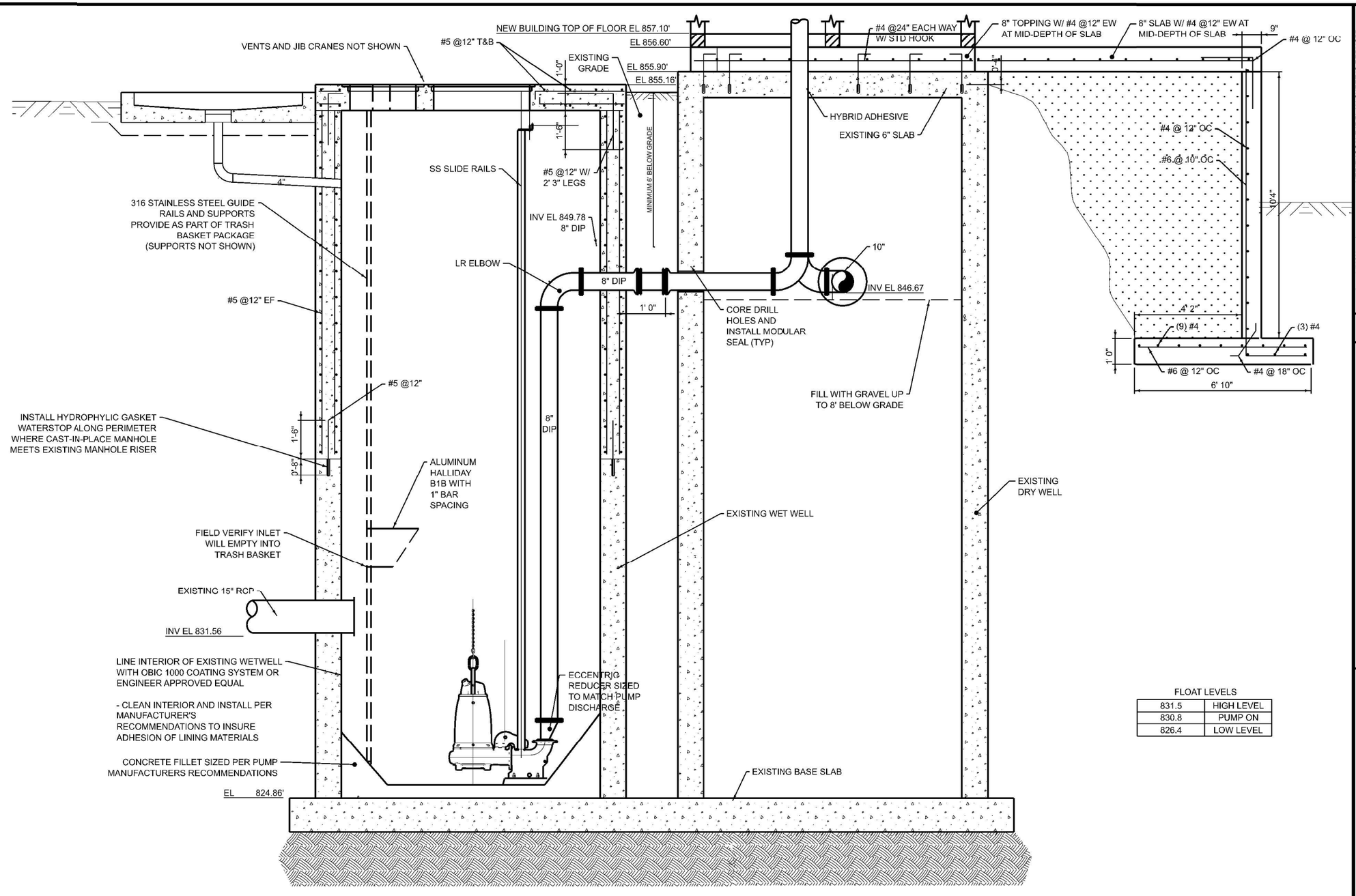
DRN | DES | CHK | APP

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

10 - SANITARY LIFT STATION PLANS

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	SM-002.Dgn
SHEET NO	21
DRAWING NO	10-SM-01



FLOAT LEVELS

831.5	HIGH LEVEL
830.8	PUMP ON
826.4	LOW LEVEL

WET WELL SECTION A

0' 4' 8'

SCALE

VERIFY SCALE IF PLAN SHEET IS REDUCED

1-INCH

REV	DESCRIPTION	DRN	CHK	DATE
BID SET		KJD	NAS	6/2026
PRELIMINARY PLAN SET		TDA	NAS	11/2025

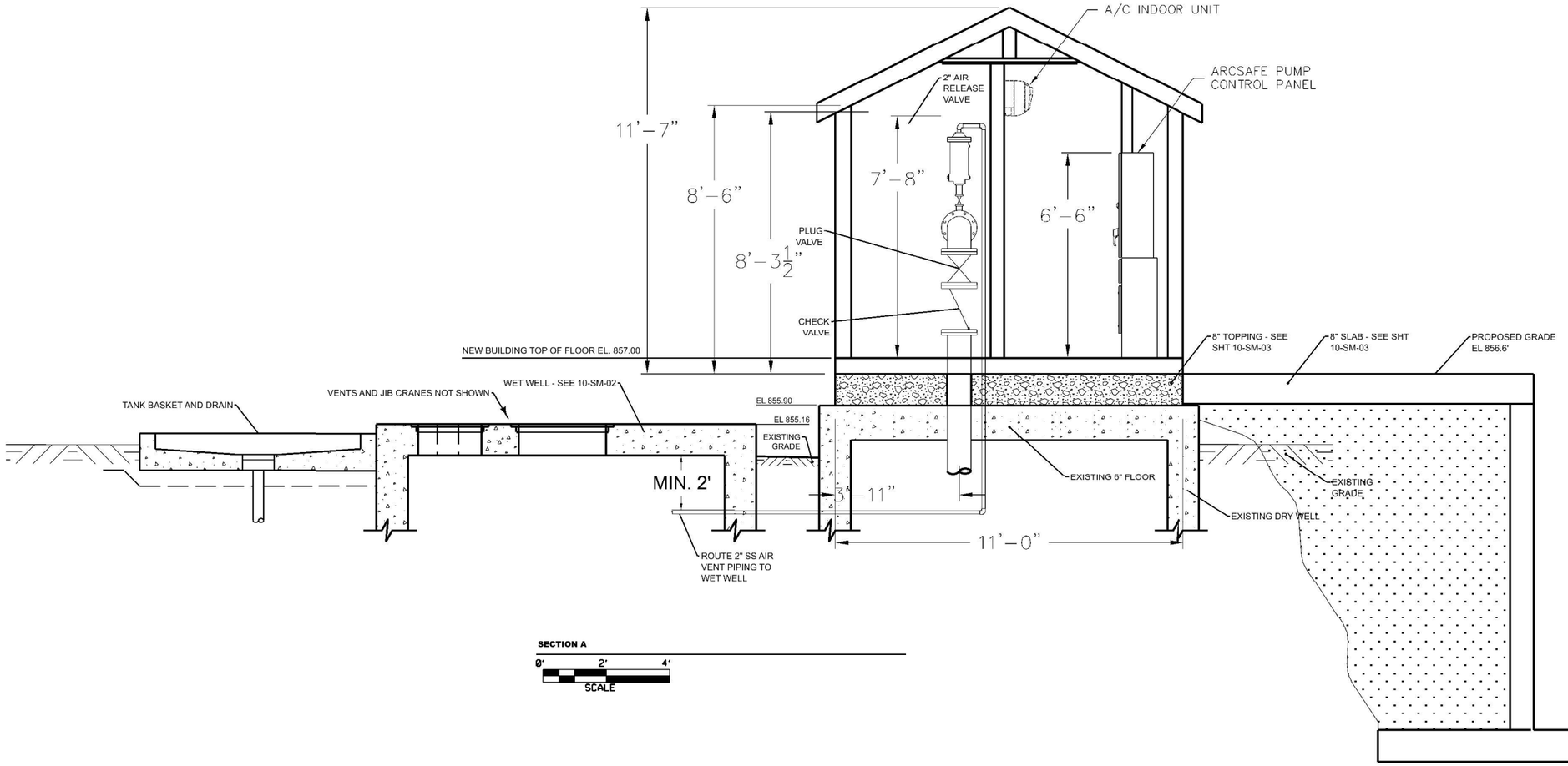
DRN DES CHK APP

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

10 - SANITARY LIFT STATION SECTION

DATE MAY 2026
PROJECT NO 60696351
FILENAME SM-003-004.Dgn
SHEET NO 22
DRAWING NO 10-SM-02



SECTION A

0' 2' 4'

SCALE

DRN	DES	CHK	APP

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	TDA	NAS	11/2025

⊢ 1-INCH ⊣ VERIFY SCALE IF PLAN SHEET IS REDUCED

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

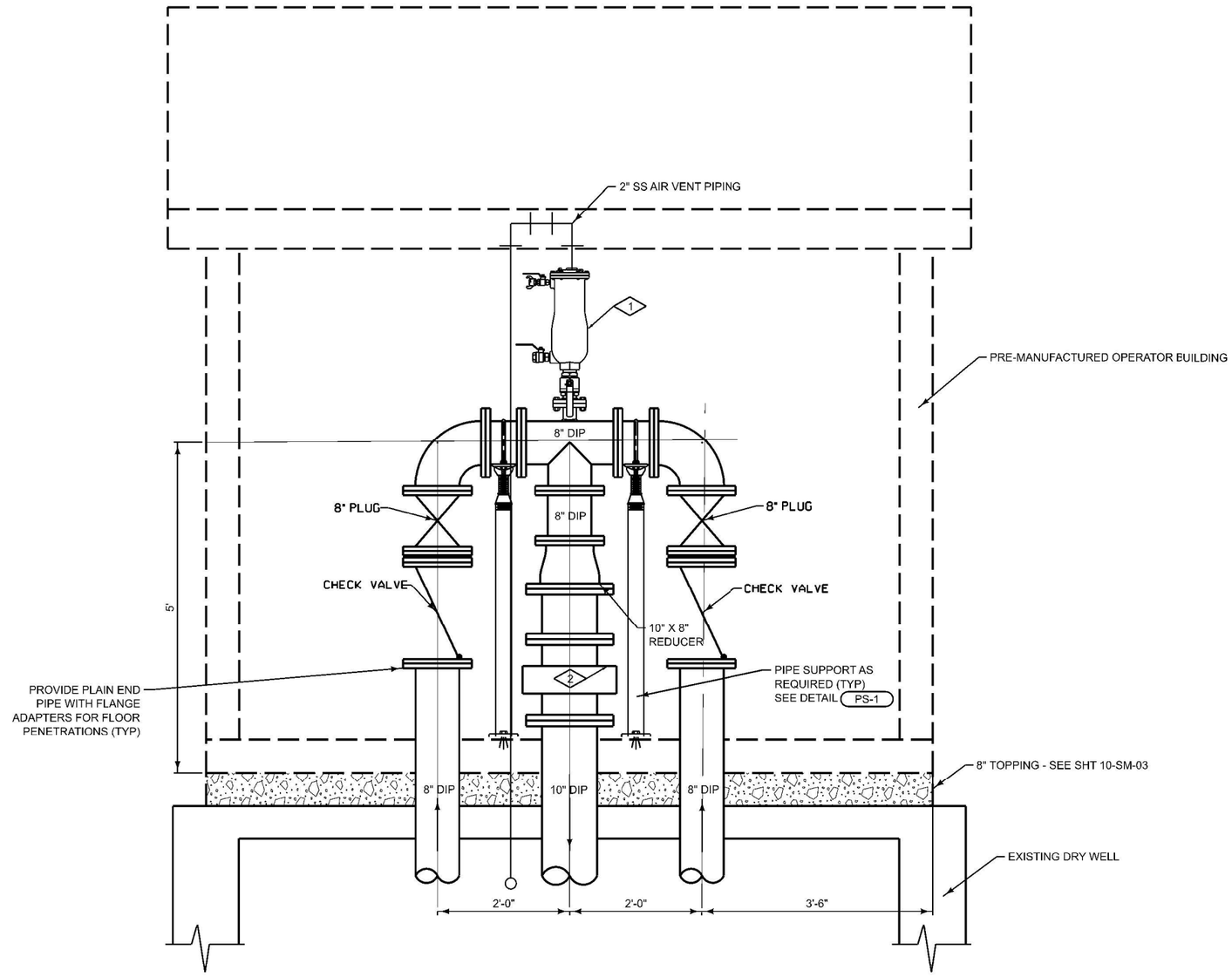
FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

10 - SANITARY LIFT STATION
SECTION

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	SM-003-004.Dgn
SHEET NO	23
DRAWING NO	10-SM-03

NOTES

1. 2" AIR RELEASE/ VACUUM VALVE (VALMATIC MODEL)
2. 10" MAGNETIC FLOWMETER/ TRANSMITTER



OPERATOR BUILDING

SECTION B

0' 2' 4'

SCALE

DRN	DES	CHK	APP

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	TDA	NAS	11/2025

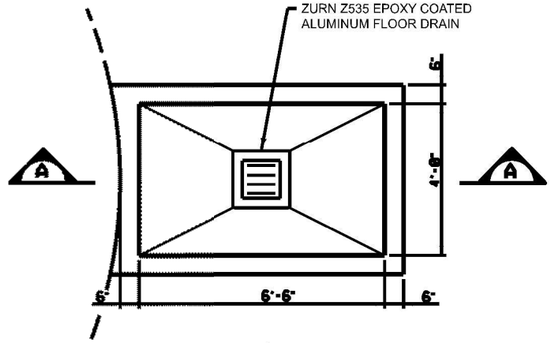
⊢ 1-INCH —⊣ VERIFY SCALE IF PLAN SHEET IS REDUCED

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

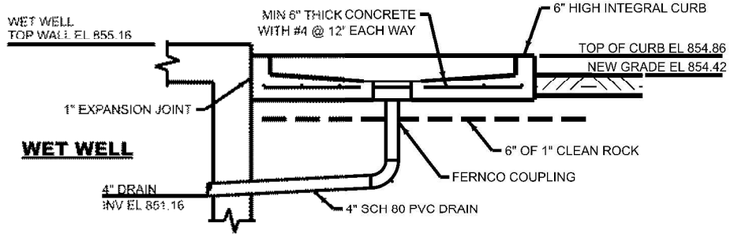
FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

10 - SANITARY LIFT STATION DETAILS

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	SM-005-006.Dgn
SHEET NO	24
DRAWING NO	10-SM-04



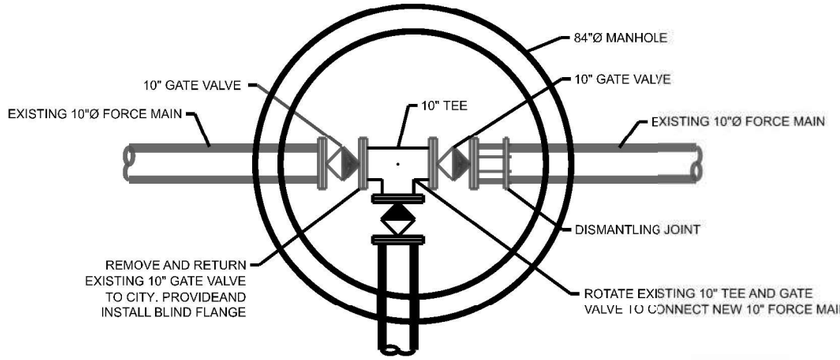
PLAN - TRASH BASKET DRAIN PAD



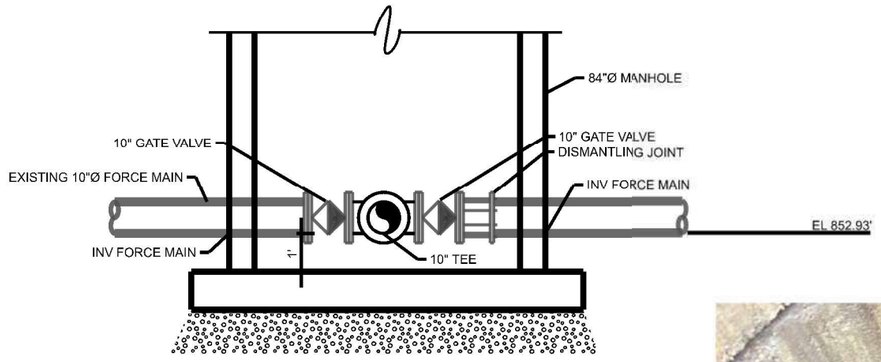
SECTION A

TRASH BASKET DRAIN PAD DETAIL 1

SCALE



BOTTOM PLAN

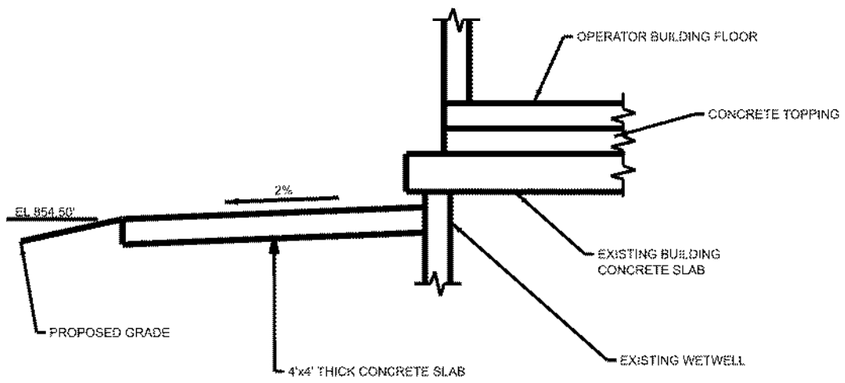


EXISTING MANHOLE LS-312-05 1

SCALE

EXISTING MANHOLE LS-312-05 2

EXISTING MANHOLE LS-312-06 FOR BYPASS PUMPING 1



CONCRETE PAD 1

VERIFY SCALE IF PLAN SHEET IS REDUCED

1-INCH

DRN	DES	CHK	APP

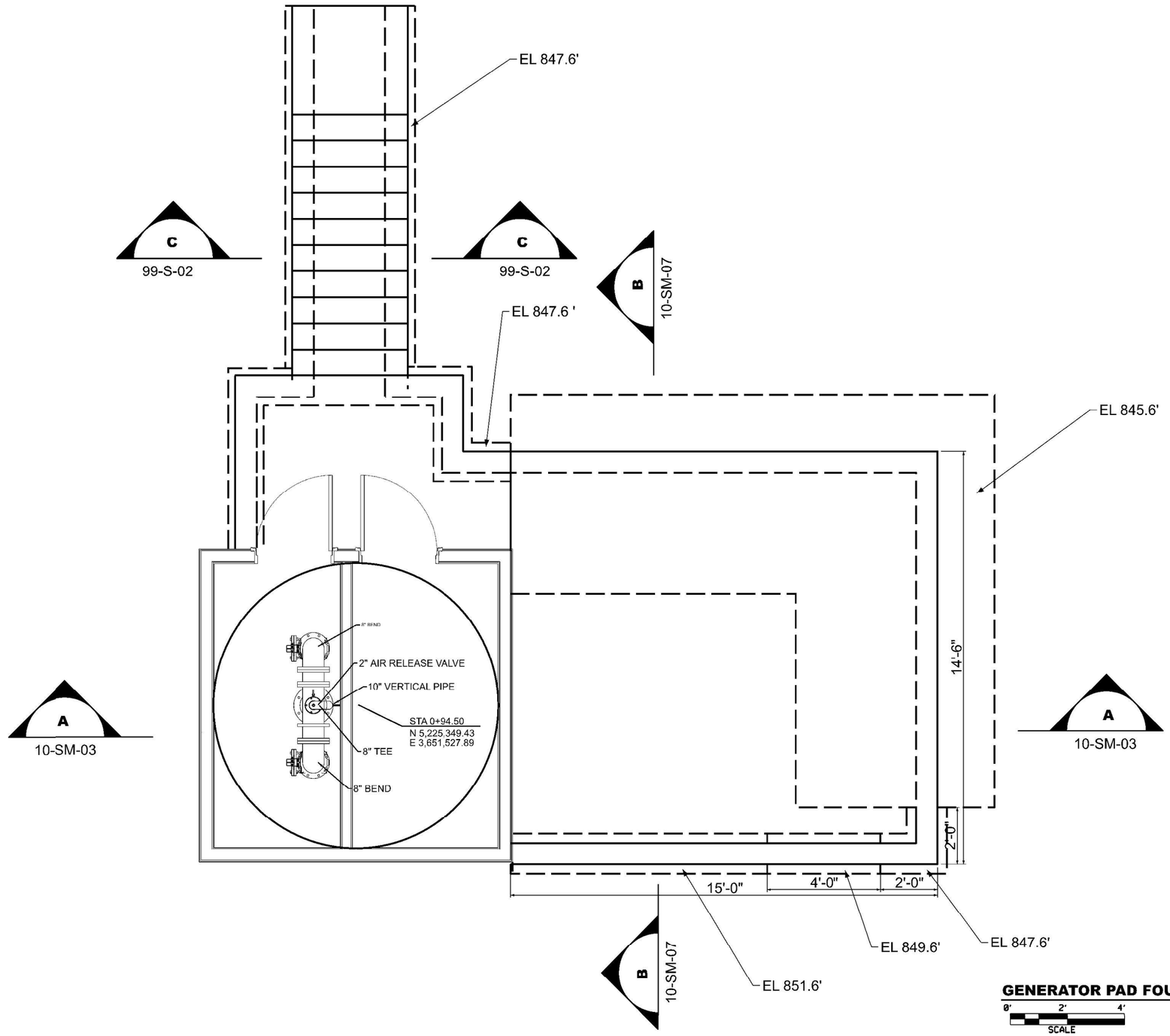
REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	TDA	NAS	11/2025

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-4460
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

10 - SANITARY LIFT STATION DETAILS

DATE MAY 2026
PROJECT NO 60696351
FILENAME 10-SM-005-006.Dgn
SHEET NO 25
DRAWING NO 10-SM-05



GENERATOR PAD FOUNDATION 1

0' 2' 4'
SCALE

VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	TDA	NAS	11/2025

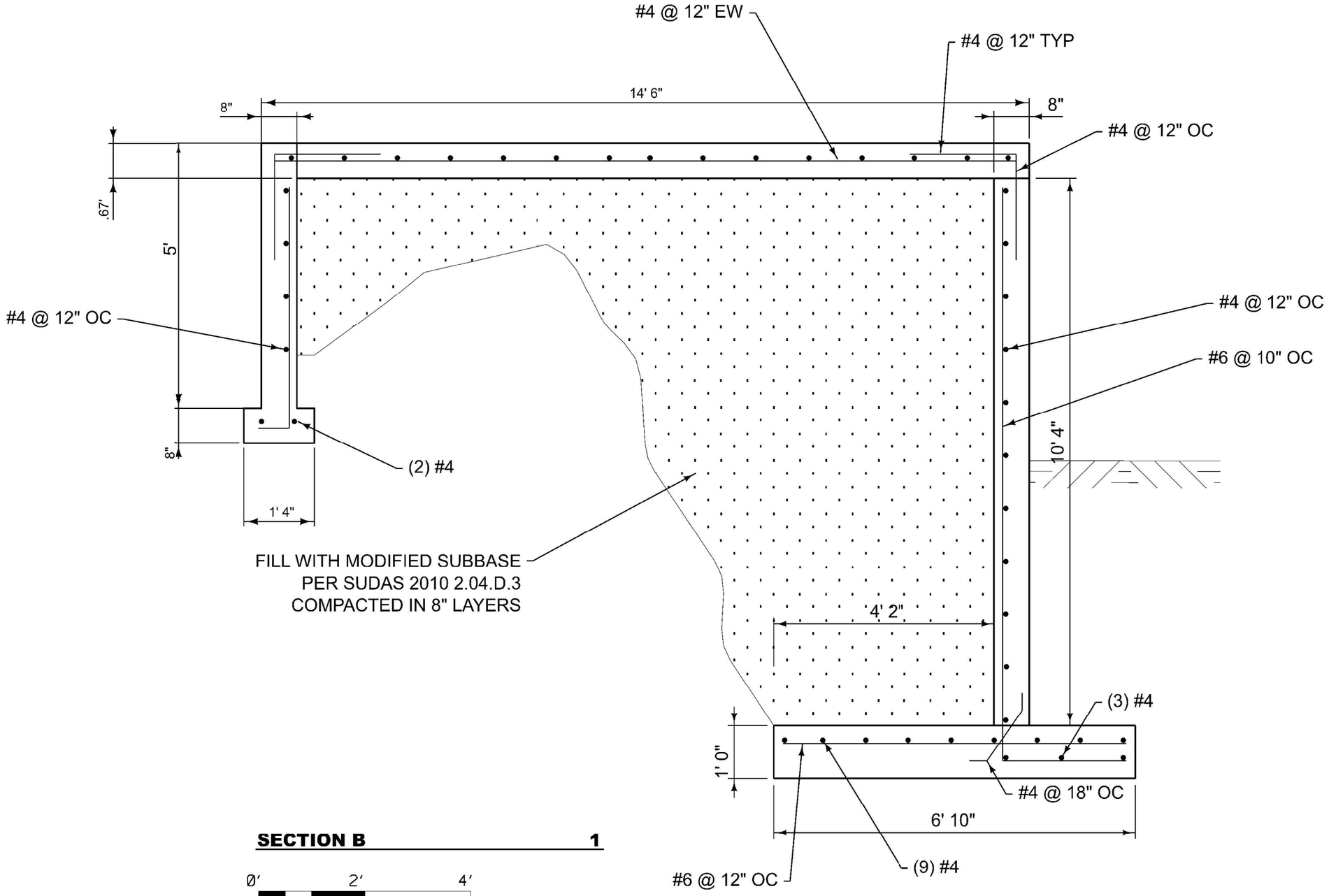
DRN DES CHK APP

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

10 - GENERATOR PAD FOUNDATION DETAILS

DATE MAY 2026
PROJECT NO 60696351
FILENAME SM-005-006.Dgn
SHEET NO 26
DRAWING NO **10-SM-06**



SECTION B 1

0' 2' 4'

SCALE

VERIFY SCALE IF PLAN SHEET IS REDUCED

1-INCH

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	TDA	NAS	11/2025

DRN DES CHK APP

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703-1497
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

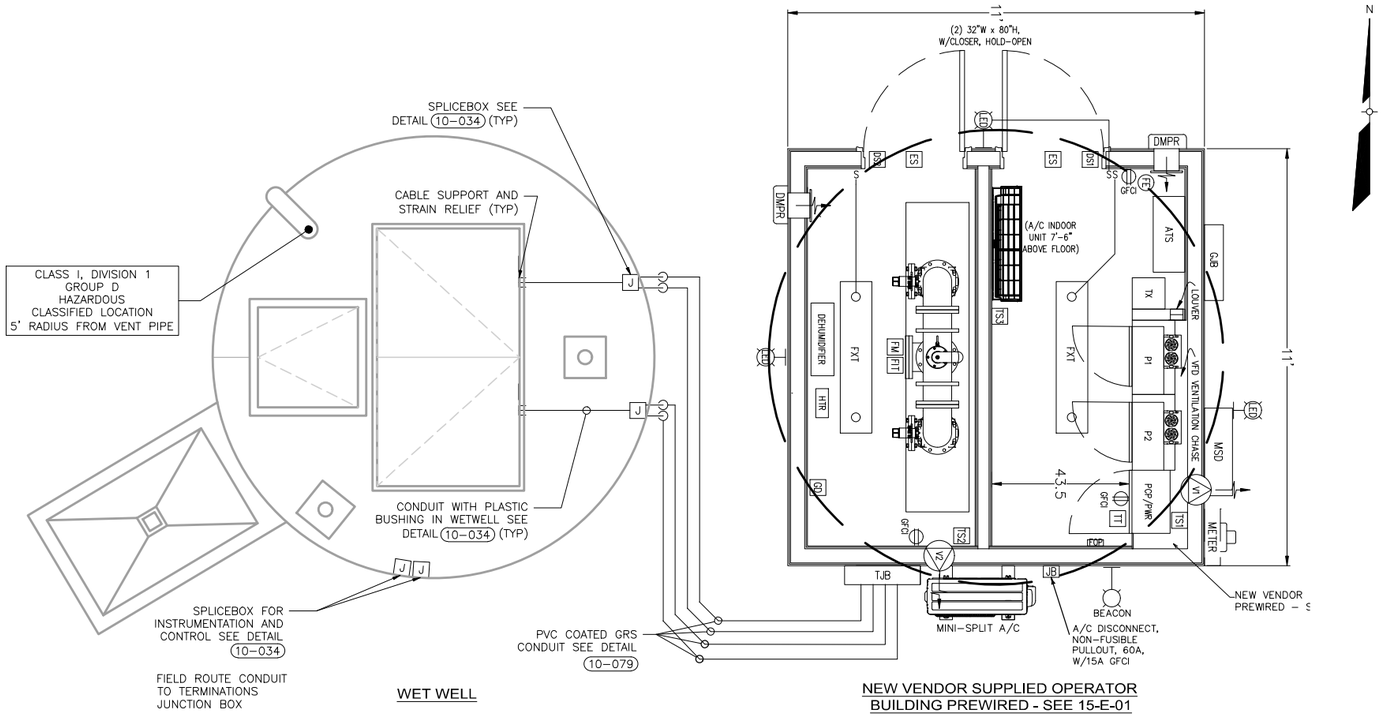
FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

10 - GENERATOR PAD FOUNDATION SECTION

DATE MAY 2026
PROJECT NO 60696351
FILENAME SM-005-006.Dgn
SHEET NO 27
DRAWING NO **10-SM-07**

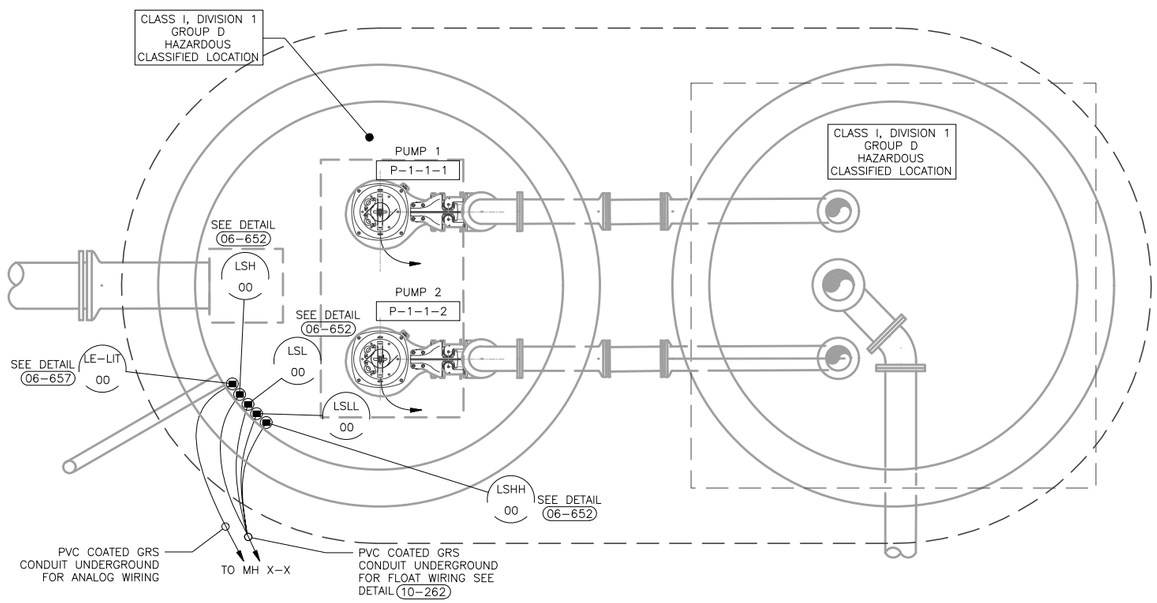
GENERAL NOTES:

1. PROVIDE UTILITY APPROVED 480V 3 PHASE 3 WIRE 400A METER/CABINET SERVICE.
2. REFER TO 99-E-01 THRU 99-E-03 FOR CONDUCTOR SIZES AND DETAILS.
3. PROVIDE ARC FLASH SIGNS/LABELS PER NEC ART. 110-16.



ELECTRICAL - TOP PLAN

0' 2' 4'
SCALE



ELECTRICAL - BOTTOM PLAN

0' 2' 4'
SCALE

DRN	KWB
DES	
WLP	
CHK	
NS	
APP	

1-INCH — VERIFY SCALE IF PLAN SHEET IS REDUCED

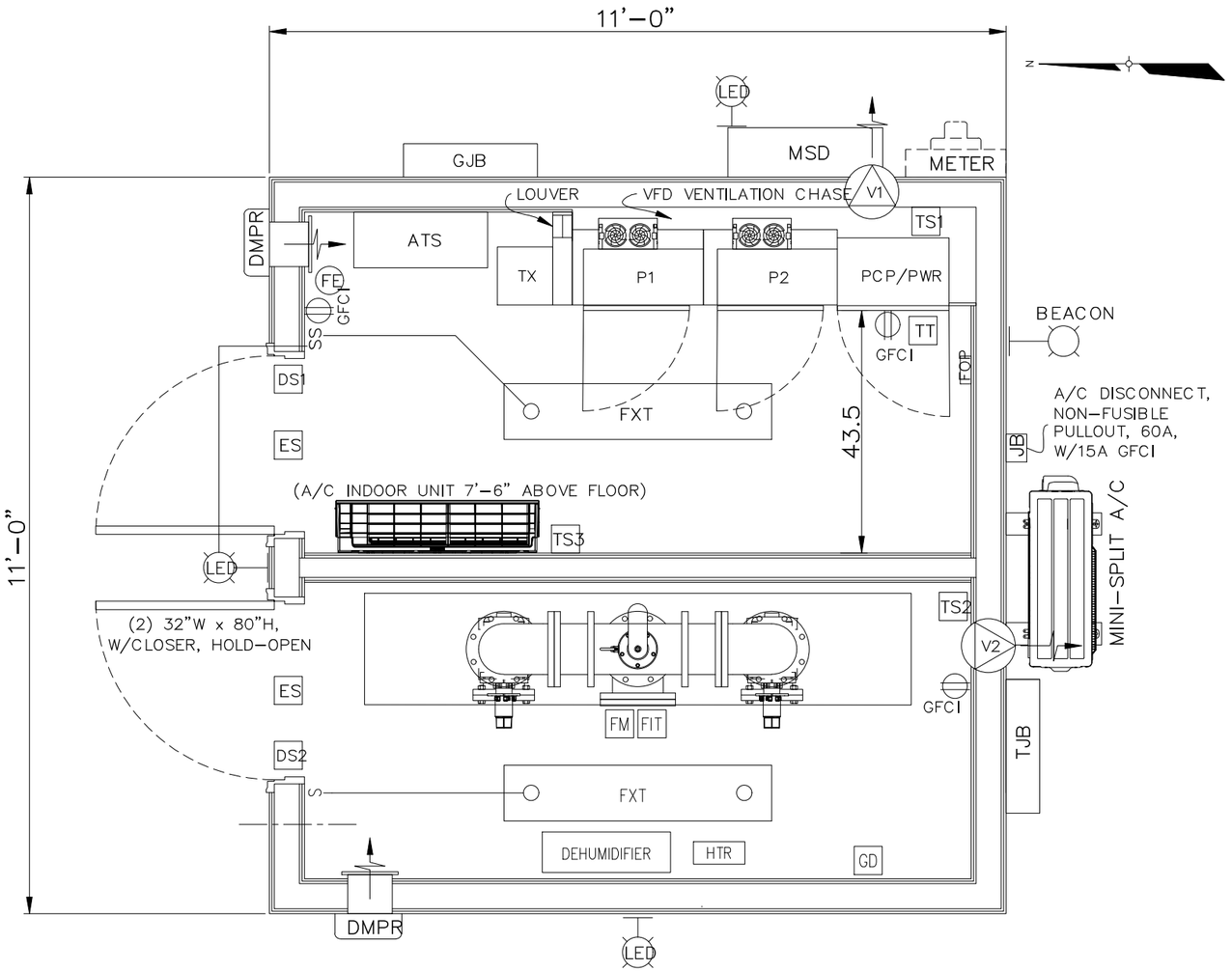
REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	KWB	WLS	3/2025

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

ELECTRICAL PLAN

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	FILE NO 10-E-01.DWG
SHEET NO	28
DRAWING NO	**10-E-01**



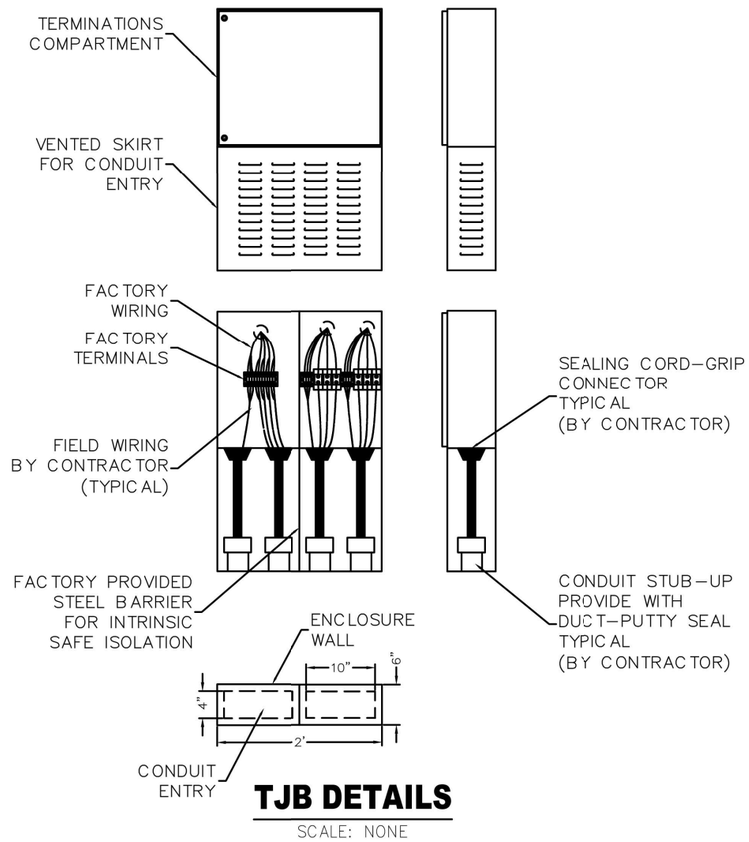
ELECTRICAL FLOOR PLAN

0' 2' 4'
SCALE

FLOOR PLAN LEGEND	
TAG	DESCRIPTION
ATS	AUTOMATIC TRANSFER SWITCH, 400A
DEH	120VAC DEHUMIDIFIER
DMPR	AIR INTAKE GRAVITY DAMPER
DS	ENTRY DOOR SWITCH
ES	EXIT SIGN
FE	FIRE EXTINGUISHER
FIT	FLOW TRANSMITTER (BY OTHER)
FM	FLOW METER (BY OTHER)
FOP	FIBER OPTIC PATCH PANEL
FXT	4' ENCLOSED LED FIXTURE
GD	GAS DETECTION
GFCI	120V RECEPTACLE, GROUND–FAULT CIRCUIT INTERRUPTER
GJB	GENERATOR TERMINATION JUNCTION BOX
HTR	WALL–MOUNT, 208VAC, 1kW ELECTRIC HEATER, EXPLOSION PROOF
JB	60 NON–FUSIBLE PULLOUT, A/C DISCONNECT, WITH 15A GFCI
LED	WEATHERPROOF LED FIXTURE W/MOTION SENSOR, CLASS 1 DIV 2
METER	UTILITY APPROVED METERING CABINET (BY CONTRACTOR)
MSD	MAIN SERVICE DISCONNECT SWITCH (FUSED)
P1/P2	PUMP CONTROL PANEL, 70HP
PCP	PUMP CONTROL PANEL
PWR	POWER CONTROL PANEL
S	LIGHT SWITCH
TS	THERMOSTAT
TJB	TERMINATIONS JUNCTION BOX
TT	TEMPERATURE TRANSMITTER
TX	DRY–TYPE TRANSFORMER
V	VENTILATION & EXHAUST FAN

GENERAL NOTES:

1. PROVIDE UTILITY APPROVED 480V 3 PHASE 3 WIRE 400A METER/CABINET SERVICE.
2. REFER TO 99–E–01 THRU 99–E–03 FOR CONDUCTOR SIZES AND DETAILS.
3. PROVIDE ARC FLASH SIGNS/LABELS PER NEC ART. 110–16.



TJB DETAILS

SCALE: NONE

DRN	KWB
DES	WLP
CHK	NS
APP	RH

1–INCH — VERIFY SCALE IF PLAN SHEET IS REDUCED

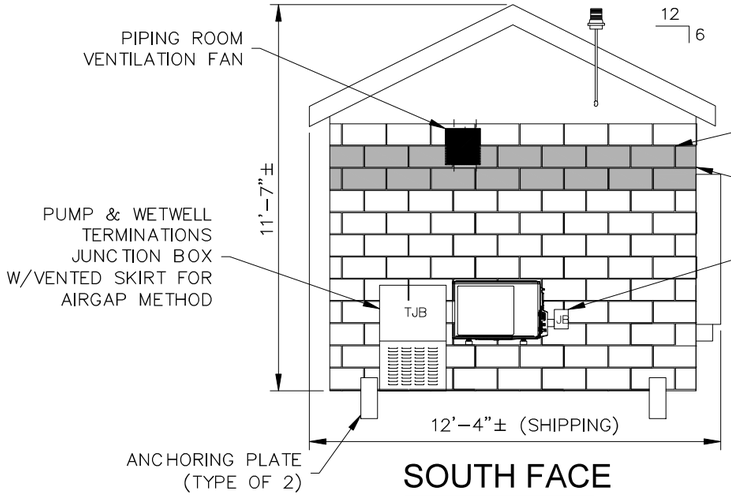
REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	KWB	WLP	3/2026

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531
WWW.AECOM.COM

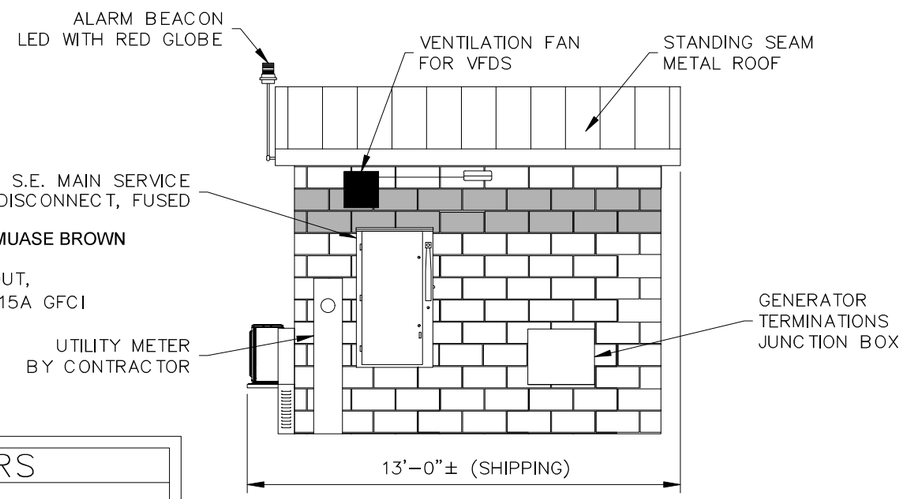
FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

ELECTRICAL EQUIPMENT BUILDING
ELECTRICAL FLOOR PLAN

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	FILE NO 10–E–02.DWG
SHEET NO	29
DRAWING NO	10-E-02

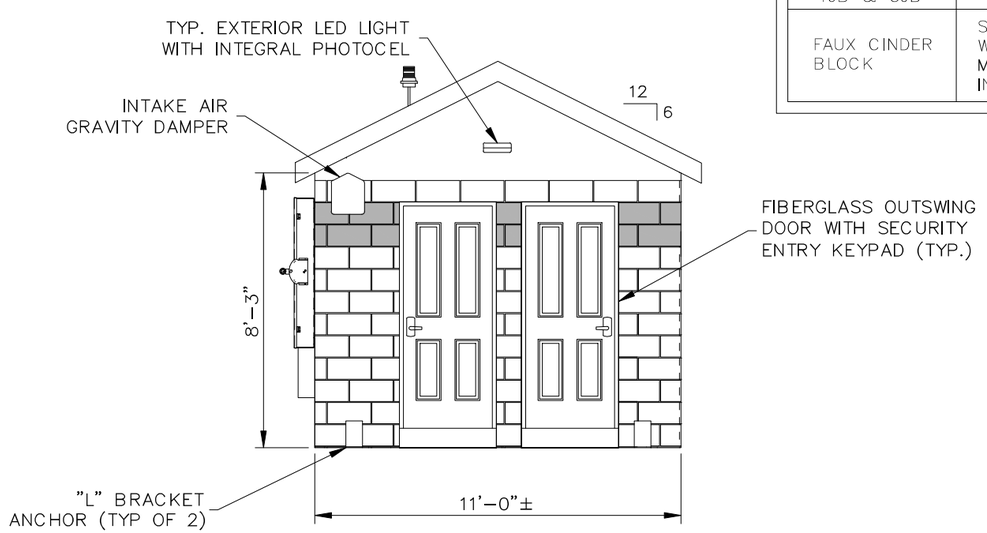


SOUTH FACE

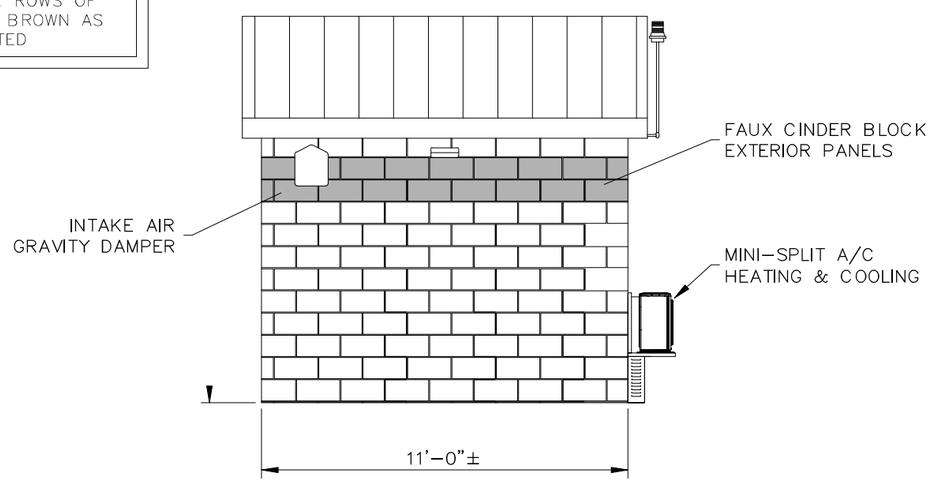


EAST FACE

COLORS	
DOOR	CHIMNEY SMOKE
METAL ROOF	
FASCIA	
TRIM	
TJB & GJB	ANSI 61 GREY
FAUX CINDER BLOCK	SPLIT FACE DUNE WITH 2 ROWS OF MUAVE BROWN AS INDICATED



NORTH FACE



WEST FACE

OPERATOR BUILDING ELEVATIONS

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531
WWW.AECOM.COM

1-INCH — VERIFY SCALE IF PLAN SHEET IS REDUCED

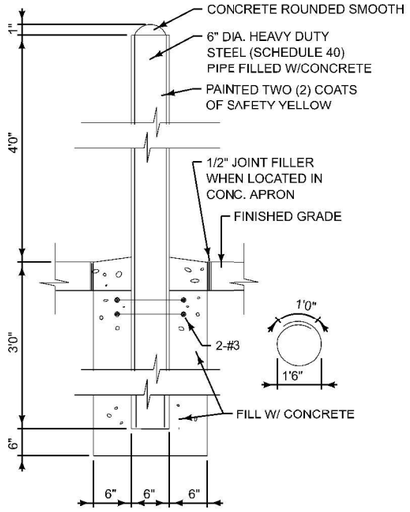
DRN	KWB
DES	
WLP	
CHK	
NS	
APP	RH

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	KJD	NAS	6/2026
	PRELIMINARY PLAN SET	KWB	WLP	3/23/2026

CATTLE CONGRESS SANITARY SEWER LIFT STATION
FY 2023
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

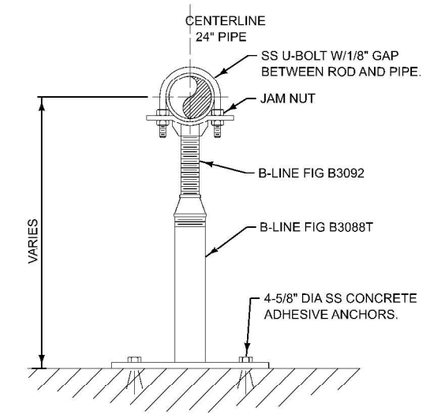
ELECTRICAL EQUIPMENT BUILDING
ELECTRICAL ELEVATIONS

DATE	MAY 2026
PROJECT NO	60696351
FILENAME / FILE NO	10-E-03.DWG
SHEET NO	30
DRAWING NO	10-E-03



GUARD POST DETAIL 02-110

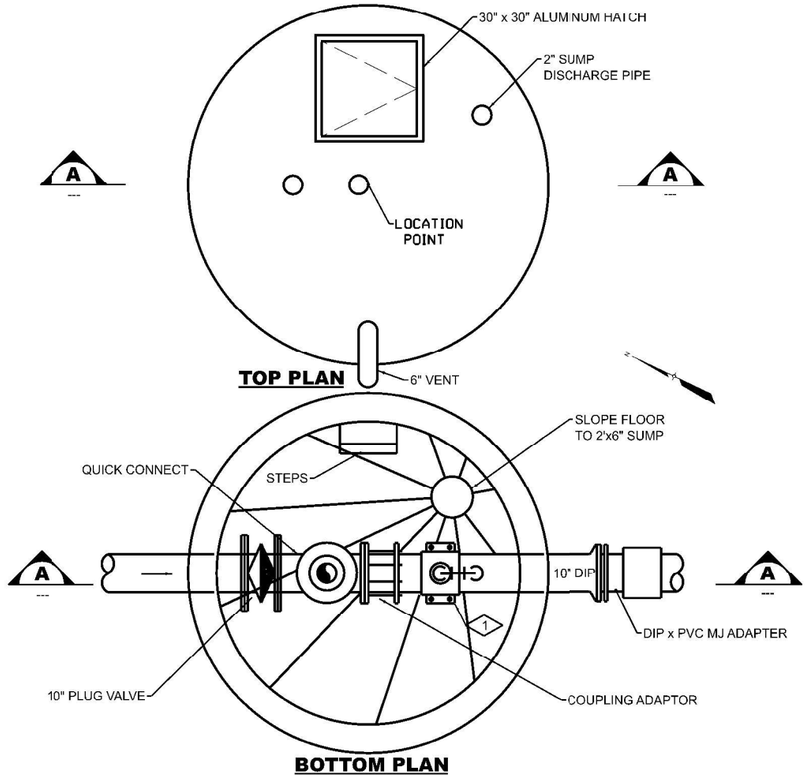
NTS

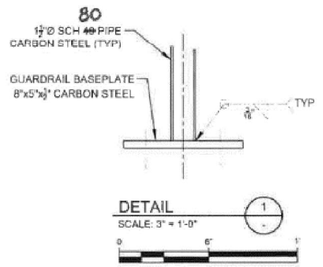


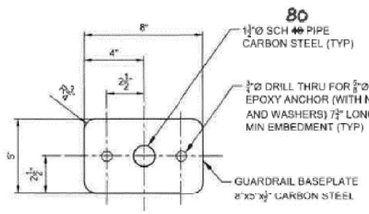
NOTE: STEEL SHALL BE HOT-DIPPED GALVANIZED.

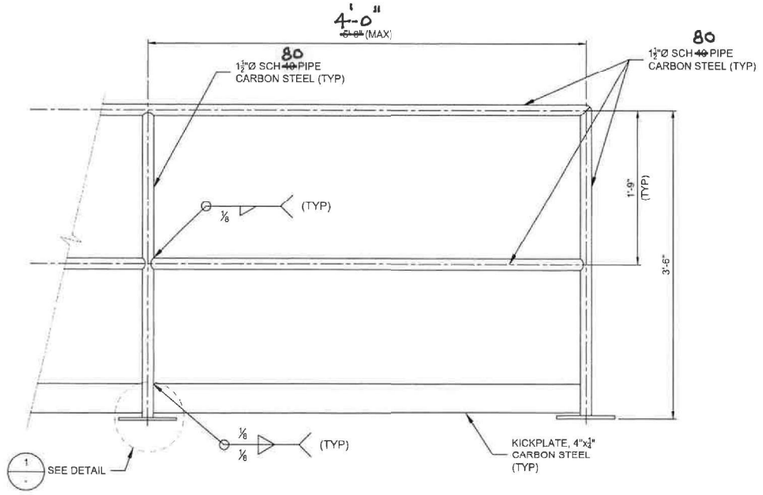
PIPE SUPPORT - FLOOR PS-1

NTS









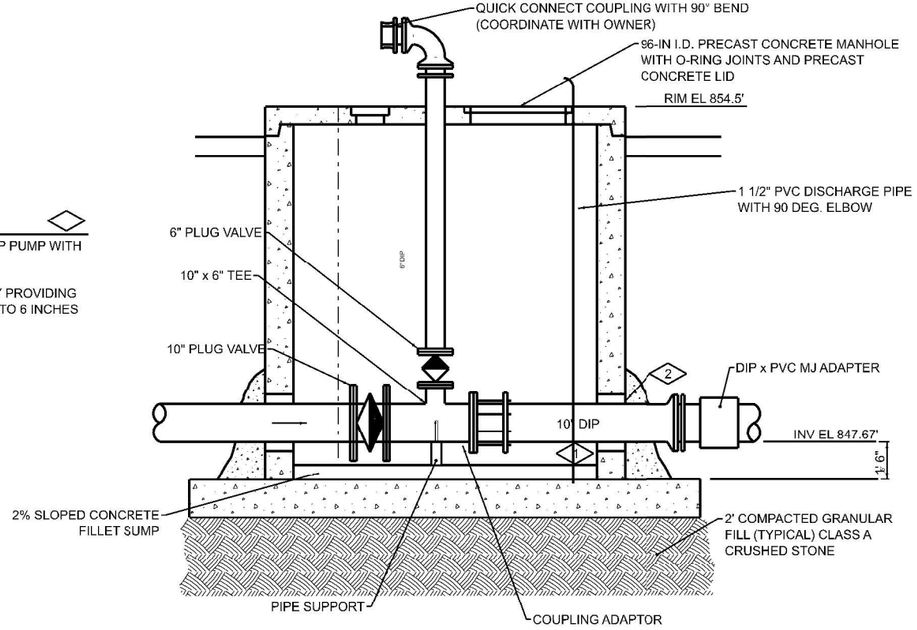
TYPICAL GUARDRAIL DETAIL

SCALE: 1-1/2" = 1'-0"

0 1' 2'

PLAN NOTES

1. 2' DIA x 6" DEEP SUMP, PROVIDE 1/3 HP SUMP PUMP WITH 1 1/2" SCH 80 PVC DISCHARGE PIPE.
2. PREVENT RISER FROM BEARING ON PIPE BY PROVIDING AN ARCHED OPENING WITH A DIAMETER UP TO 6 INCHES LARGER THAN PIPE DIAMETER.



SECTION A

BYPASS MANHOLE DETAIL 3

0' 2' 4'

SCALE

DRN	DES	CHK	APP	REV	DESCRIPTION	DRN	CHK	DATE
					BID SET	KJD	NAS	6/2026
					PRELIMINARY PLAN SET	TDA	NAS	11/2025

⊢ 1-INCH ⊣ VERIFY SCALE IF PLAN SHEET IS REDUCED

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1467
T 319.232.6531 F 319.232.0271
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

CIVIL DETAILS

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	C-001.Dgn
SHEET NO	31
DRAWING NO	99-C-01

GENERAL STRUCTURAL NOTES (08-001)

1. THE GENERAL STRUCTURAL NOTES AND STANDARD STRUCTURAL DETAILS APPLY TO THE ENTIRE PROJECT UNLESS SPECIFICALLY STATED OTHERWISE.

DESIGN CRITERIA

1. DESIGN AND CONSTRUCT IN CONFORMANCE WITH THE INTERNATIONAL BUILDING CODE, 2021 EDITION

2. SUPERIMPOSED DESIGN LOADS:

A. OCCUPANCY CATEGORY OF BUILDINGS	IV
B. ROOF SNOW LOAD:	
1. GROUND SNOW LOAD, Pg	30 PSF
2. SNOW EXPOSURE FACTOR, Ce	1.0
3. IMPORTANCE FACTOR, I	1.2
4. THERMAL FACTOR, Ct	1.0
5. FLAT ROOF SNOW LOAD, Pf	25 PSF
6. UNBALANCED SNOW:	AS REQUIRED BY BUILDING CODE.
C. WIND LOAD:	
1. BASIC WIND SPEED, V	121 MPH, ASCE 7-16
2. WIND EXPOSURE	C
3. INTERNAL PRESSURE COEFF, GCpi	+/- 0.18

3. SEISMIC DESIGN DATA:

A. ZIP CODE	50701
B. IMPORTANCE FACTOR, I	1.5
C. MAPPED SPECTRAL RESPONSE ACCELERATIONS:	
1. Ss	0.058
2. S1	0.048
D. SITE CLASS	D
E. SPECTRAL RESPONSE COEFFICIENTS:	
1. SDS	0.061
2. SD1	0.076
F. SEISMIC DESIGN CATEGORY	C
G. BASIC SEISMIC FORCE RESISTING SYSTEM	LIGHT-FRAME WALLS WITH SHEAR PANELS OF ALL OTHER MATERIALS
H. DESIGN BASE SHEAR	0.046W
I. RESPONSE MODIFICATION FACTOR, R	2.0
J. ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PROCEDURE

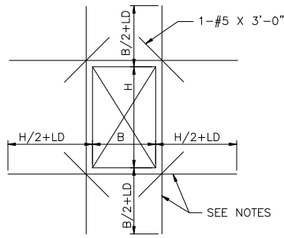
CONCRETE

1. REINFORCING STEEL:	
A. DEFORMED BARS	ASTM A615-GRADE 60
2. UNLESS OTHERWISE SHOWN PROVIDE COVER FOR REINFORCEMENT AS FOLLOWS:	
A. CAST AGAINST:	
1. EARTH	3 INCHES
B. EXPOSED TO EARTH, WEATHER OR WATER:	
1. SLABS	2 INCHES
2. WALLS	2 INCHES

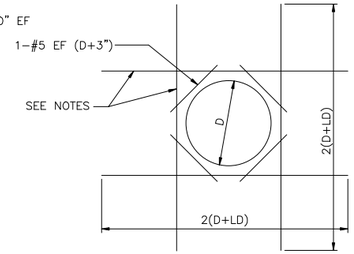
3. PLACE DOWELS BEFORE PLACING CONCRETE.
4. DO NOT WELD OR FIELD BEND REINFORCING BARS, EXCEPT AS APPROVED BY ENGINEER.
5. CONCRETE:
   A. ALL LOCATIONS CLASS A — F'c=4500 PSI
6. UNLESS OTHERWISE NOTED, CONSTRUCTION JOINTS SHOWN ARE OPTIONAL. CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY ENGINEER.
7. BEFORE CONCRETE IS PLACED, CONSTRUCTION JOINTS SHALL BE CLEANED AND LAITANCE REMOVED AND SURFACE WETTED. STANDING WATER SHALL BE REMOVED.
8. CONSTRUCTION JOINTS SHALL HAVE KEYS OR ROUGHENED SURFACES. WHERE ROUGHENED SURFACE IS USED, THE SURFACE SHALL HAVE AN AMPLITUDE OF 1/4" MIN.
9. CHAMFER EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.
10. EQUIPMENT PAD AND CURB LOCATIONS, DIMENSIONS AND HEIGHTS TO BE COORDINATED BY CONTRACTOR. VERIFY WITH EQUIPMENT MANUFACTURER'S REQUIREMENTS.

MISCELLANEOUS

1. REFER TO CIVIL, ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR LOCATIONS AND DIMENSIONS OF CHASES, SLOTS, INSERTS, CURBS, OPENINGS, SLEEVES, ANCHOR BOLTS, FLOOR PITCHES, ANGLE FRAMES, GATE FRAMES AND OTHER REQUIREMENTS NOT INDICATED ON THE STRUCTURAL DRAWINGS.
2. VERIFY PERTINENT EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING CONSTRUCTION AND/OR FABRICATION.
3. SUBMIT THE SIZE AND LAYOUT OF OPENINGS IN SLABS FOR MCC UNITS FOR APPROVAL PRIOR TO PLACEMENT OF CONCRETE.
4. COORDINATE DIMENSIONS AND VERIFY LOCATION OF STRUCTURAL ELEMENTS WITH PURCHASED EQUIPMENT. ANCHOR BOLTS SHALL BE SIZED AND FURNISHED BY THE EQUIPMENT SUPPLIER UNLESS OTHERWISE INDICATED,



RECTANGULAR OPENING



CIRCULAR OPENING

NOTES:
1. THESE DETAILS APPLY TO ALL OPENINGS IN CONCRETE WALLS AND SLABS WHEN LARGEST OPENING DIMENSION IS GREATER THAN TWO TIMES SECTION THICKNESS OR GREATER THAN REINFORCING SPACING IN THE SECTION, UNLESS OTHERWISE INDICATED IN THE DRAWINGS.
2. THE AREA OF ADDITIONAL REINFORCING REQUIRED IN EACH FACE ON EACH SIDE OF AN OPENING SHALL EQUAL OR EXCEED ONE-HALF OF THE AREA OF THE INTERCEPTED BARS IN EACH FACE, IN EACH DIRECTION, RESPECTIVELY WITH A MINIMUM OF 1-#5 BAR EACH FACE.
3. PLACE THE ADDED BARS IN THE SAME LAYERS AS THE WALL OR SLAB REINFORCING.
4. LD=EMBEDMENT LENGTH. SEE (08-010)

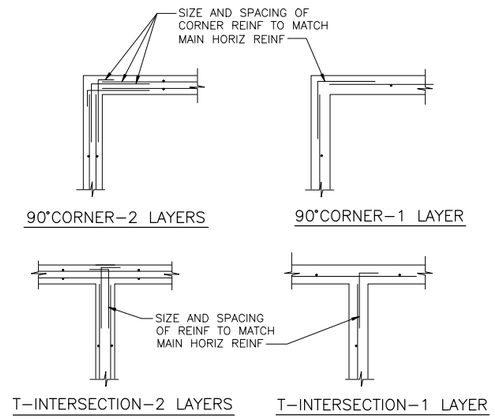
ADDITIONAL REINFORCEMENT AT OPENINGS IN WALLS AND SLABS (08-020)

NTS

BAR MINIMUM REINFORCEMENT SPLICE AND ANCHORAGE LENGTH (INCHES) (08-010)

BAR SIZE IN-POUND	BAR SIZE METRIC mm	LAPPED SPLICE LENGTH		DEVELOPMENT LENGTH		STANDARD HOOK DEVELOPMENT LENGTH	COMPRESSION LAP LENGTH
		TOP BARS	OTHERS	TOP BARS	OTHERS		
3	10	25	19	19	15	6	12
4	13	33	25	25	19	7	15
5	16	41	31	31	24	9	19
6	19	49	37	37	29	11	23
7	22	71	54	54	42	12	27
8	25	81	62	62	48	14	30
9	29	91	70	70	54	15	34
10	32	101	78	78	60	17	38
11	36	111	85	85	66	19	42

NOTES:
1. TOP BARS ARE HORIZONTAL BARS SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.
2. CTR TO CTR SPACING OF SPLICED BARS NOT TO EXCEED 1/5 MIN LAP LENGTH OR 6 IN WHICHEVER IS LESS.
3. WHEN LAPPING TWO DIFFERENT SIZE BARS USE THE LAP LENGTH OF THE SMALLER BAR UNLESS NOTED OTHERWISE.
4. DEVELOPMENT LENGTH IS MINIMUM LENGTH OF EMBEDMENT FOR STRAIGHT DOWELS WHERE END HOOK IS NOT SHOWN, UNLESS OTHERWISE NOTED.
5. COMPRESSION LAP LENGTH FOR VERTICAL COLUMN BARS ONLY.
6. HOOKS SHALL BE ACI STANDARD UNLESS OTHERWISE NOTED.
7. f'c = 4,000 PSI MIN
8. fy = 60,000 PSI



90°CORNER-2 LAYERS

90°CORNER-1 LAYER

T-INTERSECTION-2 LAYERS

T-INTERSECTION-1 LAYER

HORIZONTAL REINFORCEMENT DETAIL (08-030)

NTS

DRN	DRE
DES	DRE
CHK	SDR
APP	RH

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	K.JD	NAS	5.6/2026
	PRELIMINARY PLAN SET	TDA	NAS	3/2026

1-INCH — VERIFY SCALE IF PLAN SHEET IS REDUCED

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531
WWW.AECOM.COM

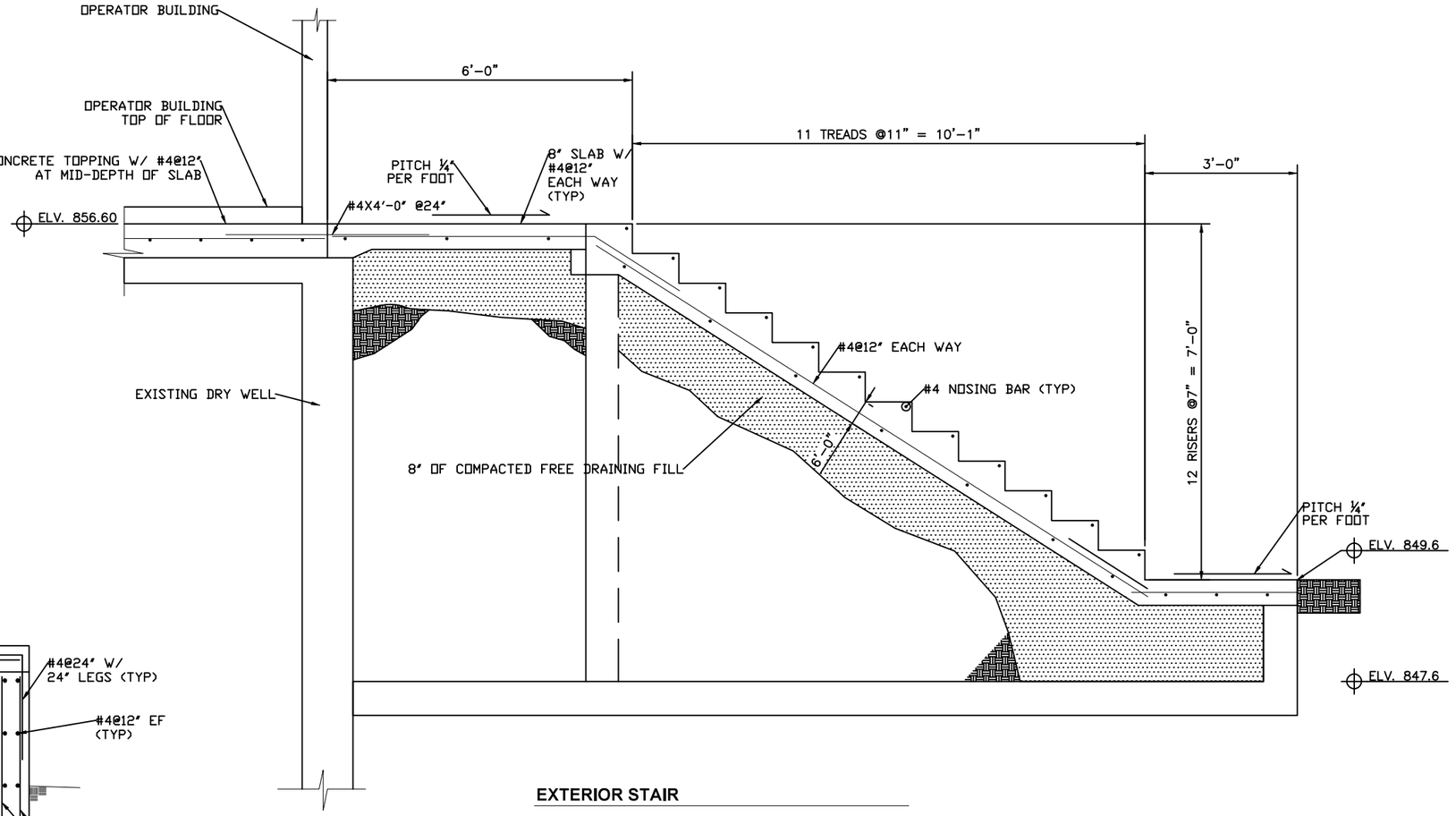
FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

STRUCTURAL STANDARD DETAILS

DATE	MAY 2026
PROJECT NO	60696351
FILENAME FILE NO	99-S-01.dwg
SHEET NO	32
DRAWING NO	99-S-01

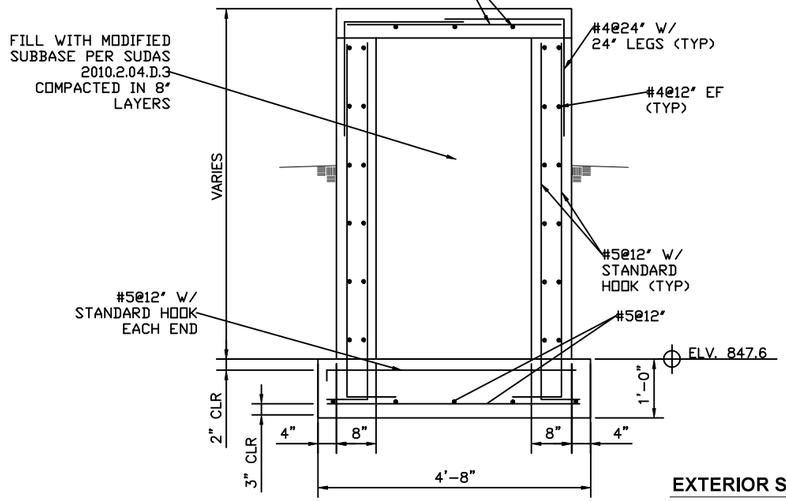
GENERAL STRUCTURAL NOTES

1. STAIRS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SUDAS DETAIL 9080.102.
2. PROVIDE HANDRAIL PER SUDAS DETAIL 9080.102
3. INCLUDE 1" KICKBACK ON STAIR TREAD



EXTERIOR STAIR

0' 2' 4'
SCALE



EXTERIOR STAIR SECTION

0' 2' 4'
SCALE

IF PLAN SHEET IS REDUCED — VERIFY SCALE — 1-INCH

REV	DESCRIPTION	DRN	CHK	DATE
	BID SET	K.JD	NAS	6/2026
	PRELIMINARY PLAN SET	TDA	NAS	3/2026

DRN DRE | DES DRE | CHK SDR | APP RH

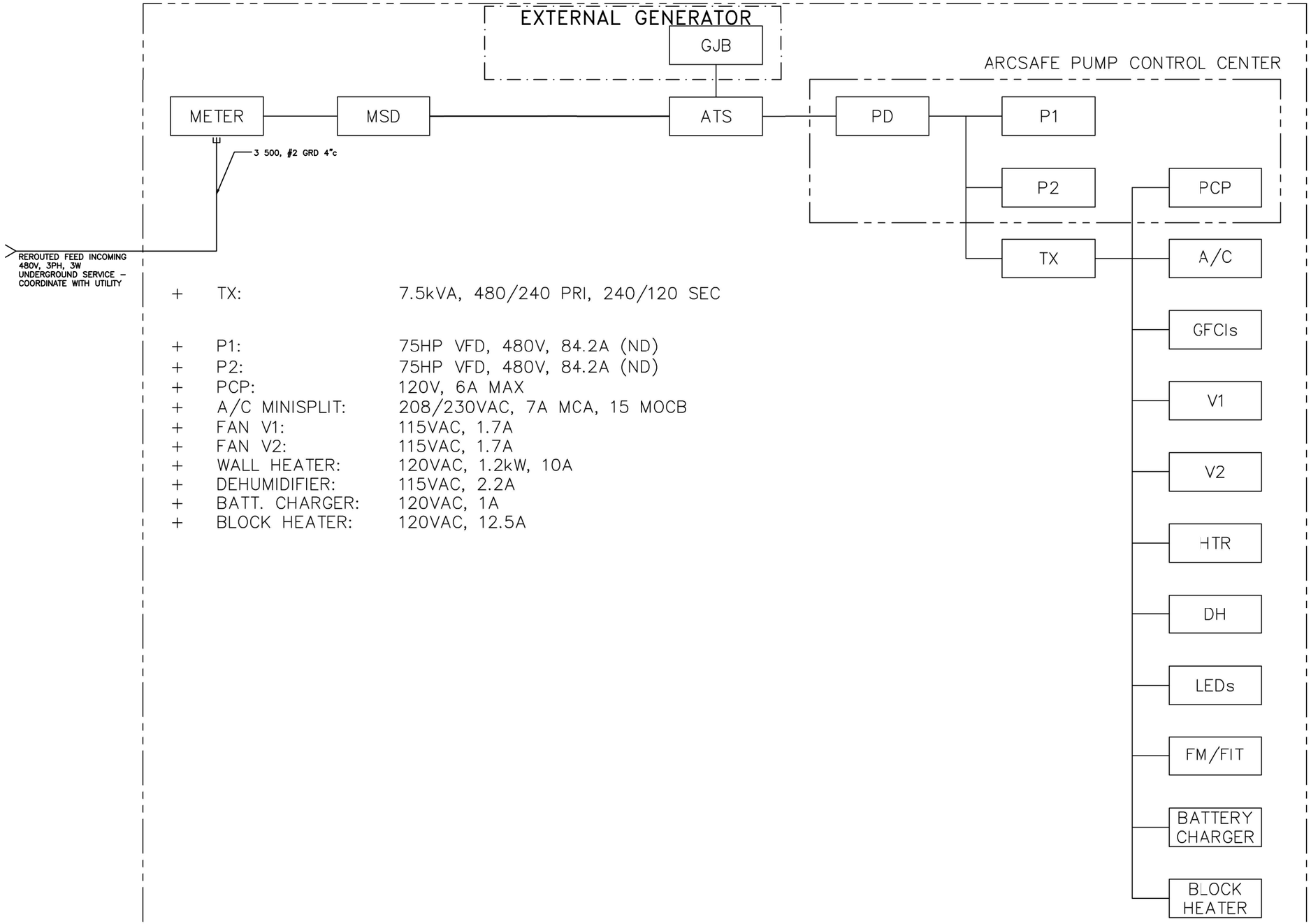
AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

STRUCTURAL STANDARD DETAILS

DATE	MAY 2026
PROJECT NO	60696351
FILENAME FILE NO	99-S-02.dwg
SHEET NO	33
DRAWING NO	**99-S-02**

VENDOR SUPPLIED ARROW BUILDING MCX-1111



+	TX:	7.5kVA, 480/240 PRI, 240/120 SEC
+	P1:	75HP VFD, 480V, 84.2A (ND)
+	P2:	75HP VFD, 480V, 84.2A (ND)
+	PCP:	120V, 6A MAX
+	A/C MINISPLIT:	208/230VAC, 7A MCA, 15 MOCB
+	FAN V1:	115VAC, 1.7A
+	FAN V2:	115VAC, 1.7A
+	WALL HEATER:	120VAC, 1.2kW, 10A
+	DEHUMIDIFIER:	115VAC, 2.2A
+	BATT. CHARGER:	120VAC, 1A
+	BLOCK HEATER:	120VAC, 12.5A

IF PLAN SHEET IS REDUCED VERIFY SCALE 1-INCH

DRN	DES	CHK	APP	REV	DESCRIPTION	DRN	CHK	DATE
						K.D	NAS	6/2026
	11/25 Brandel, Ken					TDA	NAS	3/2026
	11/25 Podolak, Wayne				BID SET			
					PRELIMINARY PLAN SET			

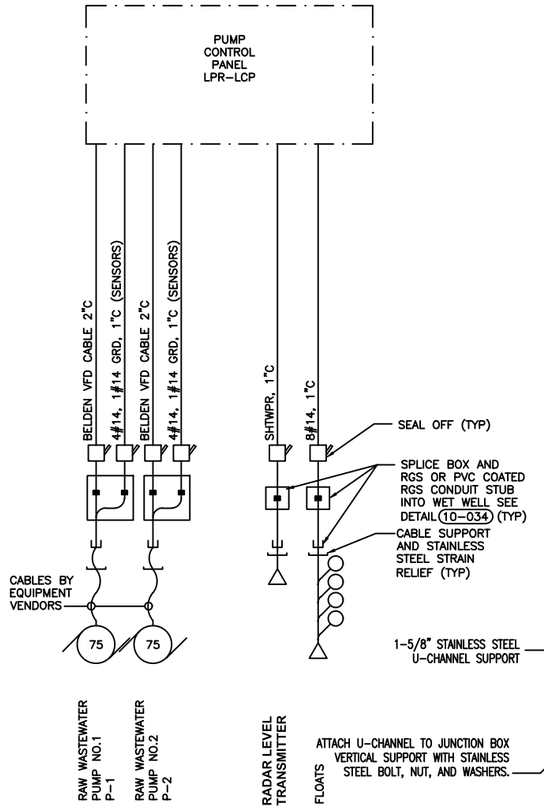
11/4/25 Hillmann, Ryan

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

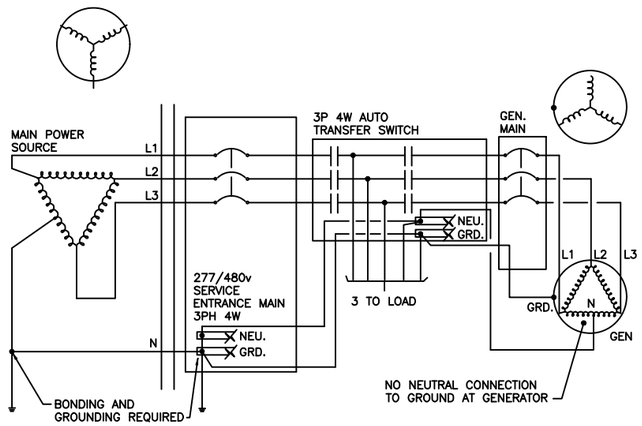
ELECTRICAL ONE-LINE DIAGRAM

DATE	MAY 2026
PROJECT NO	60696351
FILENAME FILE NO	
SHEET NO	34
DRAWING NO	99-E-01



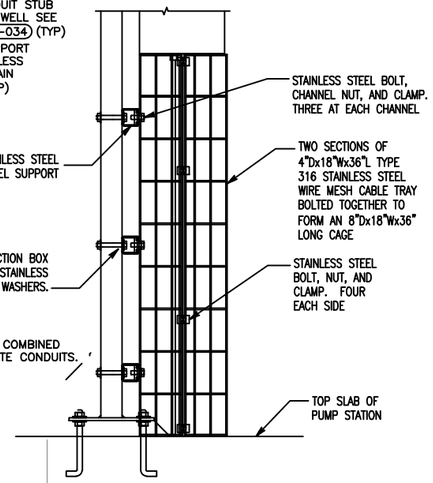
NOTE: MOTOR CONTROL WIRING AND FLOAT WIRING TO LCP MAY BE COMBINED INTO A SEPARATE CONDUIT. OTHER WIRING TO HAVE SEPARATE CONDUITS.

WET WELL WIRING DETAILS (10-079)
NTS



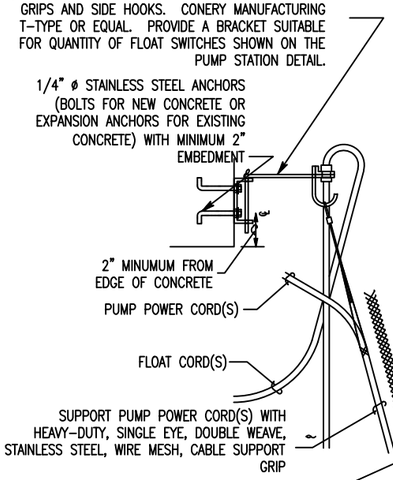
TYPICAL STANDBY GENERATOR GROUNDING DETAIL (10-606)
NTS

(GENERATOR IS NOT A SEPARATELY DERIVED SYSTEM.)

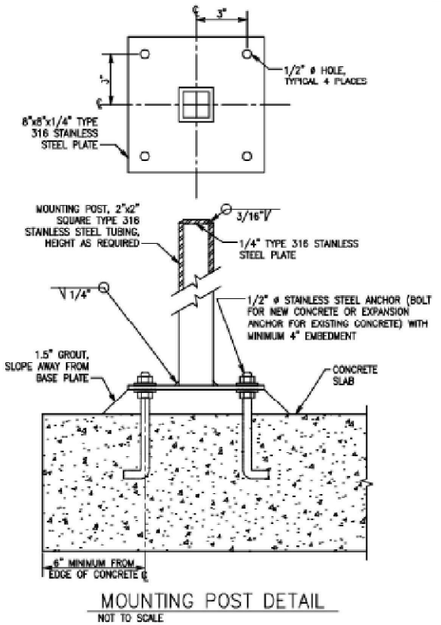


WIRE CAGE DETAIL
NOT TO SCALE

STAINLESS STEEL FLOAT SWITCH BRACKET WITH CORD GRIPS AND SIDE HOOKS. CONERY MANUFACTURING T–TYPE OR EQUAL. PROVIDE A BRACKET SUITABLE FOR QUANTITY OF FLOAT SWITCHES SHOWN ON THE PUMP STATION DETAIL.

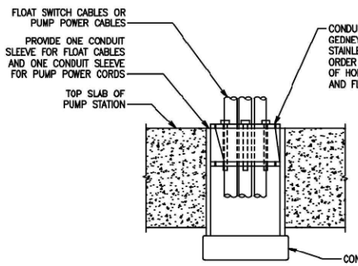


FLOAT AND CORD SUPPORT DETAIL
NOT TO SCALE

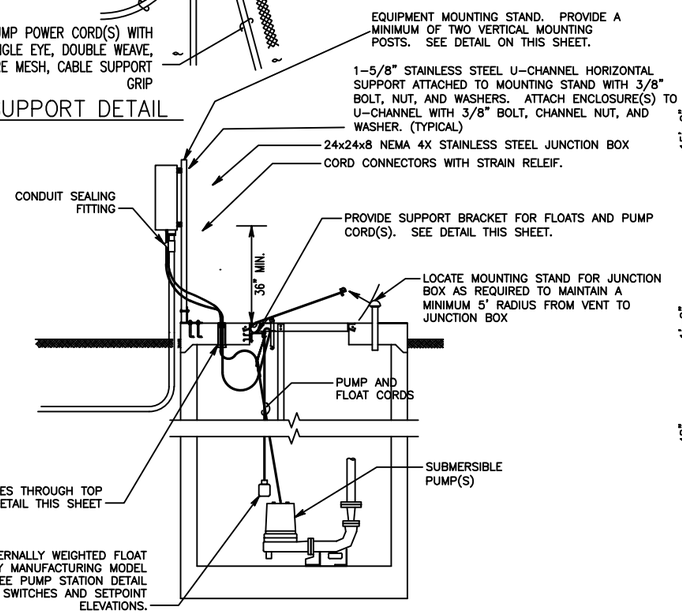


MOUNTING POST DETAIL
NOT TO SCALE

SELECT SIZE OF CONDUIT SEALING BUSHING BASED ON SIZE AND QUANTITY OF CORDS. REFER TO PUMP MANUFACTURERS INFORMATION					
CONDUIT SIZE	MAXIMUM DIAMETER OF CABLE OR CORD				
	1 CABLE	2 CABLES	3 CABLES	4 CAB;ES	CATALOG NO.
1–1/2	0.78	0.49	0.55	0.44	CSB–150P–1
2	1.02	0.77	0.71	0.61	CSB–200P–1
2–1/2	1.32	0.96	0.89	0.78	CSB–250P–1
3	1.89	1.20	1.13	0.96	CSB–300P–1
3–1/2	2.13	1.32	1.32	1.13	CSB–350P–1
4	2.57	1.63	1.51	1.26	CSB–400P–1
5	3.45	2.00	1.88	1.53	CSB–500P–1

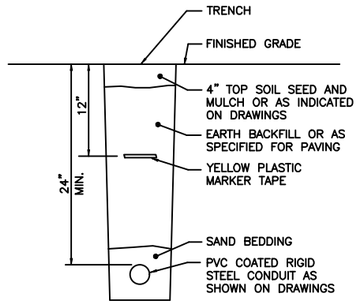


CONDUIT SLEEVE AND SEALING BUSHING DETAIL
NOT TO SCALE



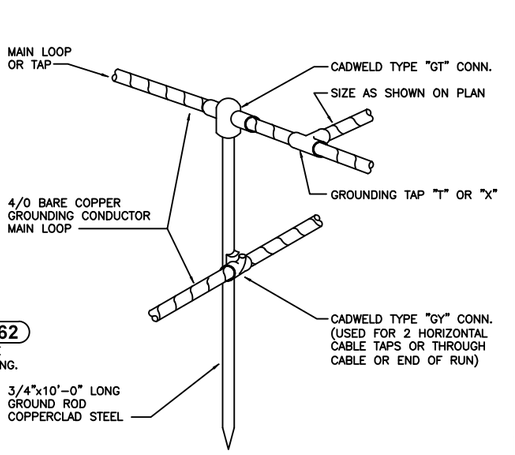
NOT TO SCALE

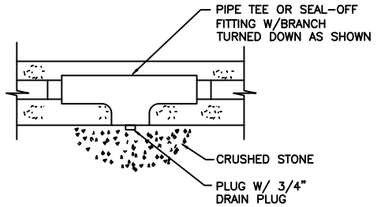
SPLICEBOX DETAIL (10-034)
NTS



UNDERGROUND CONDUIT DETAIL (10-262)
NTS

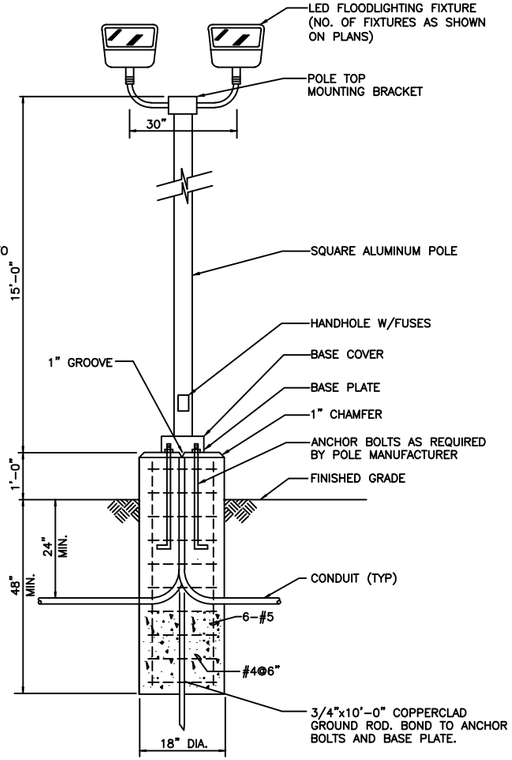
NOTE: PROVIDE SIMILAR INSTALLATION FOR INCOMING SERVICE CABLES. BURY CABLE AT 36" DEPTH TO MATCH EXISTING.





CONDUCTOR TO GROUND ROD CONNECTION DETAIL (10-451)
NTS

DUCTBANK CONDUIT DRAIN DETAIL (10-257)
NTS



AREA LIGHTING POLE & BASE DETAIL (10-509)
NTS

DRN	DES	CHK	APP	REV	DESCRIPTION	DRN	CHK	DATE
					VERIFY SCALE IF PLAN SHEET IS REDUCED 1–INCH			
	11/25 Brandt, Ken	11/25 Podolak, Wayne				K.D	NAS	6/2026
					BID SET	TDA	NAS	3/2026
					PRELIMINARY PLAN SET	DRN	CHK	DATE

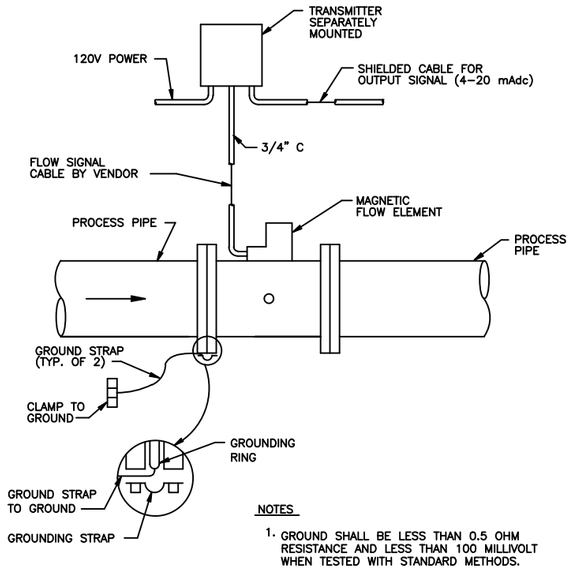
11/4/25 Hillmann, Ryan

AECOM
501 Sycamore Street, Suite 222
Waterloo, Iowa 50704-1497
T 319.232.6531
WWW.AECOM.COM

FY 2023
CATTLE CONGRESS SANITARY SEWER LIFT STATION
CITY CONTRACT NO. 1075
CITY OF WATERLOO, IOWA

ELECTRICAL DETAILS

DATE	MAY 2026
PROJECT NO	60696351
FILENAME	
FILE NO	
SHEET NO	35
DRAWING NO	99-E-02

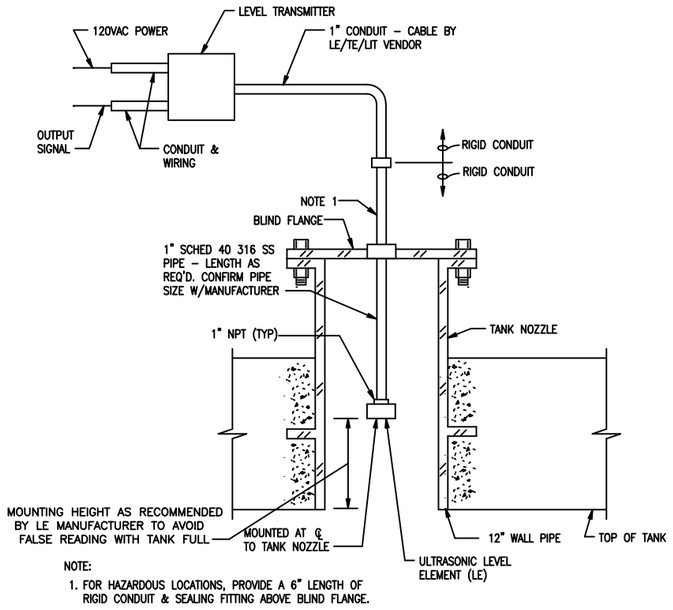


NOTES

1. GROUND SHALL BE LESS THAN 0.5 OHM RESISTANCE AND LESS THAN 100 MILLIVOLT WHEN TESTED WITH STANDARD METHODS.

FLOW - MAGNETIC, FLANGED, SEPARATE TRANSMITTER — 06-600

NTS



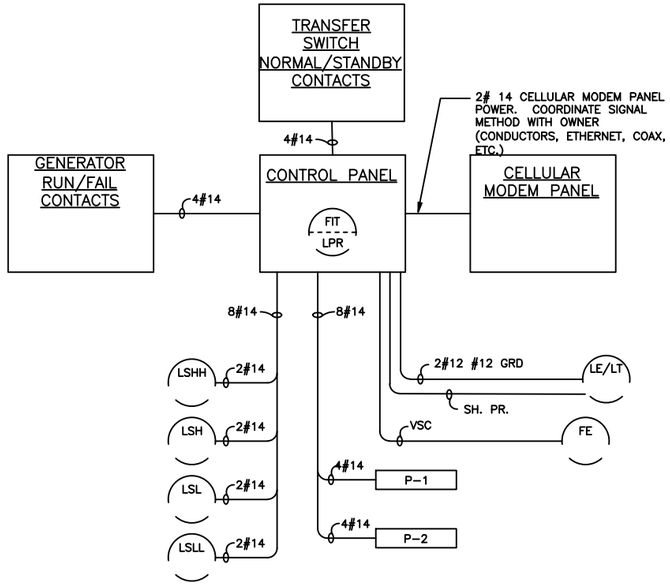
NOTE:

1. FOR HAZARDOUS LOCATIONS, PROVIDE A 6" LENGTH OF RIGID CONDUIT & SEALING FITTING ABOVE BLIND FLANGE.

LEVEL - ULTRASONIC, CONCRETE TANK — 06-657

NTS NOTE: SEAL OFFS REQUIRED - LOCATE AT POWER/SIGNAL CONDUITS ENTERING TRANSMITTER

			LIGHTING FIXTURE SCHEDULE	
A	–	LED	LED FLOODLIGHT COOPER NFFLD-A40-E-UNV-66-7060-OA/RA1014 120-277V W/PC, SLIPFIT MOUNT, 14,600 LUMEN, 5700K, PROVIDE 4' 15' AL SQ POLE. OPTION-HUBBEL RFL4-176L-120-5K7-W-UNV-K-XX-7PR-TL FIXTURE WITH HUBBELL SSA-H-16-40-A-TA-XX POLE	POLE MOUNT ADJUST FOR BEST COVERAGE OF WELL AND VAULT



LEGEND

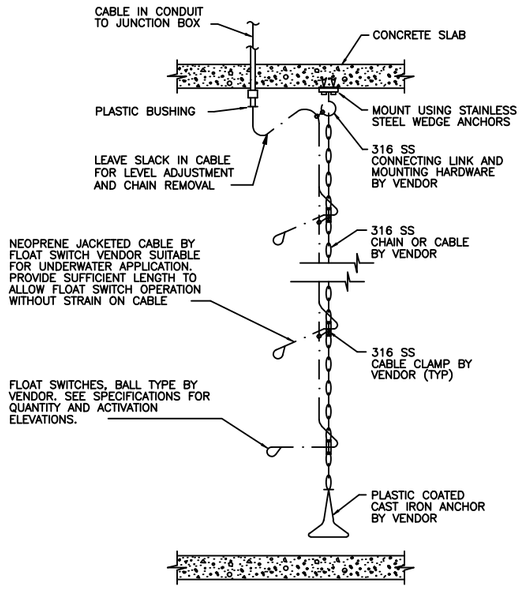
- ( ) #12 — (QUANTITY) #12 THWN CONDUCTORS
- ( ) #14 — (QUANTITY) #14 THWN CONDUCTORS
- ( ) SH. PR. — (QUANTITY) SHIELDED PAIR
- ( ) VSC — (QUANTITY) VENDOR SUPPLIED CABLE

RISER DIAGRAM

NTS

GENERAL NOTES:

1. THIS DRAWING SHOWS PROCESS INSTRUMENTATION AND CONTROL WIRING REQUIREMENTS. ASSOCIATED AC POWER AND GROUNDING CONDUCTORS ARE NOT SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRING, WHETHER SHOWN OR NOT, NECESSARY FOR A COMPLETE AND OPERABLE SYSTEM.
2. THIS DRAWING SHOWS RELATIVE LOCATIONS OF DEVICES AND PANELS AND IS NOT DRAWN TO SCALE.
3. ALL SHIELDED AND UNSHIELDED CONDUCTORS SHALL BE RUN IN CONDUIT. SHIELDED CONDUCTORS SHALL NOT BE COMBINED WITH UNSHIELDED CONDUCTORS IN ANY CONDUIT. NEITHER SHIELDED OR UNSHIELDED CONDUCTORS SHALL BE INCLUDED IN THE SAME CONDUIT AS THREE PHASE POWER.
4. THIS DRAWING DOES NOT SHOW CONDUIT SYSTEMS. PROVIDE, AS A MINIMUM, PULL BOXES AS RECOMMENDED BY CONDUCTOR MANUFACTURER. CONDULET SHALL NOT BE USED AS PULL BOX.
5. CONDUIT SHALL BE SIZED FOR CONDUCTORS SHOWN PLUS REQUIRED SPARES.
6. SHIELDED AND UNSHIELDED CONDUCTORS SHALL HAVE A MINIMUM OF 6" SEPARATION BETWEEN CONDUIT ON PARALLEL RUNS.
7. SHIELDED CONDUCTORS SHALL BE SEPARATED FROM UNSHIELDED CONDUCTORS BY STEEL BARRIERS IN ALL TERMINAL AND PULL BOXES.
8. FOR EACH CONDUIT CONTAINING MORE THAN TWO CONDUCTORS, PROVIDE A MINIMUM OF TWO CONDUCTORS OR 10% OF TOTAL CONDUCTORS IN CONDUIT, WHICHEVER IS GREATER AS SPARES. TAG BOTH ENDS OF EACH SPARE. TERMINATE EACH END OF SPARE CONDUCTOR AT TERMINALS WHENEVER POSSIBLE.
9. CONDUCTORS SHALL NOT BE SPLICED EXCEPT AT TERMINALS.



LEVEL - FLOAT SWITCH, CHAIN SUPPORT — 06-652

NTS

DRN	DES	CHK	APP	REV	DESCRIPTION	DATE	CHK
					VERIFY SCALE IF PLAN SHEET IS REDUCED 1-INCH		

FY 2023 Cattle Congress Sanitary Sewer Lift Station Reconstruction
City of Waterloo, Iowa

City Contract No. 1075

AECOM #60696351

Prepared For:
City of Waterloo
715 Mulberry Street
Waterloo, Iowa 50703

Prepared By:
AECOM
501 Sycamore Street, Suite 222
P.O. Box 1497
Waterloo, Iowa 50704-1497

June 2026

FY 2023 Cattle Congress Sanitary Sewer Lift Station Reconstruction City of Waterloo, Iowa

City Contract No. 1075

Prepared For:
City of Waterloo, Iowa

Prepared By:
AECOM

June 2026

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the state of Iowa.

June 3, 2026
NICHOLAS SCHROCK, PE Date

License No. 29965

My license renewal date is December 31, 2026.

Pages or sheets covered by this seal:
All Pages

FY 2023 Cattle Congress Sanitary Sewer Lift Station Reconstruction
CITY CONTRACT NO. 1075

CONTRACT DOCUMENTS

TABLE OF CONTENTS

1.	NOTICE TO BIDDERS	NB 1-4
2.	NOTICE OF PUBLIC HEARING	NPH 1-2
3.	INSTRUCTIONS TO BIDDERS	IB 1-5
4.	SRF REQUIRED FRONT-END SPECIFICATIONS	1-22
4.	FORM OF BID OR PROPOSAL	FB 1-3
5.	SALES TAX EXEMPTION INFORMATION FORM	STE 1
6.	FORM OF BID BOND	BB 1
7.	NON-COLLUSION AFFIDAVITS	NCA 1-2
8.	EQUAL OPPORTUNITY CLAUSE	EOC 1-2
9.	TITLE VI CIVIL RIGHTS	TVI 1
10.	BIDDER STATUS FORM	BSF-1-2
11.	STATEMENT OF BIDDER'S QUALIFICATIONS	SBQ 1-2
12.	GENERAL SPECIAL PROVISIONS	GSP 1-5
13.	SPECIAL PROVISIONS	SP 1-5

The Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series of 2015, plus the applicable General Supplemental Specifications and the 2026 Iowa Statewide Urban Specifications, also known as SUDAS, shall apply to construction work. These standard specifications are amended by the City of Waterloo Supplemental Specifications to the 2026 edition of SUDAS.

Any specifications that supersede the Iowa DOT, SUDAS and City of Waterloo Specifications are listed in the Special Provisions.

TECHNICALS

Section 01 10 00	Summary of Work	01 10 00-1 to 01 10 00-3
Section 01 33 00	Submittals	01 33 10-1 to 01 33 00-9
Section 01 45 50	Testing Laboratory Services	01 45 50-1 to 01 45 50-2
Section 01 45 51	Testing	01 45 51-1 to 01 45-51-2
Section 01 50 00	Temporary Construction Facilities and Utilities	01 50 00-1 to 01 50 00-3
Section 01 57 23	Protection of Environment	01 57 23-1 to 01 57 23-3
Section 01 60 10	Material and Equipment	01 60 10-1 to 01 60 10-8
Section 01 78 23	Operation and Maintenance Data	01 78 23-1 to 01 78 23-14
Section 01 78 39	Project Record Documents	01 78 39-1 to 01 78 39-2
Section 03 01 30	Patching Mortar	03 01 30-1
Section 03 20 00	Concrete Reinforcement	03 20 00-1 to 03 20 00-2
Section 03 30 00	Cast-in-Place Concrete	03 30 00-1 to 03 30 00-12
Section 03 62 00	Epoxy Grout	03 62 00-1 to 03 62 00-2

Section 03 63 00	Nonshrink Grout	03 63 00-1 to 03 63 00-2
Section 13 10 00	Prefabricated Control Building	13 10 00-1 to 13 10 00-16
Section 22 05 29	Pipe Hangers, Supports, and Anchors	22 05 29-1 to 22 05 29-6
Section 23 11 23	Natural Gas Systems	23 11 23-1 to 23 11 23-7
Section 26 02 00	Basic Materials and Methods	26 02 00-1 to 26 02 00-16
Section 26 05 26	Grounding	26 05 26-1 to 26 05 26-6
Section 26 05 29	Supporting Devices	26 05 29-1 to 26 05 29-3
Section 26 05 43	Underground Ducts and Manholes	26 05 43-1 to 26 05 43-6
Section 26 05 53	Electrical Identification	26 05 53-1 to 26 05 53-4
Section 26 05 73	Electrical Power System Studies	26 05 73-1 to 26 05 73-3
Section 26 08 10	Electrical System Demonstrations	26 08 10-1
Section 26 08 12	Testing Electrical Systems	26 08 12-1 to 26 08 12-7
Section 26 09 23.21	Adjustable Speed Drive Equipment – Adjustable Frequency	26 09 23.21-1 to 26 09 23.21-11
Section 26 32 13.13	Packaged Natural Gas Engine Generator Systems	26 32 13.13-1 to 26 32 13.13-9
Section 26 36 00	Transfer Switches	26 36 00-1 to 26 36 00-5
Section 26 71 73	Electric Service	26 71 73-1
Section 40 09 23.14	Flow Meter (Magnetic)	40 09 23.14-1 to 40 09 23.14-4
Section 40 23 13.01	Process Valves and Appurtenances	40 23 13.01-1 to 40 23 13.01-9
Section 40 90 10	General Provisions for Instrumentation and Controls	40 90 10-1 to 40 90 10-4
Section 40 95 13	Instrument and Control Panel Construction	40 95 13-1 to 40 95 13-5
Section 40 95 14	Panel and Field Devices	40 95 14-1 to 40 95 14-5
Section 40 95 35	Cellular Telephone Modem	40 95 35-1 to 40 95 35-2
Section 43 13 29	Submersible Sewage Pumping Station	43 13 29-1 to 43 13 29-17

14. GENERAL SPECIFICATIONS FOR CONSTRUCTION ..... GS 1-13

15. SUPPLEMENTAL GENERAL SPECIFICATIONS FOR CONSTRUCTION ..... SGS 1

16. FORM OF CONTRACT ..... C 1-3

17. PERFORMANCE BOND ..... PFB 1-2

18. PAYMENT BOND ..... PB 1-2

APPENDIX

CHANGE ORDER FORM CO-1

DAVIS-BACON WAGE RATES AND FORMS:
- Davis-Bacon Wage Rates
- Form WH-347 Payroll and Certifications
- Form SF-1444 Request for Authorization of Additional Classification and Rate
- Form WH-321 Notice Poster

GEOTECHNICAL ENGINEERING REPORT

NOTICE TO BIDDERS
For the Taking of Construction Bids for the
FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION
In the City of Waterloo, Iowa
CONTRACT NO. 1075

RECEIVING OF BIDS

Sealed proposals will be received by the City Clerk of the City of Waterloo, Iowa, at her office in the City Hall of the said City on the **16th day of July 2026, until 1:00 p.m.** for the construction of the **FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION, CONTRACT NO. 1075**, as described in detail in the plans and specifications now on file in the Office of the City Clerk.

OPENING OF BIDS

All bids received will be opened in the First Floor Conference Room at City Hall in the City of Waterloo, Iowa, on the **16th day of July 2026, at 1:00 p.m.**, and the proposals will be acted upon at such later time and place as may then be fixed by the City Council. It is anticipated that the City Council will act upon the proposals at their regular meeting on **August 3, 2026.**

PUBLIC HEARING

The Council of said City will conduct a public hearing on the proposed plans, specifications, form of contract, and estimate of cost for the construction of the described improvement project at **5:30 p.m. on July 20, 2026**, said hearing to be held in the Harold E. Getty Council Chambers in City Hall in said City.

The public is invited to speak on a public hearing item in the following ways: Call the City Clerk's Office at 319-291-4323 by 4:45 p.m. to obtain conference call information. Alternatively, you may email your comments to comments@waterloo-ia.org and they will be read during the public hearing. Please state the public hearing item on which you wish to speak.

SCOPE OF WORK

This project consists of construction of the Cattle Congress lift station and force main near the Cedar River in Waterloo, Iowa. The project includes demolition and reconstruction of the Cattle Congress Lift Station (with a natural gas generator for back-up power), a force main to pump the flow to the east along the South Riverside Trail to an existing force main manhole northwest of Conger Street.

BEGINNING AND COMPLETION DATES

The work under the proposed contract shall commence after receipt of "Notice to Proceed" and at the date submitted by the Contractor at the preconstruction conference and approved by the Engineer. Once work commences, periods of inactivity shall be minimized. All items shall be completed on or before **July 30, 2027**.

METHOD OF PAYMENT TO CONTRACTOR

The Contractor will be paid against monthly estimates in cash on the basis of ninety-five percent (95%) of the work as it is completed, and materials delivered and work approved. Final payment will be made thirty-one (31) days after completion of the work and acceptance by the Council. Before final payment is made, vouchers showing that all subcontractors and workmen and all persons furnishing materials have been fully paid for such materials and labor will be required unless the City is satisfied that material, men and laborers have been paid.

The Contractor is hereby notified that if the City does not have cash on hand to pay monthly pay estimates, according to Chapter 384.57 of the Code of Iowa, payment may be made by anticipatory warrants issued bearing a rate of interest not exceeding that permitted by Chapter 74A, Code of Iowa.

PLANS AND SPECIFICATIONS

Plans and Specifications governing the construction of the proposed improvements have been prepared by AECOM, which plans and specifications and also the prior proceedings of the City Council referring to and defining said proposed improvements are hereby made a part of this notice, and the proposed contract by reference shall be executed in compliance therewith.

Complete digital Plans and Specifications are available at **www.questcdn.com**. You may download the digital documents free of charge from Quest CDN by inputting Quest CDN Project **#10217510** on the website's Project Search page. Please contact Questcdn.com at 952-233-1632 or info@questcdn.com for assistance in free membership registration, downloading and working with this digital project information. Optional paper copies of the Plans and Specifications are available from AECOM, 501 Sycamore Street, Suite 222, Waterloo, Iowa, upon receipt of a **$50.00 deposit (CHECK ONLY).** Deposits are fully refundable if the plans and specifications are returned in usable condition (i.e., generally free of highlights, ink markings, tears, stickers, water stains and soiling) to the Waterloo AECOM office listed above by the end of the 14th consecutive day after the project has been awarded. No deposits will be refunded for any requests or plans received after the 14th consecutive day, which includes plans returned via mail service. Plan holders are responsible for ascertaining when the project has been awarded. If the plan holder is the prime contractor, or a subcontractor or supplier of the prime contractor that has been awarded the project, Plans and Specifications do not need to be returned to receive the deposit. The prime contractor must submit a list of his subcontractors and suppliers for the City and consulting engineer to verify eligibility for the refundable deposit.

Please DO NOT obtain Bid Documents from any source other than Questcdn.com or through the AECOM Waterloo office as listed above. Obtaining documents through any other source could prevent Bidder from being included on the official AECOM Plan Holders List which, in turn, may cause the Bidder to not receive addenda or other time-sensitive / bid-critical documents. The City has the right to reject any bids that do not have current bidding documents included in the proposal.

Upon award of project, the prime contractor, subcontractors and suppliers shall be supplied with the needed number of plans and specifications at no additional cost.

CONTRACT AWARD

A contract will be awarded to the qualified bidder submitting the lowest bid.

The City reserves the right to reject any or all bids, re-advertise for new bids, and to waive informalities in the bids submitted that might be in the best interest of the City.

Bids may be held by the City of Waterloo, Iowa, for a period not to exceed thirty (30) days from the day of the opening of bids for the purpose of reviewing the bids and investigating the qualifications of bidders, prior to awarding the contract.

By virtue of statutory authority, a preference will be given to products and provisions grown and coal produced within the State of Iowa and preference will be given to local domestic labor in the construction of the improvement.

PROPOSALS SUBMITTED

The bidder shall submit bids on the items listed in the proposal. The bidder shall clearly write or type the unit bid price and the bid item extension (Unit Price x Estimated Qty) in numerals on the blanks provided.

Should there be any discrepancy between the unit bid price and extension, the City of Waterloo shall consider the unit bid price as being the valid unit bid price.

The bidder has the option to submit a computer-generated spreadsheet in lieu of the portion of the Form of Bid or Proposal, which includes the Bid Item Number, Description, Unit, Estimated Quantity, Unit Bid Price, Total Bid Price and Total Bid. The computer-generated spreadsheet shall include all of the information listed in that portion of the Form of Bid or Proposal as well as bear the signature of the Prime Contractor submitting the bid. For the bidders who submit a computer-generated spreadsheet, the TOTAL BID (with alternates, if applicable) shall also be indicated in the space(s) provided on the Form of Bid or Proposal.

BID SECURITY REQUIRED

All bids must be accompanied in a separate envelope by a certified or cashier's check drawn on an Iowa bank, or a bank chartered under the laws of the United States, a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United States, or bid bond, (on the form furnished by the City) payable to the City of Waterloo, Iowa, in the sum of not less than five percent (5%) of the bid submitted, which certified check, certified share draft or bid bond will be held as security that the Bidder will enter into a Contract for the construction of the work and will furnish the required bonds, and in case the successful Bidder shall fail or refuse to enter into the Contract and furnish the required bonds, his bid security may be retained by said City as agreed upon liquidated damages. If bid bond is used, it must be signed by both the Bidder and the surety or surety's agent. Signature of surety's agent must be supported by accompanying Power of Attorney.

PERFORMANCE & PAYMENT BONDS

The successful bidder will be required to furnish a “Performance Bond” and a “Payment Bond” within ten (10) days after forms are presented to him/her in an amount equal to one hundred percent (100%) of the contract price, said bond to be issued by a responsible surety approved by the City Council and shall guarantee the faithful performance of the contract and the terms and conditions therein contained, and shall guarantee the prompt payment of all materials and labor and protect and save harmless the City from claims of any kind caused by the operations of the contractor.

MAINTENANCE BOND

Before the Contractor shall be entitled to receive final payment for work done under this contract, it shall execute and file a bond in the penal sum of not less than 100% of the total amount of the contract, same to be known as “Maintenance Bond,” and which bond must be approved by the City Council, and which bond is in addition to the bond given by the Contractor to guarantee the completion of the work.

LIQUIDATED DAMAGES

Time is an essential element of this contract. It is important that the work be diligently pursued to completion. If the work is not completed within the specified contract period, plus authorized extensions, the contractor shall pay to the City Liquidated Damages in the amount of five hundred dollars ($500.00) per day, for each day, as further described herein, in excess of the authorized time.

Days beyond the specified completion date for which Liquidated Damages will be charged will be working days that the contractor does, or could have worked, from Monday through Saturday. Sundays will be counted only if work is performed. Partial working days will be considered as a full working day. Days not chargeable for Liquidated Damages will include rain days, Sunday if no work is done, and legal holidays.

Working days will cease to be charged when only punch list items remain to be completed. Punch list items do not include contract bid items or approved change/extra work orders.

When the Contractor believes the project to be substantially completed, a written notice stating the same shall be submitted to the Engineer and a request made for a Punch List. If the work under the Contract extends beyond the normal construction season for such work the Contractor shall submit to the Engineer in writing a request that working days counted toward the project be suspended until work is resumed the following construction season.

This amount is not construed as a penalty. These damages are for the cost to the City of providing the required additional inspection, engineering and contract administration.

PRE-CONSTRUCTION CONFERENCE

Before the work is commenced on this contract, a conference shall be held for the purpose of discussing the contract. The conference shall be attended by the prime contractor, subcontractors, engineer (AECOM) and City Officials.

BIDDER STATUS

Attention of bidders is called to compliance with the provisions of the Resident Bidder/Non-Resident Bidder requirements.

Each bidder submitting a bid shall execute and include with the bid the Bidder Status Form on the form herein provided.

Failure to submit a fully completed Bidder Status Form with the bid may result in the bid being deemed nonresponsive and rejected.

SALES TAX EXEMPTION CERTIFICATES

Contractors and approved subcontractors will be provided a Sales Tax Exemption Certification to purchase building materials or supplies in the performance of construction contracts let by the City of Waterloo.

Posted pursuant to the provisions of Chapter 26 of the City Code of Iowa.

CITY OF WATERLOO, IOWA

NOTICE OF PUBLIC HEARING
On Proposed Plans, Specifications, Form of Contract,
And Estimate of Cost
for the
FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION
CONTRACT NO. 1075
In the City of Waterloo, Iowa

RECEIVING OF BIDS

Sealed proposals will be received by the City Clerk of the City of Waterloo, Iowa, at her office in the City Hall of the said City on the **16th day of July 2026, until 1:00 p.m.** for the construction of the **CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION, CONTRACT NO. 1075** as described in detail in the plans and specifications now on file in the Office of the City Clerk.

OPENING OF BIDS

All proposals received will be opened in the First Floor Conference Room at City Hall, in the City of Waterloo, Iowa, on the **16th day of July 2026, at 1:00 p.m.**, and the proposals will be acted upon at such later time and place as may then be fixed by the City Council.

PUBLIC HEARING

Notice is hereby given that the Council of said City will conduct a public hearing on the proposed plans, specifications, form of contract, and estimate of cost for the construction of the above-described improvement project at **5:30 p.m. on the 20th day of July 2026**, said hearing to be held in the Harold E. Getty Council Chambers in City Hall in said City. The proposed plans, specifications, form of contract, and estimate of cost for said improvements heretofore prepared by AECOM are now on file in the office of the City Clerk for public examination, and any person interested therein may file written objection thereto with the City Clerk before the date set for said hearing, or appear and make objection thereto with the City Clerk before the date set for said hearing, or appear and make objection thereto at the meeting above set forth. The NOTICE TO BIDDERS can be viewed at the following locations:

1) City of Waterloo web site at http://ci.waterloo.ia.us/

2) Plan Rooms:

   Master Builders of Iowa
   221 Park Street, PO Box 695
   Des Moines, IA 50303

   Quest CDN
   Chicago, IL

3) Plan Room Web sites:
   Master Builders of Iowa web site at www.mbionline.com
   QuestCDN web site at www.questCDN.com

The public is invited to speak on public hearing item in the following ways: Attend and speak at the public hearing; call the City's Clerk's Office at 319-291-4323 by 4:45 p.m. to obtain conference call information; or alternatively, you may email your comments to comments@waterloo-ia.org and they will be read during the public hearing. Please state the public hearing item on which you wish to speak.

SCOPE OF WORK

This project consists of construction of the Cattle Congress lift station and force main near the Cedar River in Waterloo, Iowa. The project includes demolition and reconstruction of the Cattle Congress Lift Station (with a natural gas generator for back-up power), a force main to pump the flow to the east along the South Riverside Trail to an existing force main manhole northwest of Conger Street.

Published pursuant to the provisions of Chapter 26 of the City Code of Iowa and upon order to the City Council of said Waterloo, Iowa, on the 15th day of June 2026.

CITY OF WATERLOO, IOWA

BY: _____
Kelley Felchle
City Clerk

* * * END OF SECTION * * *

INSTRUCTIONS TO BIDDERS

1. EXPLANATIONS TO BIDDERS

Any explanation desired by a bidder regarding the meaning or interpretation of the Notice to Bidders, Plans, Specifications, etc., must be requested in writing and with sufficient time allowed for a reply to reach bidders before submission of their bids. Any interpretation made will be in the form of an amendment of the Notice to Bidders, Plans, Specifications, etc., and will be furnished to all prospective bidders. Its receipt by the bidder must be acknowledged in the space provided on the Proposal Form or by letter or telegram received before the time set for opening of bids. Oral explanations or instructions given before the award of the contract will not be binding.

2. EXAMINATION OF PROPOSED WORK

Bidders should visit the site and take such other steps as may be reasonably necessary to ascertain the nature and location of the work, and the general and local conditions which can affect the work or the cost thereof. Failure to do so will not relieve bidders from responsibility for estimating properly the difficulty or cost of successfully performing the work. The owner will assume no responsibility for any understanding or representation concerning conditions made by any of its officers or agents prior to the execution of the contract, unless included in the Notice to Bidders, the Specifications or related documents.

3. PREPARATION OF BIDS

a. Bids shall be submitted on the forms furnished, or copies thereof, and must be manually signed. If erasures or other changes appear on the forms, each erasure or change must be initialed by the person signing the bid.

   The bidder has the option to submit a computer-generated spreadsheet in lieu of the portion of the Form of Bid or Proposal, which includes the Bid Item Number, Description, Unit, Estimated Quantity, Unit Bid Price, Total Bid Price, and Total Bid. The computer-generated spreadsheet shall include all of the information listed in that portion of the Form of Bid or Proposal as well as bear the signature of the Prime Contractor submitting the bid. For the bidders who submit a computer-generated spreadsheet, the TOTAL BID (with alternates, if applicable) shall also be indicated in the space(s) provided on the Form of Bid or Proposal.

b. The Bid Form may provide for submission of a price or prices for one or more items, which may be lump sum bids, alternate prices, schedule items resulting in a bid on a unit of construction or a combination thereof, etc. When the Bid Form explicitly requires that the bidder bid on all items, failure to do so will disqualify the bid. When submission of a price on all items is not required, bidders should insert the words "no bid" in the space provided for any item on which no price is submitted.

c. Unless called for, alternate bids will not be considered.

d. Modifications of bids already submitted will be considered if received at the office designated in the Notice to Bidders by the time set for closing of bids. Telegraphic modifications will be considered but should not reveal the amount of the original or revised bid.

e. In preparing a bid, the bidder shall specify the price, written legibly in ink or with the typewriter, at which he/she proposes to do each item of work. The unit price shall be stated in figures in the blank space provided (i.e., $7.14). In items where unit price is

required, the total amount of each item shall be computed at the unit prices bid for the quantities given on the Bid Form and stated in figures in the blank space provided.

If the bidder chooses to submit the unit prices, total bid price, and total bid on a computer-generated spreadsheet, all numbers shall be easily legible.

f. Any changes or alterations made in the Bid Form, or any addition thereto, may cause the rejection of the bid. No bid will be considered which contains a clause in which the contractor reserves the right to accept or reject a contract awarded him by the City Council of Waterloo. Bids in which the unit prices are obviously unbalanced may be rejected.

g. If the bidder does not qualify as a resident bidder, the nonresident bidder shall specify on the project proposal whether any preference to resident bidders, including but not limited to any preference to bidders, the imposition of any type of labor force preference, or any other form of preferential treatment to bidders or laborers from that state or foreign country is in effect in the nonresident bidder's state or country of domicile at the time of a bid submittal.

4. SUBMISSION OF BIDS

a. A bid must be sealed in a separate envelope and marked to indicate its contents and be accompanied by the bid security in a separate envelope. If forwarded by mail, the two envelopes shall be placed in a third and mailed to the City Clerk/Auditor. All bids must be filed with the City Clerk/Auditor of the City of Waterloo at his/her office in the City Hall before the time specified for closing bids.

b. Bids received prior to the advertised hour of opening will be securely kept sealed. The officer whose duty it is to open them will decide when the specified time has arrived, and no bid received thereafter will be considered; except that when a bid arrives by mail after the time fixed for opening, but before the reading of all other bids is completed, and it is shown to the satisfaction of the City of Waterloo, Iowa, that the non-arrival on time was due solely to delay in the mails for which the bidder was not responsible, such bid will be received and considered.

c. Bidders are cautioned that, while telegraphic modifications of bids may be received as provided above, such modifications, if not explicit and if in any sense subject to misinterpretation, shall made the bid so modified or amended, subject to rejection.

5. LATE BIDS AND MODIFICATIONS OR WITHDRAWALS

Bids and modifications or withdrawals thereof received at the office designated in the Notice to Bidders after the exact time set for closing of bids will not be considered. However, a modification which is received from an otherwise successful bidder, and which makes the terms of the bid more favorable to the City of Waterloo, will be considered at any time it is received and may therefore be accepted. Bids may be withdrawn by written or telegraphic request received from bidders prior to the time set for closing of bids.

6. PUBLIC OPENING OF BIDS

Bids will be publicly opened at that time and place set for opening in the Notice to Bidders. Their content will be made public for the information of bidders and others interested who may be present either in person or by representative.

7. BID SECURITY REQUIRED

All bids must be accompanied in a separate envelope by a certified or cashier's check drawn on an Iowa bank, or a bank chartered under the laws of the United States, a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United States, or bid bond (on the form furnished by the City) payable to the City of Waterloo, Iowa, in the sum of not less than five percent (5%) of the bid submitted, which certified check, certified share draft or bid bond will be held as security that the Bidder will enter into a Contract for the construction of the work and will furnish the required bonds, and in case the successful Bidder shall fail or refuse to enter into the Contract and furnish the required bond, his/her bid security may be retained by said City as agreed upon liquidated damages. If bid bond is used, it must be signed by both the bidder and the surety or surety's agent. Signature of surety's agent must be supported by accompanying Power of Attorney.

8. COLLUSIVE AGREEMENTS

a. Each bidder submitting a bid shall execute and include with the bid, a Non-Collusion Affidavit in the form herein provided, to the effect that he/she has not colluded with any other person, firm, or corporation in regard to any bid submitted.

b. Each bidder submitting a bid shall have each proposed subcontractor, if any, execute and submit to the City Contract Compliance Officer by 5:00 P.M. the business day following the day bids on this project are due, a Non-Collusion Affidavit in the form herein provided, to the effect that he/she has not colluded with any other person, firm, or corporation in regard to any bid submitted. Before executing any subcontract, the successful bidder shall submit the name of any proposed subcontractor for approval by the City.

9. EMPLOYMENT AND BUSINESS OPPORTUNITY

To the greatest extent feasible, suppliers, subcontractors, and low income workers owning businesses or living in the Waterloo area must be given priority in supplying materials, bidding for subcontract work, or applying for employment by the contractor on this project. Opportunities for training and for employment arising in connection with this project, shall to the greatest extent feasible be made available to lower income persons residing in the project area. The contract area is the City of Waterloo.

The City of Waterloo will require the contractor to document his efforts in securing lower income workers living in the project area and in purchasing supplies from, and awarding subcontracts to, businesses owned by persons residing in the project area.

10. STATEMENT OF BIDDER'S QUALIFICATIONS

Each bidder shall, upon request of the City of Waterloo, Iowa, submit on the form furnished for that purpose (a copy of which is included in the contract documents), a statement of bidder's qualifications, his/her experience record in constructing the type of improvements embraced, and his/her organization and equipment available for the work contemplated; and, when specifically requested, a detailed financial statement. The City of Waterloo, Iowa, shall have the right to take such steps as it deems necessary to determine the ability of the bidder to perform his obligations under the contract, and the bidder shall furnish the City of Waterloo, Iowa, all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available evidence or information does not satisfy the City of Waterloo, Iowa, that the bidder is qualified to carry out properly the terms of the contract.

11. AWARD OF CONTRACT

a. Award of contract will be made to that responsive and responsible bidder whose bid, conforming to the Specifications, is most advantageous to the City of Waterloo; price and other factors considered. The intention is to award the contract at any time of opening bids, but the right is reserved to postpone such action for a reasonable time, not exceeding thirty (30) days.

b. The City Council may, when in its interest, reject any or all bids or waive any informality in bids received.

c. The bidder shall submit bids on all the items listed in the proposal and shall state the unit bid price in words in the blank spaces provided beneath the item description. Should there be any discrepancy between the unit bid price in words and listed numeral unit bid price, the City of Waterloo shall consider the unit bid price in words as being the valid unit bid price. A computer-generated spreadsheet as herein provided shall also be acceptable. Proposals requiring mathematical computations to determine unit prices or totals will be rejected. A contract will be awarded to the qualified bidder submitting the lowest total bid for the BASE BID plus ALTERNATE(S) chosen by the City as indicated in the NOTICE TO BIDDERS.

d. When a contract for a public improvement is to be awarded to the lowest responsive and responsible bidder, a resident bidder shall be allowed a preference as against a nonresident bidder from a state or foreign country if that state or foreign country gives or requires any preference to bidders from that state or foreign country, including but not limited to any preference to bidders, the imposition of any type of labor force preference, or any other form of preferential treatment to bidders or laborers from that state or foreign country. The preference allowed shall be equal to the preference given or required by the state or foreign country in which the nonresident bidder is a resident. In the instance of a resident labor force preference, a nonresident bidder shall apply the same resident labor force preference to a public improvement in this state as would be required in the construction of a public improvement by the state or foreign country in which the nonresident bidder is a resident.

12. EXECUTION OF AGREEMENT, BONDS, AND CERTIFICATE OF INSURANCE

a. Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful bidder shall execute and deliver to the City of Waterloo, Iowa, an agreement in the form included in the contract documents in such number of copies as the City of Waterloo, Iowa, may require.

b. Having satisfied all conditions of award as set forth elsewhere in these documents, the successful bidder shall, within the period specified in paragraph "a" above, furnish a surety bond and a payment bond in a penal sum not less than the amount of the contract as awarded, as security for the faithful performance of the contract and terms and conditions therein contained and shall guarantee the prompt payment of all persons, firms, or corporations to whom the contractor may become legally indebted for labor, materials, tools, equipment, or services of any nature including utility and transportation services, employed or used by him in performing the work. The bonds shall protect and save harmless the City from claims and damages of any kind caused by the operations of the contractor and shall also guarantee the maintenance of the contract improvements for the period stated in the Notice of Hearing from and after completion of said improvements and their acceptance by the City. Such bonds shall be in the same form as that included in the contract documents and shall bear the same date as, or a date subsequent to that of the agreement. The current Power of Attorney for the person who signs for any surety

company shall be attached to such bonds.

c. The successful bidder shall, within the period specified in paragraph "a" above, furnish a certificate of insurance for approval in amounts of not less than the amounts specified in the General Specifications for Construction, Section F. No. 4 "Liability Insurance," Pages 14 to 15 of 19 Pages. The certificate of insurance shall be furnished in such number of copies as the City of Waterloo may require. The City of Waterloo shall be named as an "Additional Insured." The contractor shall similarly submit his subcontractor's certificates of insurance in the amounts for approval before each commences work. The contractor shall carry or require that there be Workmen's Compensation Insurance for all his/her employees and those of his/her subcontractors engaged in work at the site, in accordance with State Workmen's Compensation Laws.

d. The failure of the successful bidder to execute such agreement and to supply the required bond or bonds within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the City of Waterloo, Iowa, may grant, based upon reasons determined sufficient by the City of Waterloo, Iowa, may either award the contract to the next lowest bidder or re-advertise for bids, and may charge against the bidder the difference between the amount of the bid and the amount for which a contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the bid guaranty. If a more favorable bid is received by re-advertising, the defaulting bidder shall have no claim against the City of Waterloo, Iowa, for a refund.

13. BIDDER STATUS

Attention of bidders is called to the requirement of complying with the provisions of the Resident Bidder/Non-Resident Bidder requirement.

Each bidder submitting a bid shall execute and include with the bid, a Bidder Status Form in the form herein provided.

Failure to submit a fully completed Bidder Status Form with the bid may result in the bid being deemed nonresponsive and rejected.

* * * END OF SECTION * * *

SRF Required Front-End Specifications

Attachment 1: -RESERVED-

Attachment 2: Statement in Advertisement for Bids on Debarment and Suspension/Certification Regarding Debarment and Suspension Form *(to be completed and signed by Prime Contractor and submitted with the bid)*

Attachment 3: Disadvantaged Business Enterprise Certification Form (to be completed and signed by Prime Contractor and submitted with the bid)

Attachment 4: DBE Program Subcontractor Performance Form (to be completed and signed by Prime and DBE Subcontractor for each subcontract and submitted with the bid)

***If no DBE was chosen by the Prime Contractor to be utilized for this project, then this form is not required to be submitted.**

Attachment 5: DBE Program Subcontractor Utilization Form *(to be completed and signed by Prime and DBE Subcontractor for each subcontract and submitted with the bid)*

***If no DBE was chosen by the Prime Contractor to be utilized for this project, then this form is not required to be submitted.**

Attachment 6: -RESERVED-

Attachment 7: Other Federal Requirements Language

A. -RESERVED-
B. Federal Labor Standards Provisions (including Davis-Bacon prevailing wage rates**)
C. -RESERVED
D. Historical and Archeological Finds
E. Prohibitions on Procurement from Violating Facilities

Attachment 8: Right of Entry and Records Retention

Attachment 9: American Iron & Steel Requirement

Attachment 10: Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment *(to be completed and signed by Prime Contractor and submitted with the bid)*

-Attachment 1: RESERVED-

Attachment 2: SRF Required Front-End Specifications
Debarments and Suspensions

*This form to be completed by the Prime Contractor and submitted with the bid.

Any bidder or equipment supplier whose firm or affiliate is listed in on the U.S. General Services Administration Excluded Parties List will be prohibited from the bidding process. The excluded parties records search engine is located at the System for Award Management (SAM) website: https://sam.gov. Pursuant to 2 CFR Part 180, as supplemented by 2 CFR 1532, any entity submitting a bid while the SAM website lists that entity as having an active exclusion will be determined by the DNR to be a non-responsive bidder and will not be able to receive SRF funding.

United States Environmental Protection Agency Washington, DC 20460

Certification Regarding Debarment, Suspension, and Other Responsibility Matters

The prospective participant certifies to the best of its knowledge and belief that it and the principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction: violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 U SC Sec. 10 01, a false statement may result in a fine or imprisonment, or both.

Signature of Authorized Representative	Date
Printed Name	Title

☐ I am unable to certify to the above statements. My explanation is attached.

Attachment 3: SRF Required Front-End Specifications
Disadvantaged Business Enterprise (DBE) Solicitation

*This form to be completed by Prime Contractor and submitted with the bid.

In Iowa, DBEs must be certified through the Iowa Department of Transportation (IDOT). Information on certification requirements and a list of certified DBEs is on the IDOT website at https://secure.iowadot.gov/DBE/Home/Index/.

Prime contractors' DBE requirements for SRF projects include:

- Taking affirmative steps for DBE participation
- Documenting the efforts and the proposed utilization of certified DBEs

PROJECT INFORMATION

SRF Applicant: _____ Bidder: _____

Address: _____

City: _____ State: _____ Zip: _____

Contact Person: _____

Phone Number: _____ Email: _____

1. At this point in time, has the prime contractor begun to solicit work opportunities to subcontractors for this project?
   ☐ Yes ☐ No ☐ N/A

2. Do you agree to use the good faith efforts checklist to ensure the DBEs have the opportunity to compete for procurements funded by EPA financial assistance funds?
   ☐ Yes ☐ No

3. If yes, was a DBE chosen by the prime contractor to be utilized for this project?
   ☐ Yes ☐ No

Signature: _____

GOOD FAITH EFFORTS CHECKLIST

Please complete the checklist to determine if you have complied with the requirement to make good faith efforts to ensure that certified DBEs have the opportunity to compete for procurements funded by EPA financial assistance funds. Bidders/offerers must make good faith efforts prior to submission of bids/proposals.

1. Did you ensure that DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities?

   ☐ Yes ☐ No

2. Did you make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process? This includes, whenever possible, posting solicitation for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.

   ☐ Yes ☐ No

3. Did you consider in the contracting process whether firms competing for large contracts could subcontract with DBEs? This will include dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.

   ☐ Yes ☐ No

4. Did you encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually?

   ☐ Yes ☐ No

5. Did you use the services of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce to identify potential subcontractors?

   ☐ Yes ☐ No

6. List the potential DBE subcontractors that were contacted. Only list those that are certified through the Iowa Department of Transportation.

Name	**How Contacted** (e.g. letter, phone call, fax, e-mail)	**Response** (e.g. did not respond, not interested, not competitive)

CONTRACT ADMINISTRATION PROVISIONS

Several contract provisions are required to prevent unfair practices that adversely affect DBEs. These include:

1. Prime Contractor must pay its Subcontractor for satisfactory performance no more than 30 days from the Prime Contractor's receipt of payment from the SRF loan recipient.
2. Prime Contractor must notify the SRF loan recipient in writing prior to termination of a DBE subcontractor for convenience.
3. Prime Contractor must employ the six Good Faith Efforts to solicit a replacement subcontractor if a DBE subcontractor fails to complete work under a subcontract for any reason.

Attachment 4: SRF Required Front-End Specifications
Disadvantaged Business Enterprise (DBE) Subcontractor Performance Form

*This form to be completed by Prime and DBE Subcontractor for each subcontract and submitted with the bid.
*If a DBE has NOT yet been selected by the Prime Contractor or if no DBEs are needed, then this form is not required to be submitted at this time.

This form is intended to capture the DBE[1] subcontractor's[2] description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractor's bid or proposal package.

Subcontractor Name: _____

Project Name: _____

Bid/Proposal No.: _____ Assistance Agreement ID No. (if known): _____

Point of Contact: _____

Address: _____

Telephone No.: _____ Email: _____

Prime Contractor Name: _____

Issuing/Funding Entity: _____

Contract Item Number	Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the Prime Contractor

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above.

_____ _____
Prime Contractor Signature Print Name

_____ _____
Title Date

Subcontractor Signature	Print Name
Title	Date

[1]A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certification as described in 40 CFR 33.204-33.205. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

[2]Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

Attachment 5: SRF Required Front-End Specifications
Disadvantaged Business Enterprise (DBE) Subcontractor Utilization Form

*This form to be completed by Prime and DBE Subcontractor for each subcontract and submitted with the bid.
*If a DBE has NOT yet been selected by the Prime Contractor or if no DBEs are needed, then this form is not required to be submitted at this time.

This form is intended to capture the prime contractor's actual and/or intended use of identified certified DBE[1] subcontractors[2] and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name: _____

Project Name: _____

Bid/Proposal No.: _____ Assistance Agreement ID No. (if known): _____

Point of Contact: _____

Address: _____

Telephone No.: _____ Email: _____

Issuing/Funding Entity: _____

I have identified potential DBE certified subcontractors ☐ Yes ☐ No

If yes, complete the table below. If no, explain: _____

Subcontractor Name/ Company Name	Company Address/Phone/Email	Estimated Dollar Amount	Currently DBE Certified?
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above.

_____ _____
Prime Contractor Signature Print Name

_____ _____
Title Date

[1]A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certification as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.
[2]Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

-Attachment 6: RESERVED-

Attachment 7: SRF Required Front-End Specifications
Other Federal Requirements Language

A. -RESERVED-

B. Federal Labor Standards Provisions (including Davis-Bacon prevailing wage rates)

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in Sec. 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) (A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting

officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The EPA shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the EPA may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii) (A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency). The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/whd/programs/dbra/forms.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and

subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency), the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under Sec. 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate)

specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with, 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (and any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) Contract Work Hours and Safety Standards Act. The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Sec. 5.5(a) or 4.6 of part 4 of this title. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The loan recipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in Sec. 5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the EPA and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

C. -RESERVED-

D. Historical and Archeological Finds

Should any cultural, historical, or paleontological resources including but not limited to deposits of charcoal or ash, animal bones, pottery sherds, or stone tools be exposed as part of proposed project activities, the owner shall stop ground-disturbing activities within 100 feet of the discovery and immediately notify the State Revolving Fund Environmental Review Specialist (SRF). No further disturbance of the deposits shall ensue until the SRF determines that the project activities in that area may proceed.

If human remains are accidentally discovered, Iowa burial law [[Iowa Code Sections 263B, 523I.316(6), and 716.5; 685 IAC 11.1] requires that all work in the vicinity of the finding be halted, the remains left in place and protected, local law enforcement officials notified, and the bioarchaeology director at the Office of the State Archaeologist (OSA) contacted immediately (319-384-0740). Photographs are only to be taken at the direction of the bioarchaeology director and must not be shared publicly.

In all cases of inadvertent discovery, the SRF shall determine the applicability of the Protection of Historic Properties regulations of the Advisory Council on Historic Preservation [36 CFR Part 800.13(b)] and, when applicable, shall notify the State Historic Preservation Office (SHPO) and consult with the SHPO, OSA, and other interested parties to determine the proper course of action regarding the discovery.

Compensation to the contractor, if any, for lost time or changes in construction to avoid the find, shall be determined in accordance with changed conditions or change order provisions of the specifications.

E. Prohibitions on Procurement from Violating Facilities (Section 306, Clean Air Act; Section 508, Clean Water Act; Executive Order 11738)

Both the Clean Water Act and the Clean Air Act prohibit federal agencies from extending assistance by way of loans or contracts to persons who have been convicted of violations of either law. Executive Order 11738 was issued to coordinate enforcement by the U.S. Environmental Protection Agency, which shall designate facilities which have given rise to a conviction for an offense under the criminal provisions of the Clean Air Act and the Clean Water Act.

The Executive Order also prohibits agencies from extending assistance to facilities that are not in compliance with either Act.

SRF assistance recipients may not procure goods, services, or materials from suppliers listed by the EPA as violators.

The Excluded Parties Listing search engine is located at the System for Award Management (SAM) website: https://sam.gov.

Attachment 8: SRF Required Front-End Specifications
Right of Entry and Records Retention

The recipient shall provide access at all times for the Department of Natural Resources, the Iowa Finance Authority, the state auditor, and the U.S. EPA Office of the Inspector General to all project records and documents for inspection and audit purposes for a period of three years after the date of last loan payment. The same access to the project site(s) shall be provided for inspection purposes.

567 Iowa Administrative Code paragraph 92.8 (2).e. State inspections. Personnel of the department shall have the right to examine all construction aspects of the project, including materials and equipment delivered and stored on site for use on the project.

Attachment 9: SRF Required Front-End Specifications
American Iron and Steel Requirements

H.R. 3547, the "Consolidated Appropriations Act, 2014," enacted January 17, 2014 by the U.S. Congress, includes "American Iron and Steel" provisions that require Clean Water and Drinking Water State Revolving Fund assistance recipients of these funds to use iron and steel produced in the United States.

H.R. 3547 includes the following language in Division G, Title IV, under the heading, "Use of American Iron and Steel":

> Sec. 436. (a)(1) None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.
>
> (2) In this section, the term "iron and steel products" means the following products made primarily of iron and steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.
>
> (b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the "Administrator") find that—
>
> 1. Applying subsection (a) would be inconsistent with the public interest;
> 2. Iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quantity; or
> 3. Inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.
>
> (c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

The final guidance and any published waivers are found at: https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement. In particular the contractor should pay attention to the guidance for documentation of compliance. There is also a waiver for incidental items; in order to qualify for this waiver the total materials and costs for the project must be tracked and incidental items identified.

Sample "American Iron and Steel" Contract Language

In order to fulfill the requirements, the assistance recipient must in good faith design the project and solicit bids for construction with U.S.-made iron and steel. The following information will be included in any contracts resulting from this request for bids:

The Contractor acknowledges to and for the benefit of the City of _____ ("Purchaser") and the State of Iowa (the "State") that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund and such law contains provisions commonly known as "American Iron and Steel;" that requires all of the iron and steel products

used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contactor pursuant to this Agreement.

The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State.

Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

Sample Certifications

As indicated in the contract language, it will be the responsibility of the Contractor to obtain certifications that the products and materials used in the project are U.S.-made. EPA recommends the use of a step certification process for documenting compliance with AIS requirements, similar to one used by the Federal Highway Administration. Step certification creates a paper trail which documents the location of the manufacturing process involved with the production of steel and iron materials. Each handler (supplier, fabricator, manufacturer, processor, coater, etc.) of the iron and steel products certifies that their step in the process was domestically performed. Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the US and providing detailed information on the steps involved.

The following information is provided as a sample letter of certification for AIS compliance. Documentation must be provided on company letterhead. In this example, there may be multiple letters from different manufacturers if one manufacturer did not perform all of the steps.

Date Company Letterhead

Company Name
Company Address
City, State Zip

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. Xxxx

2. Xxxx

3. Xxxx

Such process took place at the following location:

_____

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

Covered and Non-Covered Items

The EPA issued a waiver for De Minimus incidental components of eligible water and wastewater infrastructure projects. Funds used for such De Minimus incidental components cumulatively may comprise no more than a total of 5% of the total cost of the materials used in and incorporated into a project. The cost of an individual incidental item may not exceed 1% of the total cost of the materials used in and incorporated into a project.

De Minimus incidental items include miscellaneous, generally low-cost components that are essential for, but incidental to, the construction and are incorporated into the physical structure of the project. For many of these incidental components, the country of manufacture and the availability of alternatives are not readily or reasonably identifiable prior to procurement in the normal course of business. For others, the country of manufacture may be known but the miscellaneous character in conjunction with the low cost, individually and (in total) as typically procured in bulk, mark them as properly incidental.

Examples of incidental components could include small washers, screws, fasteners (i.e., nuts and bolts), miscellaneous wire, corner bead, ancillary tube, etc. Examples of items that are clearly not incidental include significant process fittings (i.e., tees, elbows, flanges, and brackets), distribution system fittings and valves, force main valves, pipes, treatment and storage tanks, large structural supports, etc.

In consultation with their contractors, assistance recipients should determine the items to be covered by this waiver, and must retain relevant documentation (i.e. invoices) as to those items. Assistance recipients must summarize in the AIS De minimis Product List the types and/or categories of items to which this waiver is applied, the total cost of incidental components for each type or category, and the calculations by which they determined the total cost of materials used in and incorporated into the project.

The successful bidder will fill out the AIS Procurement List and submit it to the assistance recipient to indicate iron and steel items proposed to be procured for the project.

Assistance recipients will complete the AIS De Minimis Waiver Products List for the entire project to demonstrate compliance with the De Minimis Waiver cost requirements outlined above.

Related forms and resources can be found at https://opportunityiowa.gov/community/water-quality/srf-resources/documents-and-guides.

Attachment 10: SRF Required Front-End Specifications

*This form to be completed by Prime Contractor and submitted with the bid.

PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

This term and condition implements 2 CFR 200.216 and is effective for obligations and expenditures of EPA financial assistance funding on or after 8/13/2020. EPA recipients and subrecipients, including borrowers under EPA funded revolving loan fund programs, are prohibited from obligating or expending loan or grant funds to:

(a) Procure or obtain, extend or renew a contract to procure or obtain;
(b) Enter into a contract (or extend or renew a contract) to procure; or
(c) Obtain the equipment, services, or systems that use "covered telecommunications equipment or services"

identified in the regulation as a substantial or essential component of any system, or as critical technology as part of any system.

Certain equipment, systems, or services, including equipment, systems, or services produced or provided by entities subject to the prohibition are recorded in the System for Award Management exclusion list, website: https://sam.gov.

(1) As described in Public Law 115-232, section 889, covered telecommunications equipment or services includes:
  (i) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
  (ii) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
  (iii) Telecommunications or video surveillance services provided by such entities or using such equipment.
  (iv) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

(2) Consistent with 2 CFR 200.471, costs incurred for telecommunications and video surveillance services or equipment such as phones, internet, video surveillance, and cloud servers are allowable except for the following circumstances:
  (i) Obligating or expending EPA funds for covered telecommunications and video surveillance services or equipment or services to procure (enter into, renew or extend contracts) or obtain the equipment, services, or systems as described in 2 CFR 200.216.

I understand the above prohibitions and certify that the project will be in compliance with all the requirements.

Signature	Date
Printed Name	Title

FORM OF BID OR PROPOSAL

FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION
CONTRACT NO. 1075

CITY OF WATERLOO, IOWA

Honorable Mayor and City Council
Waterloo, Iowa

Gentlemen:

1. The undersigned, being a Corporation existing under the laws of the State of _____, a Partnership consisting of the following partners: _____, having familiarized (himself) (themselves) (itself) with the existing conditions on the project area affecting the cost of the work, and with all the contract documents listed in the Table of Contents and Addenda (if any), as prepared by AECOM now on file in the office of the City Clerk, City Hall, Waterloo, Iowa, hereby proposes to furnish all supervision, technical personnel, labor, materials, machinery, tools, appurtenances, equipment, and services, including utility and transportation services required to construct and complete the **CATTLE CONGRESS LIFT STATION SANITARY SEWER RECONSTRUCTION, CONTRACT NO. 1075**, all in accordance with the above-listed documents and for the unit prices for work in place for the following items and quantities:

FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION
CONTRACT NO. 1075

Item No.	SUDAS – Measurement & Payment	Description	Unit	Estimated Quantities	Unit Bid Price	Total Bid Price
BASE BID						
1	11020-A	MOBILIZATION	LS	1.0	$	$
2	2010-D-1	TOPSOIL, ON-SITE, 6 INCHES	CY	248.6	$	$
3	2010-E	EXCAVATION, CLASS 10 – EMBANKMENT-IN-PLACE	CY	400.0	$	$
4	2010-I	SUBGRADE TREATMENT, GEOFABRIC	SY	175.0	$	$
5	2010-J	SUBBASE, MODIFIED, 11’	SY	224.8	$	$
6	2010-M	COMPACTION TESTING	LS	1.0	$	$
7	3010-D	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL	CY	2872.4	$	$
8	3010-H	TRENCH COMPACTION TESTING	LS	1.0	$	$
9	4010-C-1	SANITARY SEWER FORCE MAIN, TRENCHED, PVC, 10-INCHES	LF	512.8	$	$
10	4010-C-1	SANITARY SEWER FORCE MAIN, TRENCHED, DUCTILE IRON, 10-INCHES	LF	5.5	$	$
11	4010-C-2	SANITARY SEWER FROCE MAIN, TRENCHLESS, PVC, 10-INCHES	LF	300.0	$	$
12	4010-L	SANITARY SEWER ABANDONMENT, FILL AND PLUG, 10-INCHES	LF	815.3	$	$
13	4050-G-3	BYPASS PUMPING	LS	1.0	$	$
14	4060	FORCE MAIN TESTING	LS	1.0	$	$
15	5010-C-2	FORCE MAIN FITTING	LB	720.0	$	$
16	6010-G-1	CONNECTION TO EXISTING MANHOLE	EA	1.0	$	$
17	7030-H-3	DRIVEWAY, GRANULAR, 6-INCHES	TON	172.9	$	$
18	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1.0	$	$
19	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 1	AC	0.4	$	$

20	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 4	AC	0.2	$	$
21	9040-A-1	SWPPP PREPARATION	LS	1.0	$	$
22	9040-A-2	SWPPP MANEGEMENT	LS	1.0	$	$
23	9060-D	REMOVAL AND REINSTALLATION OF EXISTING FENCE, CHAINLINK, GALVANIZE	LF	40.0	$	$
24	9080-A	CONCRETE STEPS, TYPE A	SF	115.5	$	$
25	9080-B	HANDRAIL, 32-INCHES	LF	22.0	$	$
26	9080-C	SAFETY RAIL	LF	44.8	$	$
27	10010-A	DEMOLITION WORK – WET WELL	LS	1.0	$	$
28	10010-A	DEMOLITION WORK – LIFT STATION BUILDING AND EQUIPMENT	LS	1.0	$	$
29	11050-A	CONCRETE WASHOUT	LS	1.0	$	$
30	AS PER PLANS	SANITARY SEWER MANHOLE ABANDONMENT	EA	5.0	$	$
31	AS PER PLANS	LIFT STATION WET WELL	LS	1.0	$	$
32	AS PER PLANS	PREFABRICATED OPERATOR'S BUILDING	LS	1.0	$	$
33	AS PER PLANS	BYPASS MANHOLE	LS	1.0	$	$
34	AS PER PLANS	SITE ELECTRICAL	LS	1.0	$	$
35	AS PER PLANS	STAND-BY GENERATOR	LS	1.0	$	$
36	AS PER PLANS	BOLLARDS	EA	6.0	$	$
37	AS PER PLANS	STRUCTURAL CONCRETE RETAINING WALL – GENERATOR PAD AND STAIRS	CY	30.2	$	$
38	AS PER PLANS	STRUCTUAL CONCRETE PAD – GENERATOR	CY	8.1	$	$
39	AS PER PLANS	COMPACTING BACKFILL – GRADING	CY	400.0	$	$
		PROJECT TOTAL			**$**	**$**

2. It is understood that the quantities set forth are approximate only and subject to variation and that the unit bid price for the work done shall govern in the actual payment to Contractor.

3. In submitting this bid, the bidder understands that the right is reserved by the City of Waterloo, Iowa, to reject any or all bids. If written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned within thirty (30) days after the opening thereof, or at any time thereafter before this bid is withdrawn, the undersigned agrees to execute and deliver an agreement in the prescribed form and furnish the required bond and certificate of the insurance within ten (10) days after the agreement is presented to him for signature, and start work within ten (10) days after "Notice to Proceed" is issued.

4. Security in the sum of _____Dollars ($_____) in the form of _____, is submitted herewith in accordance with the INSTRUCTIONS TO BIDDERS.

5. Attached hereto is a Non-Collusion Affidavit of Prime Contractor.

6. Attached hereto is a Bidder Status Form indicating Resident Bidder Certification (_____), or Non-Resident Bidder Certification (_____). (Mark one.)

7. The bidder is prepared to submit a financial and experience statement upon request.

8. The Prime Contractor and Subcontractor(s), which have performed an aggregate of $10,000.00 in work for the City in the current calendar year, are prepared to submit an AAP or Update and an EOC, within ten (10) days of notification that the bid submitted is lowest and acceptable.

9. The bidder has received the following Addendum or Addenda:

Addendum No.	Date
_____	_____
_____	_____
_____	_____

10. The bidder shall list the MBE/WBE subcontractor(s), amount of subcontracts and bid items on the City of Waterloo Minority and/or Women Business Pre-bid Contact Information Form submitted with this Form of Bid or Proposal. The apparent low Bidder shall submit a list of all other Subcontractor(s) to be used on this Project to the City of Waterloo by 5:00 p.m. the business day following the day Bids on this Project are due along with the Non-Collusion Affidavits of All Subcontractor(s).

    The Contractor shall submit information on subcontractors on "SUBCONTRACTOR REQUEST AND APPROVAL" Form to be provided by City prior to approval of contract.

    The subcontractors listed on this proposal and/or submitted to the Contract Compliance Officer cannot be changed except for the following reasons:

    1) The City of Waterloo does not approve the subcontractors.

    2) The subcontractors submit in writing that they cannot fulfill their subcontracts.

11. The bidder has filled in all blanks on this proposal. Those blanks not applicable are marked "none" or "NA".

12. The bidder has attached all applicable forms.

13. The Owner reserves the right to select alternates, delete line items, and/or to reduce quantities prior to the award of a contract due to budgetary limitations.

_____ _____
(Name of Bidder) (Date)

BY: _____ Title _____

Official Address: (Including Zip Code):

_____

_____

I.R.S. No. _____

THIS PAGE LEFT BLANK INTENTIONALLY

INFORMATION NEEDED
FOR
IOWA CONSTRUCTION SALES TAX EXEMPTION CERTIFICATE

CONTRACTOR NAME: _____

ADDRESS: _____

_____

(Check One) **PRIME** _____ **SUBCONTRACTOR** _____

FEDERAL ID#: _____

PROJECT NAME: _____

PROJECT CONTRACT NO.: _____

DESCRIPTION OF WORK:

- ☐ Brickwork
- ☐ Carpentry
- ☐ Concrete
- ☐ Drywall-Plaster-Insulation
- ☐ Electrical
- ☐ Excavation/Grading
- ☐ Flooring
- ☐ Heavy Construction
- ☐ Heating-Ventilating-Air Cond.
- ☐ Landscaping
- ☐ Painting
- ☐ Paving
- ☐ Plumbing
- ☐ Roofing-Siding-Sheet Metal
- ☐ Windows
- ☐ Wrecking-Demolition
- ☐ Other (Please specify)
- ☐ _____

THIS PAGE LEFT BLANK INTENTIONALLY

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, _____

as Principal, and _____

as Surety are held and firmly bound unto the CITY OF WATERLOO, Iowa, hereinafter called

"OWNER." In the penal sum _____

Dollars ($_____) lawful money of the United States, for the payment of which sum will and truly be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents. The condition of this obligation is such that whereas the Principal has submitted the accompanying bid dated the _____ day of _____ _____, 20____, for _____ _____.

NOW, THEREFORE,

(a) If said Bid shall be rejected, or in the alternate,

(b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the form specified and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

Then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

By virtue of statutory authority, the full amount of this bid bond shall be forfeited to the Owner in liquidation of damages sustained in the event that the Principal fails to execute the contract and provide the bond as provided in the specifications or by law.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid or execute such contract; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety, have hereunto set their hands and seals, and such of them as are corporations, have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers this _____ day of _____, A.D. 20__.

_____(Seal)
Principal

By _____
(Title)

_____ _____(Seal)
Witness Surety

_____ By _____
Witness Attorney-in-fact

THIS PAGE LEFT BLANK INTENTIONALLY

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____)
)ss
County of _____)

_____, being first duly sworn, deposes and says that:

1. He is _____(Owner, Partner, Officer, Representative, or Agent)__, of _____ _____, the Bidder that has submitted the attached Bid;

2. He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

3. Such Bid is genuine and is not a collusive or sham Bid;

4. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or, to fix any overhead, profit or cost element of the bid price or the bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the City of Waterloo, Iowa, or any person interested in the Proposed Contract; and

5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

_____
Title

Subscribed and sworn to before me this _____ day of _____, 20__.

_____
Title

My commission expires _____.

NON-COLLUSION AFFIDAVIT OF SUBCONTRACTOR

State of _____)
_____) ss:
County of _____)

_____, being first duly sworn, deposes and says that:

1. He is _____(Owner, Partner, Officer, Representative, or Agent)_____, of _____ _____ hereinafter referred to as the "Subcontractor;"

2. He is fully informed respecting the preparation and contents of the subcontractor's proposal submitted by the subcontractor to_____, contract pertaining to the _____ _____ project in _____
(City or County and State)

3. Such subcontractor's proposal is genuine and is not a collusive or sham proposal;

4. Neither the subcontractor nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other bidder, firm or person to submit a collusive or sham proposal in connection with such contract or to refrain from submitting a proposal in connection with such contract, or has in any manner, directly or indirectly, sought by unlawful agreement or connivance with any other bidder, firm or person to fix the price or prices in said subcontractor's proposal, or to fix any overhead, profit or cost element of the price of prices in said subcontractor's proposal, or to secure through collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Waterloo, Iowa, or any person interested in the proposed contract; and

5. The price or prices quoted in the subcontractor's proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed)_____

_____
Title

Subscribed and sworn to before me this _____ day of _____, 20__.

_____
Title

My commission expires _____.

EQUAL OPPORTUNITY CLAUSE

(As provided in Executive Order No. 11246)

All contractors, subcontractors, vendors and suppliers of goods and services doing business with the City and value of said business equals or exceeds ten thousand dollars ($10,000.00) annually agree as follows:

1. The contractors, subcontractor, vendor and supplier of goods and services will not discriminate against any employee or applicant for employment because of race, color, creed, sex, national origin, economic status, age, mental or physical handicap, political opinions, or affiliations. The contractor, subcontractor, vendor, and supplier will develop an Affirmative Action program to ensure that applicants are employed and that employees are treated during employment without regard to their race, creed, color, sex, national origin, religion, economic status, age, mental or physical disability, political opinions or affiliations. Such actions shall include but not be limited to the following:

    a. Employment
    b. Upgrading
    c. Demotion or Transfer
    d. Recruitment and Advertising
    e. Layoff or Termination
    f. Rates of Pay or Other Forms of Compensation
    g. Selection for Training Including Apprenticeship

2. The contractor, subcontractor, vendor and supplier of goods and services will, in all solicitations or advertisements for employees, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, national origin, religion, economic status, age, mental or physical disabilities, political opinion or affiliations.

3. The contractor, subcontractor, vendor and supplier or his/her collective bargaining representative will send to each labor union or representative of workers which he/she has a collective bargaining agreement or other contract or understanding, a notice advising said labor union or workers' representative of the contractor's commitment under this section.

4. The contractor, subcontractor, vendor and supplier of goods and services will comply with all published rules, regulations, directives, and order of the City of Waterloo Affirmative Action Program Contract Compliance Provisions.

5. The contractor, subcontractor, vendor and supplier of goods and services will furnish and file compliance reports within such time and upon such forms as provided by the Affirmative Action Officer. Said forms will elicit information as to the policies, procedures, patterns, and practices of each subcontractor as well as the contractor himself/herself and said contractor, subcontractor, vendor and supplier will permit access to his/her employment books, records and accounts to the City's Affirmative Action Officer, for the purpose of investigation to ascertain compliance with this contract and with rules and regulations of the City's Affirmative Action Program—Contract Compliance Provisions relative to Resolution No. 24664.

6. In the event of the contractor's non-compliance with the non-discrimination clauses of this contract or with any of such rules, regulations and orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further contracts in accordance with procedures authorized by the City Council.

7. The contractor, subcontractor, vendor and supplier of goods and services will include, or incorporate by reference, the provisions of the non-discrimination clause in every contract,

subcontract or purchase order unless exempted by the rules, regulations, or orders of the City's Affirmative Action Program, and will provide in every subcontract, or purchase order that said provisions will be binding upon each contractor, subcontractor, or supplier.

8. We, the undersigned, recognize that we are morally and legally committed to non-discrimination in employment. Any person who applies for employment with our company will not be discriminated against because of race, creed, color, sex, national origin, economic status, age, mental or physical disabilities.

(Signed) _____
(Appropriate Official)

_____
(Title)

_____
(Date)

TITLE VI CIVIL RIGHTS

During the performance of this contract, the contractor (for itself), its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor shall comply with the Regulations relative to non-discrimination in Federally assisted programs of the DOT Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

2. Nondiscrimination: The contractor, about the work performed by it during the contract, shall not discriminate on the grounds of race, color, national origin, sex, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

3. Solicitations for Subcontracts, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to non-discrimination on the grounds of race, color, national origin, sex, age, or disability.

4. Information and Reports: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant there to, and shall allow access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Contracting Authority, the Iowa DOT, or FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the Contracting Authority, the Iowa DOT, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Contracting Authority, the Iowa DOT, or the FHWA shall impose such contract sanctions as they may determine to be appropriate, including, but not limited to:

    a. Withholding of payments to the contractor under the contract until the contractor complies, and/or
    b. Cancellation, termination, or suspension of the contract, in whole or in part.

6. Incorporation of Provisions: The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Contracting Authority, the Iowa DOT, or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event of a contractor becomes involved in, or it threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Contracting Authority or the Iowa DOT to enter into such litigation to protect the interests of the Contracting Authority or the Iowa DOT; and, in addition, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

THIS PAGE LEFT BLANK INTENTIONALLY

Bidder Status Form

To be completed by all bidders — Part A

Please answer "Yes" or "No" for each of the following:

☐ Yes ☐ No My company is authorized to transact business in Iowa.
(To help you determine if your company is authorized, please review the worksheet on the next page).

☐ Yes ☐ No My company has an office to transact business in Iowa.

☐ Yes ☐ No My company's office in Iowa is suitable for more than receiving mail, telephone calls, and e-mail.

☐ Yes ☐ No My company has been conducting business in Iowa for at least 3 years prior to the first request for bids on this project.

☐ Yes ☐ No My company is not a subsidiary of another business entity or my company is a subsidiary of another business entity that would qualify as a resident bidder in Iowa.

If you answered "Yes" for each question above, your company qualifies as a resident bidder. Please complete Parts B and D of this form.

If you answered "No" to one or more questions above, your company is a nonresident bidder. Please complete Parts C and D of this form.

To be completed by resident bidders — Part B

My company has maintained offices in Iowa during the past 3 years at the following addresses:

Dates: _____ /_____ /_____ to _____ /_____ /_____ Address: _____

City, State, Zip: _____

Dates: _____ /_____ /_____ to _____ /_____ /_____ Address: _____

City, State, Zip: _____

Dates: _____ /_____ /_____ to _____ /_____ /_____ Address: _____

You may attach additional sheet(s) if needed. City, State, Zip: _____

To be completed by non-resident bidders — Part C

1. Name of home state or foreign country reported to the Iowa Secretary of State:

_____

2. Does your company's home state or foreign country offer preferences to resident bidders, resident labor force preferences or any other type of preference to bidders or laborers? ☐ Yes ☐ No

3. If you answered "Yes" to question 2, identify each preference offered by your company's home state or foreign country and the appropriate legal citation.

_____

_____

You may attach additional sheet(s) if needed.

To be completed by all bidders — Part D

I certify that the statements made on this document are true and complete to the best of my knowledge and I know that my failure to provide accurate and truthful information may be a reason to reject my bid.

Firm Name: _____

Signature: _____ Date: _____

You must submit the completed form to the governmental body requesting bids per 875 Iowa Administrative Code Chapter 156. This form has been approved by the Iowa Labor Commissioner.

Worksheet: Authorization to Transact Business

This worksheet may be used to help complete Part A of the Resident Bidder Status form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

☐ Yes ☐ No My business is currently registered as a contractor with the Iowa Division of Labor.

☐ Yes ☐ No My business is a sole proprietorship and I am an Iowa resident for Iowa income tax purposes.

☐ Yes ☐ No My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.

☐ Yes ☐ No My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.

☐ Yes ☐ No My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa secretary of state, has filed its most recent biennial report with the secretary of state, and has neither received a certificate of withdrawal from the secretary of state nor had its authority revoked.

☐ Yes ☐ No My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.

☐ Yes ☐ No My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.

☐ Yes ☐ No My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state, and has not filed a statement of termination.

☐ Yes ☐ No My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa secretary of state that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.

☐ Yes ☐ No My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.

☐ Yes ☐ No My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.

STATEMENT OF BIDDER'S QUALIFICATIONS

(To be submitted by the Bidder only upon the specific request of the City of Waterloo, Iowa.)

All questions must be answered, and the date given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1. Name of bidder.

2. Permanent main office address.

3. When organized.

4. If a corporation, when incorporated.

5. How many years have you been engaged in the contracting business under your present firm or trade name?

6. Contracts on hand: (Schedule these, showing amount of each contract and the appropriate anticipated dates of completion.)

7. General character of work performed by your company.

8. Have you ever failed to complete any work awarded to you? If so, where and why?

9. Have you ever defaulted on a contract? If so, where and why?

10. List the more important projects recently completed by your company, stating the approximate cost for each, and the month and year completed.

11. List your major equipment available for this contract.

12. Experience in construction work similar in importance to this project.

13. Background and experience of the principal members of your organization, including the officers.

14. Credit available: $ _____.

15. Give bank reference: _____.

16. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the City of Waterloo, Iowa? _____

17. The undersigned hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the City of Waterloo, Iowa, in verification of the recitals comprising this Statement of Bidder's Qualifications.

Dated at _____, this _____ day of _____, 20__.

_____
(Name of Bidder)

By: _____
Title: _____

State of _____)
) ss:
County of _____)

_____, being duly sworn deposes and says that he is _____ of _____.
(Name of Organization)

and that the answers to the foregoing questions and all statements therein contained are true and correct.

_____

Subscribed and sworn to before me this _____ day of _____, 20__.

_____
Notary Public

My commission expires _____, _____.

GENERAL SPECIAL PROVISIONS

1. **SCOPE OF WORK**

The work covered by this contract consists of furnishing all labor, equipment, and materials and performing all operations, in connection with the **FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION, CONTRACT NO. 1075,** as shown on the contract drawings and in accordance with these specifications.

The contract drawings, which accompany and form a part of this contract and specifications, are dated **June 3, 2026**. They have the general title of **FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION, CONTRACT NO. 1075.**

The drawings are numbered and separately entitled as follows:

SHEET NO.	DRAWING NO.	DESCRIPTION
		01 - GENERAL
1	01-G-01	TITLE SHEET AND LOCATION MAP
2	01-G-02	INDEX OF DRAWINGS AND CIVIL SYMBOLS
3	01-G-03	ESTIMATED QUANTITIES
4	01-G-03A	ESTIMATE REFERENCE NOTES
5	01-G-04	CIVIL GENERAL NOTES
6	01-G-05	CIVIL - SWPPP
7	01-G-06	GENERAL ARCHITECTURAL AND STRUCTURAL LEGEND
8	01-G-07	ELECTRICAL ABBREVIATIONS AND SYMBOLS
9	01-G-08	ELECTRICAL ONE-LINE DIAGRAM AND SCHEMATIC SYMBOLS
		02 - CIVIL
10	02-C-01	LOCATION PLAN
11	02-C-02	GEOMETRY PLAN
12	02-CFM-01	PLAN AND PROFILE STA. 0+00 TO STA 5+80
13	02-CFM-02	PLAN AND PROFILE STA. 5+80 TO STA. 9+20
14	02-CR-01	SANITARY LIFT STATION SITE REMOVAL PLAN
15	02-CR-02	SANITARY LIFT STATION SITE REMOVAL PLAN AND SECTIONS
16	02-CR-03	SANITARY LIFT STATION SITE REMOVAL PROFILE
17	02-CF-01	SANITARY LIFT STATION NEW FACILITIES PLAN
18	02-CF-02	SANITARY LIFT STATION NATURAL GAS PIPING PLAN
19	02-CG-01	SANITARY LIFT STATION GRADING PLAN
20	02-CE-01	SANITARY LIFT STATION ELECTRICAL SITE PLAN
		10 – ARCHITECTURAL/ STRUCTURAL/ ELECTRICAL
21	10-SM-01	SANITARY LIFT STATION SITE REMOVAL PLAN AND SECTIONS
22	10-SM-02	SANITARY LIFT STATION PLAN
23	10-SM-03	SANITARY LIFT STATION SECTION
24	10-SM-04	SANITARY LIFT STATION SECTION

25	10-SM-05	SANITARY LIFT STATION DETAILS
26	10-SM-06	GENERATOR PAD FOUNDATION PLAN
27	10-SM-07	GENERATOR PAD FOUNDATION SECTION
28	10-E-01	ELECTRICAL PLANS
29	10-E-02	ELECTRICAL EQUIPMENT BUILDING ELECTRICAL PLAN
30	10-E-03	ELECTRICAL EQUIPMENT BUILDING ELEVATIONS
	99 - DETAILS	
31	99-C-01	CIVIL DETAILS
32	99-S-01	STRUCTURAL STANDARD DETAILS
33	99-S-02	STRUCTURAL STANDARD DETAILS
34	99-E-01	ELECTRICAL ONE-LINE DIAGRAM
35	99-E-02	ELECTRICAL DETAILS
36	99-E-03	ELECTRICAL DETAILS

The Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series of 2015, plus the applicable General Supplemental Specifications and the 2026 Iowa Statewide Urban Specifications, also known as SUDAS, shall apply to construction work. These standard specifications are amended by the City of Waterloo Supplemental Specifications to the 2026 edition of SUDAS.

Any specifications that supersede the Iowa DOT, SUDAS and City of Waterloo Specifications are listed in the Special Provisions.

2. CONFLICTING SPECIFICATIONS

All requirements of other specifications contained in the contract documents which conflict with the provisions of the special provisions will be considered void.

3. DUMPING AREAS

Excess material resulting from construction operations shall be hauled to the County Landfill or other area secured by the contractor and approved by the City. Rubble, rubbish, trees, brush, and other unsuitable backfill material, as designated by the City, shall be hauled to the County Landfill. All Landfill charges are to be considered incidental to the contract and are the responsibility of the contractor.

4. CONSTRUCTION DAMAGE

The Contractor shall exercise care during construction operations to ensure the safety and protection to existing features located near or within the limits of construction. Damage caused by negligence or poor workmanship, as determined by the Engineer, shall be considered the Contractor's responsibility.

5. **REMOVED MATERIALS**

All materials removed as part of this Contract shall remain the property of the City unless the City determines that the materials are not salvageable, and the City does not want to retain ownership of the materials. Materials designated in the field by the Engineer as non-salvageable shall be hauled and disposed of by the Contractor at no cost to the City. All other materials shall be transported to locations as directed by the Engineer. No separate measurement or payment will be made for hauling or disposing of removed materials and it shall be considered incidental to applicable items.

6. **OVERHAUL**

Overhaul will not be paid for "surplus material" obtained from any of the items of construction under this contract. The cost of overhaul will be considered as incidental to the items to which it applies.

7. **MAILBOXES**

The Contractor shall notify the United States Postal Department of mailboxes, which interfere with any part of the work before removing them, and the Contractor will relocate them as required by the Postmaster. The removal and replacement of mailboxes will not be considered for direct payment but will be considered incidental to the item to which it applies.

The removal and replacement of stop signs will not be considered for direct payment but will be considered incidental to the item to which it applies.

8. **PAY ITEMS**

All pay items are listed in the proposal and shall include the purchase of all materials, delivery of these materials, and furnishing all labor, plant, and miscellaneous work needed to make the item complete. All such cost shall be incidental to the proposed item to which it applies and shall not be considered for separate payment.

9. **BREAKDOWN OF LUMP SUM CONTRACT PRICE ITEMS**

The Contractor shall, immediately upon execution and delivery of the contract, before the first estimate for payment is made, deliver to the City a detailed estimate giving a complete breakdown of the lump sum contract prices. The submitted breakdown shall be approved by the City prior to any payment of any lump sum price item.

10. **PERMISSION TO HAUL OVER STREETS, RAILROADS, AND HIGHWAYS**

The Contractor will be required to secure, from the proper authorities, permission or permit which may be required to haul over streets, highways, railroads or private property, and any hauling operations of the Contractor shall be subject to the requirements of such permits, permission, and to all applicable regulations, laws, and ordinances governing hauling and movement of equipment over streets, railroads, highways, and private property. Any costs or inconvenience caused by obtaining any necessary permits or permission shall be considered completely covered by the price bid for the items in the proposal.

11. **CONSTRUCTION SCHEDULING**

The City shall approve Contractor's work schedule prior to starting. All revisions shall also be approved. The City may change the schedule to accommodate changing construction conditions.

The contractor shall submit the work schedule to the City at the preconstruction conference for approval. The City shall approve Contractor's work schedule prior to starting. All revisions shall also be approved. The City may change the schedule to accommodate changing construction conditions.

The Contractor shall coordinate the work under this contract with contractors performing work under other contracts, which may be performed concurrently.

The Contractor shall be responsible to notify the Police, Fire, Street, and Engineering Departments of the closing and opening of streets.

The Contractor shall commence work after receipt of the "Notice to Proceed" and at the date approved on the submitted schedule. The contractor shall diligently execute the work of the contract to completion once work commences.

12. **PRE-CONSTRUCTION CONFERENCE**

Before any work is started, the Contractor shall arrange with the City to hold a pre-construction conference for the purpose of discussing the contract.

13. **UNDERGROUND UTILITIES**

It is the responsibility of the Contractor to obtain the location of gas lines, water lines, electric, telephone, and cable television cables or wires from the various utility companies and the City electrician before starting any excavation. The Contractor shall be responsible for any damage to any underground utilities. The Contractor shall expose those utilities indicated on the plans so that elevations may be determined before beginning construction. This work shall be considered incidental to other items of work.

If the Contractor believes that additional costs have been incurred due to a utility being improperly located, the resolution of the additional costs incurred shall be made between the contractor and the respective utility company.

14. **TRAFFIC SIGNS AND STREET SIGNS**

The Contractor shall contact the City of Waterloo Traffic Operations Department to have any street sign that will be affected by construction removed and replaced when the work has been completed.

15. **TRAFFIC CONTROL DURING CONSTRUCTION (INCIDENTAL)**

The Contractor shall provide, erect, and maintain, at all times during the progress and suspension of the work and until completion and final acceptance thereof, suitable and requisite barricades, signs, or other adequate protection, as required by Contract Documents or as may be ordered by the Engineer, to ensure the safety of the public as well as those engaged on the work.

All barricading necessary for completion of this project shall be considered incidental to contract bid items.

The Contractor shall, at his own expense and without further or other order, provide, erect and maintain, at all times during the progress and suspension of the work and until completion and final acceptance thereof, suitable and requisite barricades, signs or other adequate protection, as required by the latest edition of Part VI of the “Manual on Uniform Traffic Control Devices” and shall provide, keep and maintain such barricades, signs, etc., as may be required or as may be ordered by the Engineer, to ensure the safety of the public as well as those engaged on the work. All barricading plans shall be reviewed by the Engineer.

The Contractor shall determine, provide and obtain approval from the City Engineer on all detour locations for all street closings, barricades and posting prior to construction. These shall meet requirements of the City Police Traffic Department. The Contractor shall notify the City Engineer's Office and the Police, Fire and Street Departments when the street is closed for construction. All barricading shall be in accordance with the latest edition of Part VI of the "Manual on Uniform Traffic Control Devices." Encapsulated lens sheeting is not required on this project.

16. **GRADES, LINES, LEVELS, AND SURVEYS**

All necessary grades, lines, levels and surveys shall be established and maintained by the Contractor.

The Contractor shall verify all grades, lines, levels, and dimensions as shown on the drawings, and he shall report any errors or inconsistencies in the same to the City before commencing work.

17. **SAFETY OF WORKERS AND PUBLIC**

The Contractor shall, at all times, take necessary precautions to protect the life and health of all persons employed on this project and the public. He shall provide necessary safety devices and safeguards in accordance with latest and best accident prevention practices. All such protection shall be furnished to employees without cost.

No direct measurement of payment shall be made for this protection but shall be considered incidental to other items of work. The public shall be kept outside of any work area.

18. **WORKING ON SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS**

The Contractor shall notify the Engineer in writing forty-eight (48) hours in advance if work on Saturday is planned. By noon the Friday before the planned Saturday work, the Contractor shall confirm the Saturday work schedule with the project inspector.

Work on Sunday requires prior approval of the Engineer in accordance with the Waterloo Standard Specifications. The Contractor shall not work the following days in 2026, 2027 and 2025 due to City holidays:

2026
July 3, 2026 (Friday) – Independence Day
September 7, 2026 (Monday) – Labor Day
November 11, 2026 (Wednesday) - Veteran's Day
November 26 and 27, 2026 (Thursday and Friday) - Thanksgiving
December 24 and 25, 2026 (Thursday and Friday) - Christmas

2027
January 1, 2027 (Friday) - New Year's Day
January 18, 2027 (Monday) - Martin Luther King Day
May 31, 2027 (Monday) - Memorial Day
June 18, 2027 (Friday) - Juneteenth
July 2, 2027 (Friday) - Independence Day
September 6, 2027 (Monday) - Labor Day
November 11, 2027 (Thursday) - Veteran's Day
November 25 and 26, 2027 (Thursday and Friday) - Thanksgiving
December 23 and 24, 2027 (Thursday and Friday) - Christmas

THIS PAGE LEFT BLANK INTENTIONALLY

SPECIAL PROVISIONS

1. TRAFFIC CONTROL -- IMPROPER MAINTENANCE

The Engineer, or authorized representative, shall periodically review traffic control that has been put in place by the Contractor. If traffic control devices are found to be without proper maintenance, penalties shall be assessed. Improper maintenance shall include, but not be limited to, the following situations:

A. Any barricade or sign moved or tipped over.
B. Fencing not supported in a vertical position.
C. Fencing not placed around excavations when workers/equipment is not working at the location.
D. Lack of proper barricades or signage.

Each incident is treated as a separate citation on an individual basis. It is not intended that minor deficiencies be price adjusted if corrected the day notification is given. In addition to a price adjustment, the Engineer may suspend work for irresponsible and/or repeated failure to construct the project using proper traffic control procedures.

Penalties:	1st Offense	Written Warning Given by City
	2nd Offense	$ 100
	3rd Offense	$ 250
	4th Offense	$ 500
	5th Offense	$1,000
	6th Offense or more	Engineer's Discretion (Amount Equal or Greater Than $1,000)

2. LIQUIDATED DAMAGES

Time is an essential element of this contract. It is important that the work be diligently pursued to completion. If the work is not completed within the specified contract period, plus authorized extensions, the Contractor shall pay to the City Liquidated Damages in the amount of $500.00 per day, for each day, as further described herein, more than the authorized time.

Days beyond the specified completion date for which Liquidated Damages will be charged will be working days that the Contractor does or could have worked from Monday through Saturday. Sundays will be counted only if work is performed. Partial working days will be considered as a full working day. Days not chargeable for Liquidated Damages will include rain days, Sundays if no work is done, and legal holidays.

Working days will cease to be charged when only punch list items remain to be completed. Punch list item do not include contract bid items or approved change/extra work orders.

When the Contractor believes the project to be substantially completed, a written notice stating the same shall be submitted to the Engineer and a request made for a Punch List. If the work under the Contract extends beyond the normal construction season for such work, the Contractor shall submit to the Engineer in writing a request that working days counted toward the project be suspended until work is resumed the following construction season.

This amount is not construed as a penalty. These damages are for the cost to the City of providing the required additional inspection, engineering, and contract administration.

3. HAUL ROUTES

Haul routes to and from the project site shall be submitted for review by the Engineer. In general, the Contractor shall request haul routes over the main streets in the area, staying on streets within the project as much as possible and should not include truck-embargoed streets.

4. STANDARD SPECIFICATIONS

The Standard Specifications, which are referenced in the contract documents, are designated as follows:

SUDAS STANDARD SPECIFICATIONS - "2026 Standard Specifications for the Iowa Statewide Urban Design and Specifications Program" (unless otherwise noted) and current revisions thereof.

WATERLOO STANDARD SPECIFICATIONS - "Standard Specifications for Municipal Public Works Construction, City of Waterloo, Iowa."

5. PERCENT OF CONTRACT TO BE PERFORMED BY CONTRACTOR

A. The prime contractor shall be required to perform at least 35 percent of the total contract amount of the project.

6. SPECIAL PROVISIONS

Standard Specifications are amended by the following additions. These are Special Provisions and shall prevail over those published in the Standard Specifications.

Section 01 10 10	Summary of Work
Section 01 33 00	Submittals
Section 01 45 50	Testing Laboratory Services
Section 01 45 51	Testing
Section 01 50 00	Temporary Construction Facilities and Utilities
Section 01 57 23	Protection of Environment
Section 01 60 10	Material and Equipment
Section 01 78 23	Operation and Maintenance Data
Section 01 78 39	Project Record Documents
Section 03 01 30	Patching Mortar
Section 03 20 00	Concrete Reinforcement
Section 03 30 00	Cast-in-Place Concrete
Section 03 62 00	Epoxy Grout
Section 03 63 00	Nonshrink Grout
Section 13 10 00	Prefabricated Control Building
Section 22 05 29	Pipe Hangers, Supports, and Anchors
Section 23 11 23	Natural Gas Systems
Section 26 02 00	Basic Materials and Methods
Section 26 05 26	Grounding
Section 26 05 29	Supporting Devices
Section 26 05 43	Underground Ducts and Manholes
Section 26 05 53	Electrical Identification
Section 26 05 70	Electrical System Studies
Section 26 08 10	Electrical System Demonstrations
Section 26 08 12	Testing Electrical Systems
Section 26 09 23.21	Adjustable Speed Drive Equipment – Adjustable Frequency
Section 26 32 13.13	Packaged Natural Gas Engine Generator Systems
Section 26 36 00	Transfer Switches
Section 26 71 73	Electric Service
Section 40 09 23.14	Flow Meter (Magnetic)

Section 40 23 13.01 Process Valves and Appurtenances
Section 40 90 10 General Provisions for Instrumentation and Controls
Section 40 95 13 Instrument and Control Panel Construction
Section 40 95 14 Panel and Field Devices
Section 40 95 35 Cellular Telephone Modem
Section 43 13 29 Submersible Sewage Pumping Station

7. QUANTITY ADJUSTMENTS

The following Bid Items are exempted from consideration under the provisions of Section B. "Scope of Work," paragraph 7 of the "General Specifications for Construction" concerning the variance of the "As-Built" quantity of the listed item by more than twenty (20%) percent from the estimated quantity specified in the contract.

Item No.	SUDAS – Measurement & Payment	Description	Unit	Estimated Quantities	Unit Bid Price	Total Bid Price
BASE BID						
1	11020-A	MOBILIZATION	LS	1.0	$	$
2	2010-D-1	TOPSOIL, ON-SITE, 6 INCHES	CY	248.6	$	$
3	2010-E	EXCAVATION, CLASS 10 – EMBANKMENT-IN-PLACE	CY	400.0	$	$
4	2010-I	SUBGRADE TREATMENT, GEOFABRIC	SY	175.0	$	$
5	2010-J	SUBBASE, MODIFIED, 11'	SY	224.8	$	$
6	2010-M	COMPACTION TESTING	LS	1.0	$	$
7	3010-D	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL	CY	2872.4	$	$
8	3010-H	TRENCH COMPACTION TESTING	LS	1.0	$	$
9	4010-C-1	SANITARY SEWER FORCE MAIN, TRENCHED, PVC, 10-INCHES	LF	512.8	$	$
10	4010-C-1	SANITARY SEWER FORCE MAIN, TRENCHED, DUCTILE IRON, 10-INCHES	LF	5.5	$	$
11	4010-C-2	SANITARY SEWER FROCE MAIN, TRENCHLESS, PVC, 10-INCHES	LF	300.0	$	$
12	4010-L	SANITARY SEWER ABANDONMENT, FILL AND PLUG, 10-INCHES	LF	815.3	$	$
13	4050-G-3	BYPASS PUMPING	LS	1.0	$	$
14	4060	FORCE MAIN TESTING	LS	1.0	$	$
15	5010-C-2	FORCE MAIN FITTING	LB	720.0	$	$
16	6010-G-1	CONNECTION TO EXISTING MANHOLE	EA	1.0	$	$
17	7030-H-3	DRIVEWAY, GRANULAR, 6-INCHES	TON	172.9	$	$
18	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1.0	$	$
19	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 1	AC	0.4	$	$
20	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 4	AC	0.2	$	$
21	9040-A-1	SWPPP PREPARATION	LS	1.0	$	$
22	9040-A-2	SWPPP MANEGEMENT	LS	1.0	$	$
23	9060-D	REMOVAL AND REINSTALLATION OF EXISTING FENCE, CHAINLINK, GALVANIZE	LF	40.0	$	$
24	9080-A	CONCRETE STEPS, TYPE A	SF	115.5	$	$
25	9080-B	HANDRAIL, 32-INCHES	LF	22.0	$	$
26	9080-C	SAFETY RAIL	LF	44.8	$	$
27	10010-A	DEMOLITION WORK – WET WELL	LS	1.0	$	$

28	10010-A	DEMOLITION WORK – LIFT STATION BUILDING AND EQUIPMENT	LS	1.0	$	$
29	11050-A	CONCRETE WASHOUT	LS	1.0	$	$
30	AS PER PLANS	SANITARY SEWER MANHOLE ABANDONMENT	EA	5.0	$	$
31	AS PER PLANS	LIFT STATION WET WELL	LS	1.0	$	$
32	AS PER PLANS	PREFABRICATED OPERATOR'S BUILDING	LS	1.0	$	$
33	AS PER PLANS	BYPASS MANHOLE	LS	1.0	$	$
34	AS PER PLANS	SITE ELECTRICAL	LS	1.0	$	$
35	AS PER PLANS	STAND-BY GENERATOR	LS	1.0	$	$
36	AS PER PLANS	BOLLARDS	EA	6.0	$	$
37	AS PER PLANS	STRUCTURAL CONCRETE RETAINING WALL – GENERATOR PAD AND STAIRS	CY	30.2	$	$
38	AS PER PLANS	STRUCTUAL CONCRETE PAD – GENERATOR	CY	8.1	$	$
39	AS PER PLANS	COMPACTING BACKFILL – GRADING	CY	400.0	$	$
		PROJECT TOTAL			**$**	**$**

8. SHOP DRAWINGS, CERTIFICATES, AND EQUIPMENT LISTS

A. Submission of Drawings:

1. The Contractor shall submit to the Engineer all shop drawings and equipment drawings or lists as called for in the contract documents or as requested by the Engineer. Drawings and listings shall be complete and shall contain all required detail information conveyed according to the latest recommended standards for detailing.

2. The Contractor shall make any corrections required by the Engineer and submit the revised shop or equipment drawings or listings for review. After review by the Engineer, the shop or equipment drawings or listings will be so marked, dated, signed by the Engineer, and forwarded to the Contractor for reproduction and distribution.

B. Submission of Equipment Lists:

1. If requested in the contract documents, as soon as practicable after award of contract and before any items of material or equipment are purchased, the Contractor shall submit to the Engineer for review a complete list of the principal fixtures and equipment to be incorporated into the work.

2. The Contractor shall also submit applicable brochures, technical data, catalogs, cuts, diagrams, manufacturer's drawings and installation instructions, samples if required, and other descriptive data including the complete description, trade name, model number, type, size, and rating.

C. Engineer's Review:

1. Review by the Engineer shall not be construed as a complete check but will indicate only that the general method of construction and detail is satisfactory. The Engineer assumes no responsibility for errors in dimensions in the shop drawings and assumes the Contractor will use material complying with requirements of the contract documents or, where not specified, those of sound and reasonable quality, and will erect the subjects of such shop drawings according to recognized

standards of first quality work or, when specified, according to standards of the contract documents.

2. Any work done or material ordered by the Contractor prior to review by the Engineer shall be at the Contractor's risk.

9. PROJECT RECORD DOCUMENTS

A. Maintain at the project site one record copy of the drawings, project manual, addenda, change orders and other modifications to contract, field orders or clarifications, shop drawings, field test records, and associated permits.

B. Provide one marked up set of drawings to Engineer at substantial completion for use in preparation of record drawings.

C. Maintain record documents in clean dry, legible condition and in good order. Do not use record documents for construction purposes. Make record documents available for inspection by Engineer.

* * * END OF SECTION * * *

SECTION 01 10 00
SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

A. This project consists of the construction of the Cattle Congress lift station and force main near the Cedar River in Waterloo, Iowa. The project includes demolition and reconstruction of the Cattle Congress Lift Station (with a natural gas generator, for back-up power), a force main to pump the flow to the east along South Riverside Trail to an existing force main manhole northwest of Conger Street.

B. Measurement and Payment:

1. Work specified in this section is considered incidental and payment shall be included as part of appropriate lump sum or unit prices included in Bid Form.

1.02 DEFINITIONS

A. Standard Specifications: Iowa Statewide Urban Design and Specifications (SUDAS) – 2026 edition and Standard Specifications for Highway and Bridge Construction (Iowa), Series 2026.

1.03 FORM OF SPECIFICATIONS

A. These Specifications are written in imperative and abbreviated form. Imperative language of Specification sections is directed at CONTRACTOR, unless specifically noted otherwise. Incomplete sentences in Specifications shall be completed by inserting “shall,” “CONTRACTOR shall,” “shall be,” and similar mandatory phrases by inference in same manner as they are applied to notes on Drawings. Words “shall be” shall be supplied by inference where colon (:) is used within sentences or phrases. Except as worded to contrary, fulfill (perform) indicated requirements whether stated imperatively or otherwise.

B. Items of Work are specified by section. Specifications or requirements of one or more sections may apply or be referenced in other sections.

C. Provide Work described and comply with requirements stated in each Specification section and Drawings unless specifically assigned to other Contractors or OWNER.

1.04 CONTRACTS

A. Perform Work under unit price Contract(s) with OWNER.

1.05 WORK BY OTHERS

A. Utility Services:

1. Electric and Gas Utility will furnish and install electric power and gas services to point of termination and provide meters at locations as shown on Drawings and these Specifications.
2. Refer to referenced Specification sections for cost, if any, to be included in Bid.

1.06 MILESTONES (WORK SEQUENCE)

A. Construct Work in stages to accommodate use of site during construction period; coordinate Construction Progress Schedule and operations with OWNER.

B. Construct Work in stages to provide for public convenience.

1. Do not close off public use of facilities until completion of one stage of construction provides alternative usage.
2. Stages of construction are those indicated on Drawings.

C. Due to potential health hazards and requirements of State of Iowa, Department of Natural Resources, and U.S. Environmental Protection Agency, existing wastewater lift station facilities shall be maintained in operation during construction of new lift station facility. Degree of treatment during construction to be equal to or exceed efficiency of facility before construction started. It is forbidden to release wastewater into the environment.

1.07 CONTRACTOR'S USE OF PREMISES

A. Limit use of premises for Work and storage to allow for following:

1. OWNER occupancy.
2. Public use.

B. Conduct operations to ensure least inconvenience to general public. Coordinate use of premises with OWNER.

C. Assume full responsibility for protection and safekeeping of products under this Contract.

D. Obtain and pay for use of additional storage or Work areas needed for operations at no additional cost to OWNER.

E. Confine operations to areas within Contract limits indicated. Do not disturb portions of site beyond areas in which Work is indicated.

F. Keep driveways, roads, and entrances serving premises clear and available to OWNER and public at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on Site.

1.08 EASEMENTS, LICENSES, AND PERMITS

A. Easements, construction licenses, and permits obtained for Work shown on Drawings.

1. Comply with provisions of easements, licenses, and permits.
2. Obtain additional construction easements necessary to complete Work.
3. Easements are shown on Drawings.
4. Perform construction within existing rights-of-way.
5. Obtain written authorization from affected property owners or maintaining authorities if construction is outside these areas.
6. Comply with requirements of OWNERS or maintaining authorities.
7. Obtain written approval of restoration from easement grantors shown on Drawings.

B. Construction in Highways:

1. Construction within rights-of-way is governed by applicable permits and appropriate sections of Contract Documents.

C. Notify property owners of restoration completion by certified mail (return receipt requested, with copy to OWNER) similar to following.

"The undersigned Contractor has completed restoration of construction site on which you have granted easement or license for installation of certain utilities and improvements. If site restoration is not completed to your satisfaction, please contact City of Waterloo, Iowa, in writing, and arrangements will be made immediately to view site and restore site in conformance with our Contract obligations.

If City of Waterloo does not hear from you in writing within 5 days from above date, site restoration of your property will be deemed completed and acceptable to you."

(Signature)
(Name of CONTRACTOR)
(Address of CONTRACTOR)

1. Complete Work necessary to satisfy terms of Contract.
2. Failure of property owner to notify OWNER within 5 days, in accordance with above example, does not relieve CONTRACTOR of any obligations under Contract.
3. OWNER will:

    a. Examine site upon receipt of notice of deficiency.
    b. Have right to have remaining Work done by contract or force account and deduct cost thereof from monies due CONTRACTOR should CONTRACTOR refuse to complete restoration work.
    c. Waive requirement for obtaining statement if satisfied restoration is completed in accordance with Contract Documents.

1.09 STAKING

A. Proposed Work will be staked once, by ENGINEER, at no expense to CONTRACTOR. Should CONTRACTOR request restaking, this Work will be done as ENGINEER'S schedule permits and at expense of CONTRACTOR. Notify ENGINEER at least 3 days prior to start of open-cut work or 7 days prior to start of jacked or augered work and when making periodic requests for line and grade stakes.

1. ENGINEER will provide one line of survey stakes for utility work and prepare separate cut sheets where multiple pipes are located in common trench.
2. CONTRACTOR shall maintain survey stakes.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

* * * END OF SECTION * * *

SECTION 01 33 00
SUBMITTALS

PART 1 GENERAL

1.01 SUMMARY

A. Section specifies procedural requirements for Work-related (non-administrative) submittals including Shop Drawings, substitutions, product data, samples, test data, operations and maintenance data, and other miscellaneous Work-related submittals.

1. Submittals for certification of equipment installation, instructional, and post-startup services are specified in Section 01 60 00.
2. Submittals for record drawings are specified in Section 01 78 39.

B. Administrative Submittals: Procedures concerning items such as listing of manufacturers, Suppliers, Subcontractors, Construction Progress Schedule, schedule of Shop Drawing submissions, bonds, payment applications, insurance certificates, and schedule of values are specified elsewhere.

C. Work-Related Submittals:

1. Substitutes and “Or Equal” Items:

a. Includes material or equipment which CONTRACTOR requests ENGINEER to accept, after Effective Date of the Agreement. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or “or equal” item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers, may be submitted to Engineer for review under the circumstances described below.

2. Shop Drawings:

a. Includes technical data and drawings specially prepared for this Project, including fabrication and installation drawings, diagrams, data sheets, schedules, templates, patterns, reports, instructions, design mix formulas, measurements, and similar information not in standard printed form.
b. Standard catalog type information prepared without specific reference to Project is not considered as Shop Drawing.

3. Product Data:

a. Includes standard catalog type printed information on manufactured materials, equipment and systems that has not been specially prepared for this Project, including manufacturer’s product specifications, catalog cuts, standard wiring diagrams, printed performance curves, mill reports, and standard color charts.

4. Samples:

a. Includes fabricated and manufactured physical examples of materials, products, and units of work, includes complete units, partial cuts of manufactured or fabricated work,

swatches showing color, texture, and pattern, and units of work to be used for independent inspection and testing.

b. Mock-ups are special forms of samples too large or otherwise inconvenient for handling in manner specified for transmittal of sample submittals.

5. Test Results:

   a. Includes source and field quality inspection and test reports, actual performance curves, and certifications of results prepared specifically for equipment, material, and systems provided for this Project.
   b. Standard catalog charts or standard test results are considered Product Data.

6. Operations and Maintenance Data:

   a. Includes information and directions for operating and maintaining equipment provided and installed for this Project. May be standard for equipment or prepared specifically for this Project.

7. Miscellaneous Submittals:

   a. Work-related submittals that do not fit in previous categories, includes schedules, photographs, guarantees, warranties, certifications, maintenance agreements, workmanship bonds, survey data and reports, physical work records, copies of industry standards, field measurement data, extra materials, keys, and similar information, devices, and materials applicable to Work.

1.02 SUBMITTAL PROCEDURES

A. Scheduling:

1. CONTRACTOR is not required to submit preliminary or final schedule of Submittals.

B. Coordination:

1. Coordinate preparation and processing of submittals with performance of Work. Coordinate each submittal with other submittals and related activities such as substitution requests, testing, purchasing, fabrication, delivery, and similar activities requiring sequential activity.
2. Coordinate submission of different units of interrelated Work so one submittal is not delayed by ENGINEER'S need to review related submittal. ENGINEER may withhold action on submittal requiring coordination with other submittals until related submittals are provided.
3. Prepare and transmit each submittal sufficiently in advance of scheduled performance of related Work and other applicable activities.
4. Before submitting each Shop Drawing or Sample, Contractor shall have:

   a. reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
   b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
   c. determined and verified the suitability of all materials offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
   d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.

C. Submittal Preparation:

1. Stamp and sign each submittal certifying to review of submittal, verification of material, and equipment, field measurement, field construction criteria, and coordination of information within submittal with Contract Documents.
2. Transmittal Form: Identify following:

a. Date of submittal and dates of previous submittals.
b. Project title and number.
c. Submittal number.
d. Contract identification.
e. Names of:

1) CONTRACTOR.
2) Supplier.
3) Manufacturer.

f. If submittal is for substitute item of material or equipment, identify as “substitute” on transmittal and include “Contractor’s Application for Consideration of Substitute” with submittal.
g. Identification of equipment and material with equipment identification numbers, motor numbers, and Specification section number.
h. Variations from Contract Documents.

D. Resubmittal Preparation:

1. Comply with requirements described in Submittal Preparation above, and in addition:

a. Identify on transmittal form submittal is resubmission.
b. Make corrections or changes in submittals required by ENGINEER’S notations on returned submittal.
c. Respond to ENGINEER’S notations:

1) On transmittal or separate page attached to CONTRACTOR’S resubmission transmittal, answer or acknowledge in writing notations or questions indicated by ENGINEER on ENGINEER’S transmittal form returning reviewed submission to CONTRACTOR.
2) Identify each response by question or notation number established by ENGINEER.
3) If CONTRACTOR does not respond to each notation or question, resubmission will be returned without action by ENGINEER until CONTRACTOR provides written response to ENGINEER’S notations or questions.

d. CONTRACTOR-initiated revisions or variations.

1) On transmittal form, identify variations or revisions from previously reviewed submittal, other than those called for by ENGINEER.
2) ENGINEER’S responsibility for variations or revisions is established in the Actions On Submittals paragraph of this section.

1.03 SPECIFIC SUBMITTAL REQUIREMENTS

A. General:

1. Specific submittal requirements for individual units of Work are specified in applicable Specification section. Except as otherwise indicated in Specification sections, comply with requirements specified below for each indicated type of submittal.
2. If ENGINEER has responded to Written Clarification/Interpretation/Request submitted by CONTRACTOR, CONTRACTOR shall include ENGINEER'S response with applicable submittal.

B. Requests for Substitute Items:

1. Collect data for items to be submitted for review as substitute items into one submittal for each item of material or equipment.
2. Include completed "Contractor's Application for Consideration of Substitution" form as required by Supplementary Conditions.
3. Submit with other scheduled submittals for material or equipment allowing time for ENGINEER to evaluate additional information required to be submitted.
4. If CONTRACTOR requests to substitute for material or equipment specified, but not identified in Specification as requiring submittals, CONTRACTOR shall indicate substitution submittal in Submittal Schedule.
5. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefore. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.
6. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

    a. shall certify that the proposed substitute item will:

        1) perform adequately the functions and achieve the results called for by the general design,
        2) be similar in substance to that specified, and
        3) be suited to the same use as that specified;

    b will state:

        1) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time,
        2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
        3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

    c will identify:

        1) all variations of the proposed substitute item from that specified, and
        2) available engineering, sales, maintenance, repair, and replacement services; and

    d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.

C. Shop Drawings:

1. Submit newly prepared information, with graphic information at accurate scale and name of preparer indicated (firm name). Show dimensions and note which are based on field measurement, identify materials and equipment included in Work, and revisions on resubmittals. Indicate compliance with standards and notation of coordination requirements with other Work. Encircle, bubble or otherwise indicate selections of products or materials and/or variations from Contract Documents or previous submittals. Highlighting may be used in addition to circling or bubbling of appropriate materials or variations from Contract Documents or previous submittals to direct the attention of the reviewer, but may not be utilized exclusively due to the difficulty in continuity of selections through copying and/or scanning of the submittal. Other acceptable means of selection of materials, products or variations from Contract Documents or previous submittals include striking out selections not included as part of the submittal, providing an arrow pointing directly to the selection or other means that remain after copying and/or scanning.
2. Provide 8 in. by 3 in. blank space for CONTRACTOR and ENGINEER stamps.

D. Product Data:

1. Preparation:

   a. Collect required data into single submittal for each unit of Work or system. Where product data includes information on several similar materials or equipment, some of which are not required for use on Project or not included in submittal, mark copies to show which items are not applicable to Project.
   b. Where product data must be specially prepared for equipment, materials or systems, because standard printed data is not suitable for use, submit data as Shop Drawing and not as product data.

2. Submittals:

   a. Submit electronic copies to Nick.Schrock@aecom.com, where possible. If a hard copy submittal is required, submit 2 copies.
   b. Submittal is final when ENGINEER returns submittal marked “No Exception Taken”, or “Make Corrections Noted”.

3. Distribution:

   a. Maintain one set of product data (for each submittal) at Project site, available for reference by ENGINEER and others.

E. Samples:

1. Preparation:

   a. Provide samples physically identical with proposed materials or equipment to be incorporated into Work. Where variations in color, pattern or texture are inherent in material or product represented by sample, submit multiple units (not less than 3) showing approximate limits of variations.
   b. Provide full set of option samples where selection by ENGINEER is required.
   c. Include information with each sample to show generic description, source or product name and manufacturer, limitations, and compliance with standards.
   d. Submit samples for ENGINEER’S visual review of general generic kind, color, pattern, texture, and for final check of coordination of these characteristics with other related elements of Work.
   e. Mock-ups and similar samples specified in Specification sections are recognized as special type of samples. Comply with samples submittal requirements to greatest extent possible.

2. Submittals:

    a. At CONTRACTOR'S option, and depending upon nature of anticipated response from ENGINEER, initial submittal of samples may be preliminary or final submittal.
    b. Preliminary submittal, of single set of samples, required where Specification's indicate ENGINEER'S selection of color, pattern, texture or similar characteristics from manufacturer's range of standard choices is necessary. Preliminary submittals will be reviewed and returned with ENGINEER'S "Action" noted.
    c. Final Submittals: Submit 3 sets of samples in final submittal, 1 set will be returned.

3. Distribution:

    a. Maintain returned set of samples at Project site, in suitable condition and available for quality control comparisons throughout course of performing Work.

F. Test Results:

1. Preparation:

    a. Identify each test by Specification section and type of test.

2. Submittals:

    a. Submit 3 copies.
    b. Submittal is to confirm that results of tests verify materials, products, and systems comply with Contract Documents and are not for approval.

3. Distribution:

    a. Unless otherwise required in Specifications, test results shall be submitted to ENGINEER'S field office or if ENGINEER has no field office to ENGINEER'S office.

G. Miscellaneous:

1. Guarantees, Warranties, Maintenance Agreements, and Workmanship Bonds:

    a. Refer to Specification sections for requirements. Submittal is considered final when submittal returned by ENGINEER, marked "No Exceptions Taken" or "Make Corrections Noted".
    b. In addition to copies desired for CONTRACTOR'S use, furnish 2 executed copies. Provide 2 additional copies where required for maintenance data.

2. Certifications:

    a. Refer to Specification sections for requirement on submittal of certifications. Submit 6 copies. Certifications are submitted for review of conformance with specified requirements and information.

3. Closeout Submittals:

    a. Refer to Specification sections and Section 01 78 39 for requirements on submittal of closeout information, materials, tools, and similar items.

        1) Materials and Tools: Spare parts, extra and overrun stock, maintenance tools and devices, keys, and similar physical units to be submitted.

2) Operating and maintenance data.

H. Operating and Maintenance (O&M) Data:

1. Organize operations and maintenance information into suitable sets of manageable size, and bind into individual binders properly identified and indexed (thumb-tabbed). Include emergency instructions, safety precautions, spare parts listing, copies of warranties, wiring diagrams, recommended "turn-around" cycles, inspection procedures, Shop Drawings, Product Data, and similar applicable information.

   a. Manufacturer's printed instructions regarding safety precautions for both (a) protection of personnel operating equipment and systems and (b) prevention of damage to equipment and systems.
   b. Shop Drawings and other submittals included in O&M data shall be corrected to include, in same format and style as original submittal, review comments.
   c. Data may be submitted on CD Rom if approved by ENGINEER.

2. Binders: Commercial quality D-Ring binder with durable and cleanable plastic covers. Paperboard and laminated paperboard covers are not acceptable.

   a. Do not fill binders to more than 75% of capacity.
   b. When multiple binders are used for an item of equipment, organize contents into related groupings. Each binder cover shall bear identification of specific contents.

3. Cover Label: Label each binder cover and spine with typed or printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and following:

   a. Project title.
   b. Name(s) of applicable building(s) or structure(s) as shown on Drawings in which equipment located.
   c. Name of equipment as set forth in Contract Documents.
   d. Specification section number for equipment as set forth in Contract Documents.

4. Submit after equipment requiring O&M data has been returned "No Exceptions Taken" or "Make Corrections Noted".
5. Submit 6 copies of each manual.

I. General Distribution:

1. Unless required elsewhere, provide distribution of submittals to Subcontractors, suppliers, governing authorities, and others as necessary for proper performance of Work.
2. Provide copies of submittals bearing ENGINEER'S action stamp to:

   a. Job site file.
   b. Record documents file.

1.04 ACTION ON SUBMITTALS

A. ENGINEER'S Action:

1. General:

   a. Except for submittals for record and similar purposes, where action and return on submittals is required or requested, ENGINEER will review each submittal, mark with appropriate action, and return. Where submittal must be held for coordination, ENGINEER will so advise CONTRACTOR without delay.

b. ENGINEER will stamp each submittal with uniform, self-explanatory action stamp, appropriately marked with submittal action.
c. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
d. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
e. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of request for substitution items and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of submittal procedure coordination.

2. Notification of Insufficient Information:

a. If information submitted is not sufficient to complete review of submittal, ENGINEER will send transmittal to CONTRACTOR notifying CONTRACTOR that additional information is required.
b. Submittal will be placed in an "On Hold" status and not returned until CONTRACTOR provides additional information.

3. Unsolicited Submittals: ENGINEER will return unsolicited submittals to CONTRACTOR without reviewing.
4. If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. A proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole; and
3) it has a proven record of performance and availability of responsive service.

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times; and
2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

B. Action Stamp:

1. Marking: No Exceptions Taken.

    a. Final Unrestricted Release: When submittals are marked as “No Exceptions Taken”, Work covered by submittal may proceed provided it complies with Contract Documents. Acceptance of Work depends on that compliance.

2. Marking: Make Corrections Noted.

    a. Final-But-Restricted Release: When submittals are marked as “Make Corrections Noted Exceptions”, Work covered by submittal may proceed provided it complies with ENGINEER’S notations or corrections on submittal and with Contract Documents. Acceptance of Work depends on that compliance. Resubmittal not required.

3. Marking: Rejected; See Remarks.

    a. Submittal Not Accepted: When submittals are marked as “Rejected; See Remarks”, do not proceed with Work covered by submittal. Work covered by submittal does not comply with Contract Documents.
    b. Prepare new submittal for different material or equipment supplier or different product line or material of same supplier complying with Contract Documents.

4. Marking: Revise and Resubmit.

    a. Returned for Resubmittal: When submittals are marked as “Revise and Resubmit,” do not proceed with Work covered by submittal. Do not permit Work covered by submittals to be used at Project site or elsewhere where Work is in progress.
    b. Revise submittal or prepare new submittal in accordance with ENGINEER’S notations in accordance with resubmittal requirements of this section. Resubmit without delay. Repeat if required to obtain different action marking.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

* * * END OF SECTION * * *

SECTION 01 45 50
TESTING LABORATORY SERVICES

PART 1 GENERAL

1.01 PERFORMANCE REQUIREMENTS

A. Employ and pay for services of testing laboratory approved by OWNER to perform specified services and testing as described in Specifications.

1. Employment of laboratory shall, in no way, relieve CONTRACTOR'S obligations to perform Work of Contract.

B. Related Requirements in Other Parts of Contract Documents:

1. Inspections and testing required by laws, ordinances, rules, regulations, orders or approvals of public authorities, Conditions of Contract.

1.02 QUALIFICATION OF LABORATORY

A. Meet basic requirements of ASTM E329.

B. Authorized to operate in state in which Project is located.

C. Testing Equipment:

1. Calibrated at reasonable intervals by devices of accuracy traceable to either:

a. National Bureau of Standards.
b. Accepted values of natural physical constants.

1.03 LABORATORY DUTIES

A. Cooperate with ENGINEER and CONTRACTOR; provide qualified personnel to perform Work after due Notice to Proceed.

B. Perform specified inspections, secure samples, and test materials.

1. Comply with specified standards.
2. Ascertain compliance of materials with Contract Documents.

C. Promptly notify ENGINEER and CONTRACTOR of observed irregularities or deficiencies of Work, equipment or material.

D. Promptly submit written report of each test and inspection; one copy each to ENGINEER, OWNER, material supplier and CONTRACTOR, and one copy to record document file. Each report shall include following:

1. Date issued.
2. Project title and number.
3. Testing laboratory name, address and telephone number.
4. Name and signature of laboratory inspector.
5. Date and time of sampling or inspection.
6. Record of temperature and weather conditions if test performed in field.
7. Date of test.

8. Identification of product and Specification section.
9. Location of sample or test in Project.
10. Type of inspection or test.
11. Results of tests and compliance with Contract Documents.
12. Interpretation of test results, when requested by ENGINEER.

E. Perform additional tests as required by ENGINEER or CONTRACTOR.

1.04 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY

A. Laboratory is not authorized to:

1. Release, revoke, alter or enlarge on requirements of Contract Documents.
2. Approve or accept any portion of Work.
3. Perform duties of CONTRACTOR.

1.05 CONTRACTOR'S RESPONSIBILITIES

A. Cooperate with laboratory personnel and provide access to Work.

B. Provide to laboratory preliminary design mix proposed to be used for concrete and other material mixes which require control by testing laboratory.

C. Furnish copies of product test reports.

D. Furnish incidental labor and facilities.

1. Provide access to Work to be tested.
2. Obtain and handle samples at Project site or at source of product to be tested.
3. Facilitate inspections and tests.
4. Store and cure test samples.

E. Notify laboratory and ENGINEER sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.

1. When tests or inspections cannot be performed after such notice, reimburse OWNER for laboratory personnel and travel expenses incurred due to CONTRACTOR'S negligence.

F. Make arrangements with laboratory and pay for additional samples and tests required for CONTRACTOR'S convenience.

G. Employ and pay for services of testing laboratory to perform additional inspections, sampling and testing required when initial tests indicate Work does not comply with Contract Documents.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

* * * END OF SECTION * * *

SECTION 01 45 51
TESTING

PART 1 GENERAL

1.01 SUMMARY

A. Measurement and Payment:

1. Testing and furnishing of samples required to be provided by CONTRACTOR will not be paid for separately but shall be considered incidental to unit price of item to which it applies unless called for specifically to be paid separately in the Bid Items.

B. CONTRACTOR shall employ services of independent testing laboratory approved by OWNER to perform testing as described in the SUDAS specifications.

C. CONTRACTOR shall cooperate with ENGINEER to facilitate execution of assurance testing deemed necessary by ENGINEER.

1.02 SYSTEM DESCRIPTION

A. Production Testing:

1. Materials produced off-site and incorporated into Work shall comply with the Contract Documents.

a. Provide certifications of compliance.

2. On-site testing to confirm that material or equipment comply with Contract Document shall be provided by CONTRACTOR.

a. On-site testing to confirm that methods used by CONTRACTOR result in conformance with Contract Documents shall be provided by CONTRACTOR. ENGINEER will not perform production testing, but CONTRACTOR shall inform ENGINEER of production testing schedule so ENGINEER, at ENGINEER'S option, may observe testing.
b. CONTRACTOR is responsible that materials and completed construction comply with Contract Documents.

B. Assurance Testing:

1. Testing performed on-site by ENGINEER or an independent testing laboratory to determine if CONTRACTOR'S work or materials comply with Contract Documents.
2. Materials used for assurance testing shall be furnished by CONTRACTOR. CONTRACTOR shall provide labor and equipment needed to provide access to areas for assurance testing. This includes, but is not limited to, excavation of backfill to various depths for testing.
3. Density of subgrades, trench backfill and crushed stone bases/surfaces.

a. CONTRACTOR shall employ an independent testing laboratory to gather, test and report on representative earth samples and to provide results of Standard Proctor Density test in accordance with Iowa DOT Materials Laboratory Test Method 103. Samples tested shall be representative of earth materials used for backfilling structures and trenches.
b. CONTRACTOR shall employ an independent testing laboratory to gather representative crushed stone base/surface materials and provide the results of Standard Proctor Density test in accordance with Iowa DOT Materials Laboratory Test Method 103.

C. Results of assurance testing or production testing provided by CONTRACTOR shall, in no way, relieve CONTRACTOR of obligations to comply with Contract Documents.

PART 2 MATERIALS

(Not Used)

PART 3 EXECUTION

(Not Used)

* * * END OF SECTION * * *

SECTION 01 50 00
TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES

PART 1 GENERAL

1.01 QUALITY ASSURANCE

A. Items provided under this section shall be listed or labeled by UL or other Nationally Recognized Testing Laboratory (NRTL).

1. Term “RTL” shall be as defined in OSHA Regulation 1910.7.
2. Terms “listed” and “labeled” shall be as defined in National Electrical Code (NEC), Article 100.

B. Regulatory Requirements:

1. National Electrical Code (NEC): Components and installation shall comply with National Fire Protection Association (NFPA) 70.

C. Comply with federal, state, and local codes and regulations, and with utility company requirements.

PART 2 PRODUCTS

2.01 TEMPORARY ELECTRICITY AND LIGHTING

A. General:

1. Temporary lighting shall be sufficient to enable CONTRACTOR and Subcontractors to complete Work and enable ENGINEER to observe Work as it is being performed. Illumination shall meet or exceed state code requirements.

B. Responsibilities:

1. Provide, maintain, and remove temporary electric service facilities.
2. Facilities exposed to weather shall be weatherproof type and electrical equipment enclosure locked to prevent access by unauthorized personnel.
3. Pay for installation of temporary services including poles, transformer charges, and metering.
4. Arrange with local electric utility for temporary electric service subject to their requirements and approval.
5. Register temporary meter in CONTRACTOR’S name.
6. Provide and maintain lamps, wiring, switches, sockets, and similar equipment required for temporary lighting and small power tools.
7. Pay for electrical energy consumed for construction purposes including operation of ventilating equipment for heating of buildings, and for testing and operating of equipment after permanent wiring has been installed, until final acceptance by ENGINEER or until occupancy by OWNER.
8. Provide and pay for service to temporary offices.

2.02 TEMPORARY TELEPHONE SERVICE

A. Arrange with local telephone company to provide telephone service throughout duration of Work.

B. Locate telephone in Project construction office for local calls.

2.03 WATER FOR CONSTRUCTION

A. Water is not available at Project site. Make arrangements and pay costs to obtain suitable water.

2.04 WATER FOR TESTING

A. CONTRACTOR shall provide water necessary for testing prior to acceptance of Work, unless specifically stated otherwise in Specifications for equipment, system or facility.

2.05 SANITARY FACILITIES

A. No sanitary facilities are available on site.

B. Provide temporary sanitary toilet facilities conforming to state and local health and sanitation regulations, in sufficient number for use of ENGINEER'S, CONTRACTOR'S and Subcontractor's employees.

C. Maintain in sanitary condition and provide supply of toilet paper.

2.06 TEMPORARY FIRE PROTECTION

A. Provide and maintain in working order, minimum of one fire extinguisher at each work location, and such other fire protective equipment and devices as would be reasonably effective in extinguishing fires during early stages by personnel at Project site.

2.07 TEMPORARY SITE AND OTHER ROADS

A. Construct and maintain temporary site roadways in snow free, ice free, drivable condition necessary to carry out construction operations.

B. Maintain OWNER'S existing on-site roads and public roads used during construction free from accumulations of dirt, mud and construction debris resulting from construction operations. Roads shall be considered "maintained" when material has been removed by sweeper.

2.08 SECURITY

A. Security will not be provided by OWNER.

B. CONTRACTOR shall be responsible for loss or injury to persons or property where Work is involved, and shall provide security and take precautionary measures to protect CONTRACTOR'S and OWNER'S interests.

2.09 TEMPORARY PARKING

A. There shall be no parking on Project site outside of active work area unless designated or approved by OWNER.

B. Make arrangements and pay for parking area for employee's vehicles.

2.10 TEMPORARY FENCING

A. Provide temporary fencing sufficient to prevent trespass by CONTRACTOR'S and Subcontractor's employees and Suppliers onto private property and by public onto construction site.

B. Materials shall be sufficiently durable to be effective for Contract Time.

2.11 FIELD OFFICES AND BUILDINGS

A. If required by CONTRACTOR, erect where designated by OWNER, and maintain in good condition, temporary field office, tool, and storage building(s) or trailer(s) for CONTRACTOR'S use.

1. Tool storage building(s) or trailer(s) shall be of ample size to provide space for tools and equipment.
2. Building(s) or trailer (s) shall be neat and well constructed, surfaced with plywood, drop siding, masonite, or other similar material, well painted and void of advertisements.

PART 3 EXECUTION

3.01 GENERAL

A. Comply with applicable requirements specified in Divisions 23 and 26.

B. Maintain and operate systems to ensure continuous service.

C. Modify and extend systems as Work progress requires.

3.02 REMOVAL AND RESTORATION

A. Completely remove temporary materials, equipment, signs, and structures when no longer required.

B. In unfinished areas, clean and repair damage caused by temporary installations or use of temporary facilities, restore drainage, and evenly grade, seed or plant as necessary to provide appearance equal to or better than original.

C. In finished areas, restore existing or permanent facilities used for temporary services to specified or original condition.

3.03 DAMAGE TO EXISTING PROPERTY

A. CONTRACTOR is responsible for replacing or repairing damage to existing buildings, structures, sidewalks, roads, parking lot surfacing, and other existing assets.

B. CONTRACTOR shall have option of having OWNER contract for such Work and have cost deducted from Contract price.

* * * END OF SECTION * * *

SECTION 01 57 23
PROTECTION OF ENVIRONMENT

PART 1 GENERAL

1.01 SUMMARY

A. CONTRACTOR, in executing Work, shall maintain Work areas on- and off-site free from environmental pollution that would be in violation of federal, state or local regulations.

B. Payment:

1. Consider Work specified in this section incidental and include payment as part of appropriate lump sum or unit prices specified in Bid Form.

1.02 PROTECTION OF STORM SEWERS

A. Prevent construction material, pavement, concrete, earth or other debris from entering existing storm sewer or sewer structure.

1.03 PROTECTION OF WATERWAYS

A. Observe rules and regulations of State of Iowa and agencies of U.S. government prohibiting pollution of lakes, streams, rivers or wetlands by dumping of refuse, rubbish, dredge material, discharge of wastewater, or debris.

1. Permits obtained by OWNER are contained in Project Forms.
2. Other permits shall be obtained by CONTRACTOR at CONTRACTOR'S cost.

B. Provide holding ponds or approved method which will divert flows, including storm flows and flows created by construction activity, to prevent excessive silting of waterways or flooding damage to property.

C. Comply with Section 9040 of the SUDAS Specifications.

D. CONTRACTOR shall comply with Iowa Department of Natural Resources National Pollution Discharge Elimination System, (NPDES) Storm Water permit for construction site activities. As a minimum, CONTRACTOR is required to prepare, submit, and comply with following.

1. Notice of Intent (NOI).
2. Storm Water Pollution Prevention Plan (SWPPP).

1.04 DISPOSAL OF EXCESS EXCAVATED AND OTHER WASTE MATERIALS

A. Excess excavated material not required or not suitable for backfill and other waste material shall be disposed of in accordance with local regulatory requirements.

B. Provide watertight conveyance for liquid, semi-liquid or saturated solids which tend to bleed during transport. Liquid loss from transported materials is not permitted, whether being delivered to construction site or hauled away for disposal. Fluid materials hauled for disposal must be specifically acceptable at selected disposal site.

1.05 PROTECTION OF AIR QUALITY

A. Minimize air pollution by requiring use of properly operating combustion emission control devices on construction vehicles and equipment and encourage shutdown of motorized equipment not in use.

B. Do not burn trash on construction site.

C. If temporary heating devices are necessary for protection of Work, they shall not cause air pollution.

1.06 THAWING OF FROZEN GROUND

A. Obtain permit from appropriate local authority before building fire to thaw frozen ground, and comply with conditions of permit.

B. Use fuel which does not create air pollution or inconvenience public.

C. ENGINEER reserves right to prohibit fires for thawing whenever deemed undesirable.

1.07 USE OF CHEMICALS

A. Chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant or of other classification, shall be approved by U.S. EPA or U.S. Department of Agriculture or any other applicable regulatory agency.

B. Use and disposal of chemicals and residues shall comply with manufacturer's instructions.

1.08 NOISE CONTROL

A. Conduct operations to cause least annoyance to residents in vicinity of Work, and comply with applicable local ordinances.

B. Equip compressors, hoists, and other apparatus with mechanical devices necessary to minimize noise and dust. Equip compressors with silencers on intake lines.

C. Equip gasoline or oil-operated equipment with silencers or mufflers on intake and exhaust lines.

D. Line storage bins and hoppers with material that will deaden sounds.

E. Conduct operation of dumping rock and of carrying rock away in trucks so as to cause minimum of noise and dust.

F. Route vehicles carrying rock, concrete or other material over such streets as will cause least annoyance to public and do not operate on public streets between hours of 6:00 p.m. and 7:00 a.m., or on Saturdays, Sundays or legal holidays unless approved by OWNER.

1.09 DUST CONTROL

A. Due to close geographic location of Project to other off-site facilities and residential homes, take special care in providing and maintaining temporary site roadways, OWNER'S existing roads, and public roads used during construction operations in clean, dust free condition.

B. Comply with local environmental regulations for dust control. If CONTRACTOR'S dust control measures are considered inadequate by ENGINEER, ENGINEER may require CONTRACTOR to take additional dust control measures.

1.10 FUELS AND LUBRICANTS

A. Comply with local, state and federal regulations concerning transportation and storage of fuels and lubricants.

B. Fuel storage area and fuel equipment shall be approved by OWNER prior to installation. Submit containment provisions to OWNER for approval.

C. Report spills or leaks from fueling equipment or construction equipment to OWNER and cleanup as required.

D. OWNER may require CONTRACTOR to remove damaged or leaking equipment from Project site.

1.01 MAINTAINING FLOWS:

A. The pump station is to remain in operation during the entire period of construction. Contractor is responsible for any bypass pumping that may be required.

B. It is essential to the operation of the existing sewerage system that there be no interruption in the flow of sewage. To this end, the Contractor shall, at his own expense, provide, maintain and operate all temporary facilities such as dams, pumping equipment, conduits, and all other labor and equipment necessary to intercept the sewage flow before it reaches the points where it would interfere with his work, carry it past his work and return it to the existing sewer below his work.

C. The Contractor shall, at his own cost, provide all the flow of sewers, drains and water courses interrupted during the progress of the work, and shall immediately cart away and remove all offensive matter. The entire procedure of maintaining existing flow shall be fully discussed with the Engineer well in advance of the interruption of any flow.

1.11 PILE AND SHEATHING DRIVING NOISE

A. If piles are required, use only pile driver hammers with mufflers capable of significantly reducing noise and use barriers or shielding techniques, as necessary, to comply with applicable federal, state, and local ordinances.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

* * * END OF SECTION * * *

SECTION 01 60 10
MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01 SUBSTITUTIONS AND "OR EQUAL" ITEMS

A. General:

1. When equipment or material is specified by naming 1 or more equipment manufacturers or material suppliers and followed by words "no substitution permitted" or similar wording, CONTRACTOR shall provide one of named manufacturers or suppliers.

B. Substitutions:

1. For material or equipment specified by naming one or more equipment manufacturers or material suppliers and not followed by words "or equal," CONTRACTOR shall submit request for substitution in accordance with Section 01 33 00 for equipment or manufacturer not specifically named.
2. CONTRACTOR'S requests for changes in equipment and materials from those required by Contract Documents are considered "requests for substitutions" and subject to CONTRACTOR'S representations and review provisions of Contract Documents when one or more of following conditions are satisfied.

a. Where required equipment or material cannot be provided within Contract Time, but not as result of CONTRACTOR'S failure to pursue Work promptly or coordinate various activities properly.
b. Where packaging of several items of equipment from single source will provide maintenance and coordination advantages to OWNER.
c. When CONTRACTOR proposes to provide substitute equipment or material to provide OWNER with cost savings.

C. "Or Equal": For material or equipment specified by naming one or more equipment manufacturer followed by the words "or equal", CONTRACTOR shall submit in accordance with Section 01 33 00 for equipment or manufacturer not specifically named. ENGINEER will review submittal in accordance with Section 01 33 00.

D. Conditions which are not substitutions:

1. Requirements for substitutions do not apply to CONTRACTOR options on materials and equipment provided for in Specifications.
2. Revisions to Contract Documents, where requested by OWNER or ENGINEER, are "changes" not "substitutions."
3. CONTRACTOR'S determination of and compliance with governing regulations and orders issued by governing authorities do not constitute substitutions or basis for Change Orders, except as provided for in Contract Documents.

1.02 REUSE OF EXISTING MATERIAL

A. Except as specifically indicated or specified, do not use materials and equipment removed from existing structure(s) in new Work.

B. For material and equipment specifically indicated or specified to be reused in Work:

1. Use special care in removal, handling, storage, and reinstallation to ensure proper function in completed Work.
2. Arrange and pay for transportation, storage, and handling of products which require off-site storage, restoration or renovation.
3. Off-site storage areas and buildings shall conform to requirements of this section.

1.03 MANUFACTURER'S INSTRUCTIONS

A. Installation of equipment and materials shall comply with manufacturer's instructions. Obtain and distribute printed copies of such instructions to parties involved in installation, including 2 copies to ENGINEER.

1. Maintain one set of complete instructions at Site during installation and until completion of Work.

B. Handle, store, install, connect, clean, condition, and adjust materials and equipment in accordance with manufacturer's written instructions and in conformance with Specifications.

1. If Site conditions or specified requirements conflict with manufacturer's instructions, consult ENGINEER for further instructions. Do not proceed with Work without written instructions.

1.04 TRANSPORTATION AND HANDLING

A. Arrange deliveries of materials and equipment in accordance with construction Progress Schedule; coordinate to avoid conflict with Work and conditions at site.

1. Deliver materials and equipment in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
2. Protect bright machined surfaces, such as shafts and valve faces, with heavy coat of grease prior to shipment.
3. Upon delivery, inspect shipments to ensure compliance with Contract Documents and approved submittals, and materials and equipment have been protected and are undamaged.

B. Provide equipment and personnel to handle materials and equipment by methods recommended by manufacturer to prevent soiling or damage to materials or equipment, or their packaging.

1.05 STORAGE, PROTECTION AND MAINTENANCE

A. OWNER assumes no responsibility for damage or loss due to storage of materials and equipment.

B. Interior Storage:

1. Store with seals and labels intact and legible.
2. Store materials and equipment subject to damage by elements in weathertight enclosures.
3. Maintain temperature and humidity within ranges required by manufacturer's instructions.

C. Exterior Storage:

1. Store fabricated materials and equipment above ground, on blocking or skids, to prevent soiling or staining. Cover materials and equipment subject to deterioration with impervious sheet coverings. Provide ventilation to avoid condensation.
2. Store loose granular materials in well-drained area on solid surfaces to prevent mixing with foreign matter.
3. Store materials such as pipe, reinforcing steel, structural steel, and equipment on pallets or racks, off ground.

D. Inspection and Maintenance:

1. Arrange storage to provide easy access for inspection, maintenance, and inventory.
2. Make periodic inspections of stored materials and equipment to ensure materials and equipment maintained under specified conditions are free from damage or deterioration, and coverings are in-place and in condition to provide required protection.
3. Perform maintenance on stored material and equipment in accordance with manufacturer's written instructions and in presence of OWNER or ENGINEER.

    a. Notify ENGINEER 24 hrs before performance of maintenance.
    b. Submit report of completed maintenance and condition of coverings to ENGINEER with each Application for Payment.
    c. Failure to perform maintenance, to notify ENGINEER of intent to perform maintenance or to submit maintenance report may result in rejection of material or equipment.

E. Assume responsibility for protection of completed construction and repair and restore damage to completed Work equal to original condition.

F. Wheeling of loads over finished floors, with or without plank protection, is not permitted in anything except rubber-tired wheelbarrows, buggies, trucks or dollies. This applies to finished floors and exposed concrete floors, as well as those covered with composition tile or other applied surfacing.

G. Where structural concrete is also finished surface, avoid marking or damaging surface.

1.06 SPECIAL TOOLS, SPARE PARTS AND LUBRICATING EQUIPMENT

A. Furnish, in accordance with manufacturer's recommendations, special tools required for checking, testing, parts replacement, and maintenance. Special tools are those specially designed or adapted for use on parts of equipment, and not customarily and routinely carried by maintenance mechanics.

1. Tools and lubricating equipment shall be of quality compatible to equipment manufacturer has furnished.

B. Deliver to OWNER before operating personnel have been instructed in operation, repair and maintenance of equipment and unit is placed in operation.

C. Mark spare parts and special tools to identify associated equipment by name, equipment, and part number. Package parts for protection against damage during shipping, handling and storage. Ship spare parts and special tools in boxes marked to indicate contents.

1.07 LUBRICATION

A. Where lubrication is required for proper operation of equipment, incorporate necessary and proper provisions in equipment in accordance with manufacturer's requirements. Where possible, lubrication shall be automated and positive.

B. Where oil is used, reservoir shall be of sufficient capacity to supply unit for 24 hr period.

PART 2 PRODUCTS

2.01 MATERIALS AND EQUIPMENT

A. Material and Equipment Incorporated into Work:

1. Conform to applicable specifications and standards.
2. Comply with size, make, type, and quality specified or as approved by Submittal.

B. Manufactured and Fabricated Materials and Equipment:

1. Design, fabricate, and assemble in accordance with engineering and shop practices standard with industry.
2. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
3. Two or more items of same kind shall be identical, by same manufacturer.
4. Material and equipment shall be suitable for service conditions.
5. Equipment capabilities, sizes, and dimensions shown or specified shall be adhered to, unless variations are specifically approved, in writing.
6. Equipment shall be adapted to best economy in power consumption and maintenance. Parts and components shall be proportioned for stresses occurring during continuous or intermittent operation, and for additional stresses occurring during fabrication or installation.
7. Design so working parts are readily accessible for inspection and repair, easily duplicated, and replaced.

C. Do not use material or equipment for purpose other than for which it is designed or specified.

PART 3 EXECUTION

3.01 FIELD QUALITY CONTROL; INSTALLATION, INSTRUCTIONAL, AND POST STARTUP SERVICES

A. General:

1. Provide on-site services of Supplier's representatives for equipment provided by CONTRACTOR during construction, installation, equipment startup, and training of OWNER'S personnel for equipment or plant operation as specifically required in Specification section for equipment or system.
2. Include and pay costs for Supplier's services.
3. Work day is defined as 8 hr period during OWNER'S or CONTRACTOR'S typical calendar day. Work day for purposes of this section does not include travel to or from Site.
4. Specifications include minimum mandays to provide basis for bidding. If additional time is required to perform services CONTRACTOR shall include that time in Contract Price.

B. Installation Services:

1. Where installation services are called for in Specifications, provide competent and experienced technical representatives of manufacturers of material or equipment and systems to resolve assembly or installation procedures attributable to, or associated with, equipment furnished.
2. After equipment is installed, representatives shall perform initial equipment and system adjustment and calibration to conform to Specifications and manufacturer's requirements and instructions.
3. Provide "Certificate of Installation Services" stating proper adjustments have been made to equipment or system and equipment or system is ready for startup and system demonstration. Use form in Project Forms and furnish 2 copies to ENGINEER.

C. Instructional Services:

1. Do not start Instructional Services until Installation Services have been completed.

2. Where Instructional Services are called for in Specifications, provide competent and experienced technical representative of Supplier to provide detailed instructions to OWNER'S personnel for operation of equipment. Training services shall include operation and maintenance of instrumentation and equipment in classroom and on-site. Training shall include electrical, mechanical, and safety aspects of equipment.
3. Submit documentation identifying name of specific representative, factory authorization, and background of named individual(s) to conduct training. Submit information 30 days before scheduled training period for review and approval by ENGINEER.
4. Coordinate training periods with ENGINEER and OWNER and Supplier's representatives.

    a. No training shall be conducted unless instructor has been approved by ENGINEER.
    b. Notify ENGINEER at least 48 hrs before training sessions are to begin so ENGINEER can make arrangements with OWNER'S operating personnel.
    c. Reschedule canceled training sessions 48 hrs in advance.
    d. Failure of Supplier's or manufacturer's representative to appear for scheduled training, failure to notify ENGINEER 24 hrs in advance of need to cancel scheduled training or failure to arrive within 30 min of start of scheduled training shall result in reimbursement to OWNER for time lost by OWNER'S personnel in waiting for arrival of manufacturer's representative. Except in case of failure to arrive on time, time will not exceed 1 hr for each employee scheduled to receive training. Failure to arrive on time will be reimbursed by actual time late, up to 1 hr, after 1 hr training will be rescheduled.
    e. Failure of Supplier's or manufacturer's representative to appear for scheduled training, failure to notify ENGINEER 24 hrs in advance of need to cancel scheduled training or failure to arrive within 30 min of start of scheduled training shall result in reimbursement to OWNER for expenses and time incurred by ENGINEER in traveling and time spent on-site. Minimum time billed shall be 8 hrs.

5. Similar types of equipment differing in model, size or manufacturer shall require equal service time as stated in specific Specification section.
6. O&M data shall constitute basis of instruction.

    a. Review data contents with personnel in full detail to explain aspects of operations and maintenance.

7. Instructional Services shall be completed before start of system demonstration as required.
8. Provide "Certificate of Instructional Services", cosigned by OWNER and Supplier's representative, verifying training has been accomplished to satisfaction of each party. Use form in Project Forms and furnish 2 copies to ENGINEER.

* * * END OF SECTION * * *

CERTIFICATE OF INSTALLATION SERVICES
(Reference Specification Section 01 60 10)

Project _____

Equipment _____

Specification Section _____

Contract _____

I hereby certify the equipment supplier/manufacturer has inspected this equipment and that it has been properly installed, adjusted, and calibrated. I further certify this equipment may now be operated for test purposes and/or normal use.

MANUFACTURER'S REPRESENTATIVE

Signature _____ Date _____

Name (print) _____

Title _____

Representing _____

CONTRACTOR

Signature _____ Date _____

Name (print) _____

Title _____

This form shall be completed and submitted to ENGINEER prior to training of OWNER'S personnel.

CERTIFICATE OF INSTRUCTIONAL SERVICES
(Reference Specification Section 01 60 10)

Project _____

Equipment _____

Specification Section _____

Contract _____

I hereby certify that the equipment supplier/manufacturer has instructed OWNER'S personnel in the startup operation and maintenance of this equipment as required in the Specifications.

CONTRACTOR

Signature _____ Date _____

Name (print) _____

Title _____

OWNER

I hereby certify that my operating personnel received _ days instruction from _____ for startup, operation, and maintenance of this equipment.

Signature _____ Date _____

Name (print) _____

Title _____

Representing _____

COMMENTS:

CERTIFICATE OF POST STARTUP SERVICES
(Reference Specification Section 01 60 10)

Project _____

Equipment _____

Specification Section _____

Contract _____

I hereby certify that the equipment supplier/manufacturer has inspected this equipment, made adjustments and calibrations, and that it is operating in conformance with the design, Specification, and manufacturer's requirements. Notation of improper operation shall be detailed and recommendations made and attached to this form.

MANUFACTURER'S REPRESENTATIVE

Signature _____ Date _____

Name (print) _____

Title _____

Representing _____

CONTRACTOR

Signature _____ Date _____

Name (print) _____

Title _____

OWNER

I hereby certify that the equipment supplier/manufacturer has inspected this equipment and made adjustments and calibrations.

Signature _____ Date _____

Name (print) _____

Title _____

COMMENTS

This form shall be submitted to OWNER upon completion of 1-year reinspection as required by the Specifications.

SECTION 01 78 23
OPERATION AND MAINTENANCE (O&M) DATA

PART 1 GENERAL

1.01 SUMMARY

A. Compile data and related information in manuals appropriate for OWNER'S operation and maintenance (O&M) of each item of equipment identified in other Specification sections.

1.02 QUALITY ASSURANCE

A. Preparation of data shall be performed by personnel:

1. Trained and experienced in O&M of described equipment.
2. Familiar with requirements of this section.
3. Skilled as technical writer to extent required to communicate essential data.
4. Skilled as drafter competent to prepare required drawings.

1.03 FORM OF MANUALS

A. Components:

1. Size: 8-1/2 in. by 11 in., or 11 in. by 17 in. folded, with standard 3-hole punching.
2. Paper: 20-lb minimum, white, for typed pages.
3. Text: Manufacturer's printed data, or neatly typewritten. Handwritten data is not acceptable.
4. Drawings:

    a. Bind in with text.
    b. Fold larger drawings and place in clear plastic pockets punched for inserting into binder. Place identification on outside of each pocket.

B. Cover Label: Label each binder cover and spine with typed or printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and following:

1. Project title.
2. Name(s) of applicable building(s) or structure(s) as shown on Drawings in which equipment located.
3. Name of equipment as set forth in Contract Documents.
4. Specification section number for equipment as set forth in Contract Documents.

C. Binders:

1. Commercial quality D-Ring binder with durable and cleanable plastic covers. Paperboard and laminated paperboard covers are not acceptable.
2. Do not fill binders to more than 75% of capacity.
3. When multiple binders are used for an item of equipment, organize contents into related groupings. Each binder cover shall bear identification of specific contents.

1.03 SUBMITTAL SCHEDULE

A. Submit 3 printed copies and 1 electronic copy of complete O&M data, bound in binders bearing identification label, for review within 30 days after time CONTRACTOR receives approved Shop Drawings and other submittals for equipment from ENGINEER.

B. ENGINEER'S review and acceptance of O&M data will be only for conformance with requirements of this section, for form of submittal and organization of data and completeness of information provided, but not for technical content or coordination between individual suppliers of equipment or system(s).

C. CONTRACTOR shall review O&M submittal and complete Form 1, Contractor Submittal Form, attached to this section indicating requirements of this section have been met before submitting to ENGINEER. ENGINEER will reject submittals without completed Form 1.

D. ENGINEER will be sole judge of completeness of data.

1.04 PAYMENTS

A. Progress payment for equipment delivered, stored or installed under these Contract Documents will not be made until O&M data is approved by ENGINEER.

B. Progress payments for control systems packaged with equipment will not be made until O&M data incorporated into equipment and control system manual is approved by ENGINEER.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

3.01 GENERAL CONTENTS OF DATA

A. Each manual shall contain equipment data pertaining to not more than one Specification section number indicated in Contract Documents.

B. Title Sheet: First page in data listing following:

1. Title: "OPERATION AND MAINTENANCE INSTRUCTIONS."
2. Title of Project: As shown on Contract Documents.
3. Name(s) of applicable building(s) or structure(s) in which equipment is located.
4. Name of equipment as described in Contract Documents.
5. Specification section number for equipment.
6. CONTRACTOR'S name, address, and telephone number.
7. Subcontractor's name, address, and telephone number if equipment is provided by Subcontractor.
8. CONTRACTOR'S or Subcontractor's purchase order number, manufacturer's shop order number or other such numbers required for parts and service ordering.
9. Manufacturer's name, address, and telephone number.
10. Name, address, and telephone number for local source of supply for parts and service.

C. Equipment List: Immediately following title sheet containing following:

1. Completed Form 1, Contractor's Submittal Form.

D. Table of Contents: Immediately following equipment list. Arrange in logical, systematic order and shall include as minimum each tabbed divider. Each page shall be numbered.

E. Tabbed Dividers: Insert tabbed section dividers between each major section.

1. Provide title of section on each tab.
2. Provide table of contents for each tabbed section, arranged in systematic order.

F. Equipment Data Sheets: Provide catalog sheets showing configuration, manufacturer's specifications, models, options, and styles of equipment and major components being provided. Product data sheets will show project specific information with inapplicable information deleted by crossing out or removal. Include in tabbed section(s).

G. Text:

1. Include only those sheets applicable to Project.
2. Each sheet shall:

    a. Identify specific equipment or part installed.
    b. Identify text applicable to equipment or part installed.
    c. Do not include inapplicable information.

H. Drawings:

1. Supplement text with drawings to clearly illustrate following:

    a. Equipment and components.
    b. Relations of component parts of equipment and systems.
    c. Control and flow diagrams.

2. Actual drawings of equipment from manufacturer. "Typical" drawings are not acceptable, unless they accurately illustrate actual installation.

I. Specially written information, as required to supplement text for particular installation.

1. Provide explanation of interrelationships of equipment and components, and effects one component has on another or entire system.
2. Provide overall instructions and procedures for equipment tying in instructions and procedures for separate components into unified instructional package.
3. Provide glossary of special terms used by manufacturer.
4. Organize in consistent format under separate headings for different procedures.
5. Provide logical sequence of instructions for each procedure.

J. Copy of each warranty, bond or service contract issued.

1. Provide information sheet for OWNER'S personnel to explain following.

    a. Proper procedures in event of failure or malfunction to prevent voiding warranty.
    b. Instances affecting validity of warranties or bonds.

3.02 SPECIFIC DATA FOR EACH EQUIPMENT AND SYSTEMS

A. For each item of equipment and system include:

1. Completed Equipment Data Form typewritten on copy of Form 2 to Section 01 78 23.
2. Description of equipment and component parts:

    a. Function, normal operating characteristics, and limiting conditions.
    b. Performance curves, engineering data, and tests as applicable.
    c. Complete nomenclature and commercial number of replaceable parts.
    d. Complete nameplate data.

e. P&ID numbers for equipment as indicated on Drawings.

3. Operating Procedures:

   a. Startup, break-in, and normal operating instructions.
   b. Regulation, control, stopping, shutdown, and emergency instructions.
   c. Summer and winter operating instructions, as applicable.
   d. Special operating instructions.

4. Maintenance Procedures:

   a. Routine maintenance operations.
   b. Guide to troubleshooting.
   c. Disassembly, repair, and reassembly instructions.
   d. Alignment, adjusting, and checking instructions.

5. Servicing and Lubrication Schedule:

   a. List of lubricants required and quantity to be applied.
   b. Schedule of lubrication.
   c. Schedule for other routine maintenance.

6. Manufacturer's printed instructions regarding safety precautions for both (a) protection of personnel operating equipment and systems and (b) prevention of damage to equipment and systems.
7. Description of sequence of operation of controls.
8. Manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.

   a. Predicted life of parts subject to wear.
   b. Items recommended to be stocked as spare parts and quantities of same.

9. Approved control diagrams such as ladder diagrams, instrumentation loop diagrams, and electrical schematics as appropriate.
10. Bill of material.
11. Other data as required under applicable Specification sections.

B. Each electric and electronic system, as applicable to equipment such as switchgear, motor control centers, panel boards, switchboards, starters, breakers, and relays shall include:

1. Description of System and Component Parts:

   a. Function, normal operating characteristics, and limiting conditions.
   b. Performance curves, engineering data, rating tables, and tests as applicable.
   c. Complete nomenclature and commercial number of replaceable parts.
   d. Complete nameplate data.
   e. P&ID numbers for equipment as set forth on Drawings.

2. Circuit Directories of Panel Boards:

   a. Electrical service.
   b. Controls.
   c. Communications.

3. Complete instrumentation loop diagrams with tabulated listing of components in each control circuit or loop.

4. Operating Procedures:

    a. Routine and normal operating instructions.
    b. Sequences required.
    c. Special operating instructions.

5. Maintenance Procedures:

    a. Routine maintenance operations.
    b. Guide to troubleshooting.
    c. Disassembly, repair, and reassembly instructions.
    d. Adjustment and checking instructions.

6. Manufacturer's printed instructions regarding safety precautions for both (a) protection of personnel operating equipment and systems and (b) prevention of damage to equipment and systems.
7. List of original manufacturer's spare parts and recommended quantities maintained in storage.
8. Other data as required under pertinent sections of Specifications.

C. Prepare and include additional data when need for such data becomes apparent during instruction of OWNER'S personnel or as requested by OWNER.

FORM 1 TO SECTION 01 78 23 Page 1 of 5
CONTRACTOR SUBMITTAL FORM

TO: (Engineer) (Address) (City, State, Zip) (Attn:)		DATE:	
		SPECIFICATION SECTION TITLE:	
		SECTION NO.:	
		MANUFACTURER/ VENDOR:	
FROM: (Contractor) (Address) (City, State, Zip)		NO. OF COPIES SUBMITTED TO ENGINEER:	
		SIGNATURE OF CONTRACTOR:	

GENTLEMEN:
We have checked the O&M manual submittal dated _____, 20__, and have found it to be in accordance with the requirements of Specification Section 01 78 23 as noted below.

FORMAT

Size: 8-1/2 x 11 or 11 x 17
Paper: 20-lb minimum
Text: Printed data/neatly typed
Drawings: Standard size bound in text; in text-size labeled envelopes
Tabbed Section Dividers
Cover Label: Title
Project name
Building/structure ID
Equipment name
Specification section
Binders: Plastic Cover

FORM 1 TO SECTION 01 78 23 **Page 2 of 5**
CONTRACTOR SUBMITTAL FORM

Provided	Not Applicable	Page No.	
			GENERAL CONTENTS
			☐ One specification only
			☐ Title Page
			- Title
			- Project title
			- Building/structure ID
			- Equipment name
			- Specification section number
			- Contractor ID
			- Subcontractor ID
			- Purchase order data
			- Manufacturer ID
			- Service/parts supplier ID
			☐ Product List
			☐ Table of Contents
			☐ Tabbed Sections
			- Pertinent data sheets
			- Annotated as needed
			☐ Text
			- Pertinent to project
			- Annotated
			☐ Drawings
			- Illustrate product and components
			- Control and flow diagrams

FORM 1 TO SECTION 01 78 23 Page 3 of 5
CONTRACTOR SUBMITTAL FORM

Provided	Not Applicable	Page No.	
			GENERAL CONTENTS
			□ Special Information
			- Interrelationships of equipment and components
			- Instructions and procedures provided
			- Instructions organized in consistent format
			- Instructions in logical sequence
			- Glossary
			□ Warranty, Bond, Service Contract
			SPECIFIC CONTENTS (EQUIPMENT/SYSTEMS ONLY)
			□ Description of Unit and Components
			- Equipment functions
			- Normal operating characteristics
			- Limiting conditions
			- Performance curves
			- Engineering data
			- Test data
			- Replaceable parts list (with numbers)
			- Nameplate data
			- P&ID numbers
			□ Operating Procedures
			- Startup
			- Routine/normal operation
			- Regulation and control
			- Stopping and shutdown
			- Emergency

FORM 1 TO SECTION 01 78 23 **Page 4 of 5**
CONTRACTOR SUBMITTAL FORM

Provided	Not Applicable	Page No.	
SPECIFIC CONTENTS (EQUIPMENT/SYSTEMS ONLY)			
			□ Operating Procedures (continued)
			- Seasonal operation
			- Special instructions
			□ Maintenance Procedures
			- Routine/normal instructions
			- Troubleshooting guide
			- Disassembly/reassembly/repair
			□ Servicing and Lubrication
			- List of lubricants
			- Lubrication schedule
			- Maintenance schedule
			□ Safety Precautions/Features
			□ Sequence of Operation of Controls
			□ Assembly Drawings
			□ Parts List and Illustrations
			- Predicted life
			- Spare parts list
			□ Control Diagrams/Schematics
			□ Bill of Materials
			□ Completed Equipment Data Form per Specification
			□ Other Data as Required

FORM 1 TO SECTION 01 78 23 **Page 5 of 5**
CONTRACTOR SUBMITTAL FORM

Provided	Not Applicable	Page No.	
SPECIFIC CONTENTS (EQUIPMENT/SYSTEMS ONLY)			
			□ Description
			- Equipment functions
			- Normal operating characteristics
			- Performance curves
			- Engineering data
			- Test data
			- Replaceable parts list (with numbers)
			- Nameplate data
			- P&ID numbers
			□ Panel Board Directories
			- Electrical
			- Controls
			- Communications
			□ Instrumentation Loops
			- Diagrams
			- Components list each circuit/loop
			□ Maintenance Procedures
			- Routine/normal instructions
			- Troubleshooting guide
			- Disassembly/reassembly
			- Adjusting and checking
			□ Safety Precautions/Features
			□ Spare Parts List
			□ Additional Data

FORM 2 TO SECTION 01 78 23 **Page 1 of 4**
EQUIPMENT DATA FORM

PROJECT NAME			
CONTRACT NO.			
CONTRACTOR			
EQUIPMENT NO.		ASSET NO.*	
DESCRIPTION		MAINT. NO.*	
LOCATION			
MANUFACTURER			
PURCHASED FROM			
VENDOR ORDER NO.		PURCHASE $	
DATE OF PURCHASE			
LOCAL SUPPLIER			
ADDRESS			
PHONE NO.			
MODEL NO.			
NO. OF UNITS		SERIAL NOS.	

*By Owner

FORM 2 TO SECTION 01 78 23 **Page 2 of 4**
EQUIPMENT DATA FORM

NAMEPLATE DATA			
ELECTRIC MOTOR		**PUMP/HVAC UNIT**	
MANUFACTURER		MANUFACTURER	
TYPE	**[ ]** AC **[ ]** DC	TYPE	
HORSEPOWER		SIZE	
RPM		CAPACITY	
VOLTAGE		PRESSURE	
AMPERAGE		ROTATION	
PHASE		IMPELLER SIZE	
FRAME		IMPELLER MATERIAL	
DRIVE/REDUCER		**OTHER (I&C)**	
MANUFACTURER		MANUFACTURER	
TYPE	**[ ]** GEAR **[ ]** V-BELT **[ ]** CHAIN **[ ]** VARIDRIVE	TYPE SIZE	
SERVICE FACTOR		CAPACITY	
RATIO		RANGE	

FORM 2 TO SECTION 01 78 23 **Page 3 of 4**
EQUIPMENT DATA FORM

MAINTENANCE SUMMARY

EQUIPMENT NO.		ASSET NO.*	
DESCRIPTION		MAINT. NO.*	

MAINTENANCE OPERATION:	**FREQUENCY:**
List briefly each Maintenance Operation required and refer to specific information in Manufacturer's Manual, if applicable. Refer by symbol to "Lubricant List" for Lubrication Operation.	List required frequency of each maintenance operation.

*By Owner

FORM 2 TO SECTION 01 78 23 Page 4 of 4
EQUIPMENT DATA FORM

LUBRICANT/RECOMMENDED SPARE PARTS LIST

EQUIPMENT NO.		ASSET NO.*	
DESCRIPTION		MAINT. NO.*	

LUBRICANT LIST

REFERENCE SYMBOL	LUBRICANT TYPE (MILITARY STANDARD)	RECOMMENDED LUBRICANT AND MANUFACTURER
List symbols in "Maintenance Operation" (Page 3).	List general lubricant type.	List specific lubricant name, viscosity, and manufacturer.

RECOMMENDED SPARE PARTS LIST

PART NO. **	DESCRIPTION	UNIT	QUANTITY	UNIT COST

ADDITIONAL DATA AND REMARKS

* By Owner
** Identify parts provided by this contract with two asterisks.
Note: Attach additional sheets if necessary; identify each sheet at top with equipment number and description.

* * * END OF SECTION * * *

SECTION 01 78 39
PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 SUMMARY

A. Maintain at site one record copy of:

1. Drawings.
2. Project Manual.
3. Addenda.
4. Change orders and other modifications to Contract.
5. ENGINEER'S Field Orders, Work Change Directives, Written Amendments, or clarifications.
6. Returned Shop Drawings and other submittals.
7. Field test records.
8. Associated permits.

1.02 SUBMITTALS

A. At Substantial Completion:

1. Deliver 1 marked up set of Drawings to ENGINEER for use in preparation of record drawings.

B. Submit with transmittal letter containing following:

1. Date.
2. Project title and number.
3. CONTRACTOR'S name and address.
4. Title of record document.
5. Signature of CONTRACTOR or authorized representative.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

3.01 MAINTENANCE OF DOCUMENTS AND SAMPLES

A. Store record documents and samples on-site apart from documents used for construction.

1. Provide files and racks for storage of documents.
2. Provide secure storage space for storage of samples.

B. Maintain record documents in clean, dry, legible condition and in good order. Do not use record documents for construction purposes.

C. Make record documents and samples available for inspection by ENGINEER or OWNER.

D. Failure to properly maintain record documents may be reason to delay portion of progress payments until records comply with Contract Documents.

3.02 RECORD DOCUMENTS

A. General:

1. Maintain 1 complete set of Drawings and Project Manual, including Addenda, legibly annotated to show changes made during construction.
2. Label each document “PROJECT RECORD” in neat, large printed letters.
3. Record information concurrently with construction progress:

    a. Do not conceal Work until information is recorded.
    b. Record changes made by Field Order, Change Order or Work Directive Change and identify document number.

4. Give particular attention to concealed equipment and materials that would be difficult to measure and record at later date.

B. Drawings:

1. Graphically depict changes by modifying or adding to plans, details, sections, elevations, or schedules.
2. Make changes on each sheet affected by changes.
3. Dimensions:

    a. Depths of various elements of foundation in relation to finish first floor datum.
    b. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.

4. Location of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of structure.
5. Details not on original Drawings.
6. Location and identification of exposed interior piping, including those shown schematically on Drawings.
7. Size of equipment and location including connections.
8. Electrical and Instrumentation:

    a. Horizontal and vertical locations and size of underground cable, conduit, and duct runs dimensioned from established building lines.
    b. Plan location and size of interior concealed and exposed feeders.
    c. Size and location of access panels.
    d. Variations from original Drawings.

C. Specifications:

1. Mark Specification sections to show substantial variations in actual Work performed in comparison with text of Specifications and modifications.
2. Include variations in products delivered to site and from manufacturer’s installation instructions and recommendations.
3. Give particular attention to substitutions and selection of options and similar information.
4. Note related record drawing information and Product Data.

* * * END OF SECTION * * *

SECTION 03 01 30
PATCHING MORTAR

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Polymer modified, cementitious, fast setting, mortar for repair of concrete surfaces.

1.02 SUBMITTALS

A. Product Data:

1. Manufacturer's literature.

B. Submit in accordance with Section 01 33 00.

PART 2 PRODUCTS

2.01 MATERIALS

A. Manufacturers:

1. Sikatop OR SikaQuick VOH, by Sika Corporation.
2. Duratop, by L&M Construction Chemicals.

B. Polymer modified cementitious system consisting of 2 components.

1. Component A: Liquid polymer emulsion of acrylic copolymer base and additives.
2. Component B: Blend of selected Portland cements, specially graded aggregates, organic accelerator, and admixtures for controlling setting time, water reducers for workability, and corrosion inhibitor.
3. System shall not contain chlorides, nitrates, added gypsum, added lime or high alumina cements. System shall be noncombustible, before or after cure.
4. Color: Concrete gray.
5. Minimum Compressive Strength: 5,000 psi.
6. Bond Strength: 100% concrete substrate failure (pull off method), minimum 400 psi.
7. System shall not produce vapor barrier, shall be thermally compatible with concrete, and freeze-thaw resistant.

PART 3 EXECUTION

3.01 PREPARATION

A. Prepare surface in accordance with manufacturer's written recommendations and Section 03 30 00.

3.02 APPLICATION

A. Apply and cure patching mortar in accordance with manufacturer's written recommendations.

* * * END OF SECTION * * *

SECTION 03 20 00
CONCRETE REINFORCEMENT

PART 1 GENERAL

1.01 SUBMITTALS

A. Shop Drawings:

1. Conform to ACI SP-66 showing bending diagrams; assembly diagrams; location diagrams; splicing and laps of bars, shapes, and dimensions; and details for bar reinforcing, stirrup spacing, accessories, and openings.
2. Coordinate bar splicing and placement with CONTRACTOR'S concrete placing schedule and joint locations.
3. Submit with construction joint submittals required in Section 03 30 00.

B. Submit in accordance with Section 01 33 00.

1.02 DELIVERY, STORAGE, AND HANDLING

A. Store reinforcing steel on supports above ground; cover and keep clean.

PART 2 PRODUCTS

2.01 MATERIALS

A. Steel Reinforcing Bars:

1. Deformed bars conforming to ASTM A615, Grade 60.

B. Reinforcing Supports:

1. Shall have all plastic or stainless steel supports.

2.02 FABRICATION

A. Fabricate to schedules and details on Drawings and in accordance with ACI 318.

PART 3 EXECUTION

3.01 PLACEMENT

A. Placement of reinforcing steel shall be approved by ENGINEER before covered with concrete.

B. Correct displacement of reinforcement prior to and during concrete pouring operations. Maintain clear cover as noted on Drawings. Tolerances shall be in accordance with ACI 117 and ACI 318, unless noted otherwise.

C. Support reinforcing steel in accordance with CRSI “Placing Reinforcing Bars” with maximum spacing of 4 ft 0 in.

D. Tie reinforcing steel at intersections in accordance with CRSI “Placing Reinforcing Bars.”

1. Maximum Tie Spacing for Footings and Walls: Every third intersection or 3 ft 0 in.

2. Maximum Spacing for Slabs and Other Work: Every fourth intersection or 3 ft 0 in.
3. Tie each dowel in-place.

E. Locate reinforcing to avoid interference with items drilled in later, such as concrete anchors.

F. Reinforcement shall be continuous through construction joints.

G. Reinforcement may be spliced at construction joints provided that entire lap is placed within only 1 concrete pour.

H. Use concrete brick for supporting bottom mat reinforcing on grade. Use bolsters or chairs supported on concrete brick or tied to bottom mat for supporting upper reinforcing mat on grade. Use bolsters or chairs for supporting reinforcing on mud slabs and forming.

I. Dowel bar splicer systems may be substituted for dowels at CONTRACTOR'S option when approved by ENGINEER.

J. Do not field bend bars, including bars partially embedded in concrete unless indicated.

K. Do not place bars having kinks and bends other than shown on approved Shop Drawings.

L. Welding reinforcement is prohibited.

M. Reinforcement shall be clean and free from loose mill scale, dirt, grease, oil, form release agent, dried concrete or any material reducing bond with concrete.

* * * END OF SECTION * * *

SECTION 03 30 00
CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SYSTEM DESCRIPTION

A. Tolerances:

1. Conform to requirements of ACI 117.
2. Pitch floor to floor drains minimum of 1/8 in./ft or as shown on Drawings. Minimum thickness of slabs and depth of beams shall be as dimensioned on Drawings. Pitch bottom of slab or beam to match top slope of slab or beam to maintain thickness or depth noted. As an alternate, bottom of slab or beam may be poured level provided that minimum thickness or depth is maintained.

1.02 SUBMITTALS

A. Shop Drawings:

1. Construction Joints: Sequence of placing concrete and location and details of joints, openings, and embedded items not shown on Drawings. Coordinate sequence of placement and joint location with reinforcement Shop Drawings. Submit with reinforcement submittals required in Section 03 20 00.
2. Verification of Mix Design:

a. Proposed mix design for each class of concrete to be used as specified using designations indicated. Provide dry weight of cement, saturated surface dry weight of coarse and fine aggregates, brand name and quantity of admixtures when applicable, fly ash when applicable, gallons of water required for 1 cu yd of concrete, and chloride ion content.
b. Submit with admixture product data and miscellaneous submittals required herein.
c. Mix design shall be approved by ENGINEER before concrete is delivered to site.

B. Product Data:

1. Curing Compound and Sealers Proposed rate of coverage and manufacturer's literature indicating conformance with these Specifications.
2. Concrete Admixtures:

a. Manufacturer's literature.
b. Submit with mix design.

3. High Range Water Reducers:

a. Name of product and manufacturer's literature.
b. Intended use area.
c. Submit with mix design.

C. Test Results:

1. Concrete test results.
2. With each load of concrete delivered, provide duplicate delivery tickets, one for CONTRACTOR and one for ENGINEER, with following information.

a. Date and serial number of ticket.

b. Name of ready mixed concrete plant, operator, and job location.
c. Type of cement, admixtures, if any, and brand name.
d. Cement content, in bags/cu yd of concrete, and mix design.
e. Truck number, time loaded, and name of dispatcher.
f. Amount of concrete in load, cu yds, delivered.
g. Maximum size aggregate.
h. Gallons of water added at job, if any, and slump of concrete after water was added.
i. Temperature of concrete at delivery.
j. Time unloaded.

D. Miscellaneous Submittals:

1. NRMCA certification or certificate stating plant and equipment complies with NRMCA requirements specified herein.
2. Statement by ready mix supplier giving source and material certificates of cement and fine and coarse aggregates, including sieve analysis, that will be used in manufacture of each class of concrete. Make no changes in sources of materials.
3. Fly Ash: Source and test reports showing fly ash in compliance with these Specifications. Reports shall be for actual fly ash to be used in Work.
4. Method of pumping concrete.
5. Submit with mix design.

E. Submit in accordance with Section 01 30 10.

1.03 QUALITY ASSURANCE

A. Plant Certification: Plant or concrete supplier shall comply with requirements of National Ready Mixed Concrete Association (NRMCA) certification plan as regards material storage and handling, batching equipment, central mixer, truck mixers with counters, agitators, nonagitating units, and ticketing system.

B. Concrete Testing: Testing shall be provided by CONTRACTOR in accordance with Section 01 45 50 and this section.

1. Conduct tests on sample material in accordance with applicable ASTM methods listed below.

a. Slump: ASTM C143.
b. Air-Entrainment: ASTM C231.
c. Compressive Strength Test: ASTM C31 (making and cylinders curing) and ASTM C39 (testing).

1.04 PROJECT/SITE CONDITIONS

A. Hot Weather:

1. Comply with ACI 305R.
2. Concrete temperature shall not exceed 90°F.
3. At air temperatures of 80°F or above, keep concrete as cool as possible during placement and curing.
4. When concrete temperatures exceed 80°F, water reducing, set retarding admixtures shall be used in accordance with manufacturer's recommendations.

B. Cold Weather:

1. Comply with ACI 306R.
2. Temperature of reinforcement, forms, fillers, and other materials in contact with concrete at time of placement shall not be less than 35°F. Preheat if temperature below 35°F.

3. Maintain air and forms in contact with concrete sections having minimum dimension less than 12 in. at temperature above 50°F for at least first 3 days and at temperature above 32°F for remainder of specified curing period.
4. Maintain air and forms in contact with concrete in more massive sections at temperature above 40°F for at least first 3 days and at temperature above 32°F for remainder of specified curing period.

PART 2 PRODUCTS

2.01 MATERIALS

A. Portland Cement:

1. ASTM C150.
2. Type I or II except tricalcium aluminate (C_3A) content of Type I shall not exceed 12%.
3. When aggregates determined to be deleteriously reactive, as defined by Appendix XI of ASTM C33, alkali content of cement defined by Table 1A of ASTM C150 shall not exceed 0.60%.

B. Fly Ash:

1. ASTM C618, Class C or F including requirements of Table 1A.
2. Supplemental Requirements:

    a. Loss on Ignition (maximum): 3%.
    b. Water Requirement (maximum): 100% (as percent of control).
    c. Fineness (maximum retained on No. 325 sieve): 25%.
    d. R-factor, $\frac{CaO\ (\%) - 5}{Fe_2O_3\ (\%)}$: 3.2 maximum.

C. Aggregates:

1. ASTM C33, modified as follows.

    a. Fine Aggregate: Natural sand.
    b. Coarse Aggregate: Crushed gravel, crushed stone or gravel, Size 467 (1-1/2 in. maximum), Size 67 (3/4 in. maximum), Size 8 (3/8 in. maximum).

2. Potential reactivity of aggregates shall be determined in accordance with Appendix XI of ASTM C33.

D. Admixtures for Concrete:

1. Air-Entraining: ASTM C260.
2. Chemical Admixtures: ASTM C494, non-corrosive and chloride free.
3. Chemical Admixtures for Flowing Concrete: ASTM C1017.

    a. Type 1, Water reducing, high range.
    b. Type 2, Water reducing and retarding, high range.

E. Water: Potable.

F. Premolded Joint Filler:

1. ASTM D1751.
2. ASTM D1752, Type I, II or III.

3. Closed cell polyethylene.

G. Floor Sealer:

1. Manufacturers:

a. Kure-N-Seal by Sonneborn.
b. Cure and Seal by Symons.
c. Dress and Seal 18 by L&M Construction Chemicals, Inc.
d. Tuf-Seal J-35 by Dayton Superior.
e. Achro Kure AK-2 or Achro Seal AS-1 by TK Products.

H. Membrane Forming Curing Compound:

1. Manufacturers:

a. Cure and Seal J-20 by Dayton Superior.
b. Kure-N-Seal by Sonneborn Building Products, Inc.
c. Floor Treet by Forrer Chemical Company.
d. Euco Floor Coat by Euclid Chemical Company.
e. Cure and Seal by Symons.
f. Dress and Seal 18 by L&M Construction Chemicals, Inc.
g. Achro Kure AK-2 or Achro Seal AS-1 by TK Products.

2. ASTM C309, and compatible with scheduled finishes and coatings.

I. Finishing Grout:

1. Manufacturers:

a. Thoroseal with Acryl 60 by Thoro.
b. Concrete Finisher with AKKRO-7T by Tamms Industries Company.
c. Tri-Mix with TK-225 Liquid Bonding Agent by TK Products.

J. Cement Grout: Mixture of cement and fine sand in proportions used in concrete being finished.

K. Epoxy Bonding Compound:

1. Manufacturers:

a. Sikadur Hi-Mod by Sika Corporation.
b. Epoxtite 2362 by A.C. Horn.
c. Euco Epoxy 452 MV or 620 by Euclid Chemical Company.
d. Fresh Concrete Binder R649 by Rescon.

e. Resi-Bond J-58 by Dayton Superior.
f. Epobond by L&M Construction Chemicals, Inc.
g. TK-310 Concrete Bonding Agent by TK Products.

2. Use when joining new to existing concrete.
3. Conforming to ASTM C881.

L. Non-Epoxy Bonding Compound:

1. Manufacturers:

a. Weld-Crete, by Larsen Products Corporation.

b. Acryl 60 by Thoro.
c. Acrylset by Master Builders.
d. Everbond by L&M Construction Chemicals, Inc.
e. TK-225 Liquid Bonding Agent by TK Products.

2. Use when joining new to existing concrete where bonding compound cannot be placed immediately prior to pouring of new concrete.
3. Conforming to ASTM C1059 Type II.

M. Evaporation Retardant:

1. Manufacturers:

a. E-CON by L&M Construction Chemicals, Inc.
b. Confilm by Master Builders.
c. Eucobar by Euclid Chemical Company.
d. Tri-Film by TK Products.
e. Sika Film by Sika Corporation.

2.02 CONCRETE MIX DESIGN

A. Concrete Mix: Measure and combine cements, aggregates, water, and admixtures in accordance with ASTM C94 and ACI 211.1.

1. Cement: When used in exposed concrete shall be one brand from one source. Do not mix different cements in same element or portion of Work.
2. Air-Entrainment: Air-entrain all concrete except interior concrete floor noted slab on grade.
3. Chemical Admixtures: Use is optional to aid concrete properties and allow for efficient placement. Manner of use and amount shall be in accordance with manufacturer's written recommendations and as approved by ENGINEER. Do not use admixtures which increase early shrinkage or negatively affect finishing.
4. Fly Ash: Use is optional unless otherwise noted. Combine fly ash with cement at rate of 1.5 lbs fly ash/lb reduction in cement. Amount of fly ash shall not be less than 15% nor more than 25% of weight of cement plus fly ash. When fly ash is used, minimum amount of cement given in table for Class of Concrete may be proportionately reduced.
5. Use no admixture other than specified, unless approved by ENGINEER.

B. Class of Concrete:

1. Normal-weight concrete
2. Provide Exposure Class in accordance with ACI 318 Table 19.3.1.1.
3. Air contents, maximum w/cm, compression strength listed in ACI 318 Table 19.3.2.1. Contents listed shall be maintained after addition of admixtures.
4. Slumps listed are maximum, except when high range water reducer is used. Maximum slump when high range water reducer is used, 10 in.
5. Chloride ion content shall not exceed values listed in ACI 318, Table 19.3.2.1.

Class	Compressive Strength (psi)	Coarse Aggregate (Size No.)	Minimum Cement Factor (bags/cu yd)	Air Content (%)	Slump (in.)	Water/Cement Ratio (maximum)
A1	4,000	467	5.5	5-1/2+1	3 +1	0.45
A2	4,000	67	6.0	6+1	3 +1	0.45
C	4,000	467	6.0	6+1-1/2	3 +1	0.45
F	2,000	67	2.25	---	---	---

C. Concrete Usage:

1. Class A: Locations, except where Class C and F specified.
2. Class C: Exterior unreinforced concrete pavement and curbs.
3. Class F: Mud slabs and backfill below and around structures where noted.
4. Do not use coarse aggregate Size 467 in sections less than 12 in. thick, where clear cover of reinforcement is less than 11/2 in., or where clear spacing between reinforcing bars is less than 3 in.

2.03 MIXING AND DELIVERY

A. Use ready mixed concrete.

B. Deliver and complete discharge within 1-1/2 hrs of commencing of mixing or before 300 revolutions of drum or blades, whichever comes first. Includes revolutions required by transit mix trucks. Limitations may be waived by ENGINEER if concrete slump, after 1-1/2 hrs or 300 revolution limit reached, that concrete can be placed without addition of water. In hot weather, time or number of revolutions criteria may be reduced by ENGINEER.

C. Do not add water on-site unless slump and water-cement ratio, after addition of water, are below maximum allowed. If water added, mix concrete at site additional 30 revolutions of drum.

D. Deliver concrete to site having temperature not less than 50°F nor greater than 90°F.

E. If high range water-reducing admixture added on-site, mix concrete at site additional 85 revolutions of drum after addition of high range water-reducing admixture.

PART 3 EXECUTION

3.01 FORMS

A. Formwork design, detailing, and installation shall be CONTRACTOR'S responsibility and shall conform to requirements of ACI 347R.

B. Materials and Construction: Type of forms used is CONTRACTOR'S option, except as otherwise indicated below or on Drawings. Plywood and other wood surfaces shall have smooth, level surfaces treated with form oil or sealer to produce clean release of concrete from forms.

1. Where walls remain exposed use plywood, prefabricated metal or wood forms. Do not use boards.
2. Use bolts, rods or other approved devices for form ties. Plastic cone snap ties are approved as form ties. Ties for liquid holding structures or dry structures below grade shall have integral waterstop. Do not use wire ties on exposed concrete.
3. Ties shall be removed minimum of 1 in. from formed surface. Removal of ties shall leave holes clean cut and without appreciable spalling at face of concrete. Provide plastic cone or other approved device.
4. Provide 3/4 in. chamfer on external corners of exposed concrete walls, beams, columns, equipment bases and exposed edges of construction joints. Do not chamfer columns flush with concrete block walls.
5. Provide openings at base of vertical forms as access for cleaning and inspection of forms and reinforcing prior to depositing concrete.

C. Treat or Wet Contact Forms: Coat plywood and wood moldings with non-staining form release agent. Apply release agent before reinforcement is placed.

D. Repairing and Cleaning: Clean, patch, and repair form material before reusing.

E. Workmanship:

1. Formwork shall prevent leakage of mortar, shall not deflect under weight of concrete and workman, and shall withstand fluid pressures of concrete.
2. Removal of wall ties shall leave holes clean cut and without appreciable spalling at face of concrete.

3.02 SUBGRADE PREPARATION

A. Subgrade and bedding shall be compacted and free of frost. If placement allowed at temperatures below freezing, provide temporary heat and protection to remove frost. Do not place concrete on frozen material.

B. Provide mud slabs where necessary, and when required by ENGINEER to obtain dry and stable working platform for placement of slabs on grade. Mud slabs shall be 2 in. thick minimum.

C. Soak subgrade evening before placement and sprinkle ahead of placement of concrete.

D. Remove standing water, ice, mud, and foreign matter before concrete deposited.

3.03 PLACING CONCRETE

A. Notify ENGINEER 24 hrs in advance of placing operation.

B. Place concrete, except as modified herein, in accordance with ACI 304R, Chapter V.

C. Concrete will not be allowed to drop freely where reinforcing will cause segregation of mix.

1. Superplasticized Concrete: 10 ft maximum drop.
2. Other Concrete: 5 ft maximum drop.

D. If pumping is used, do not use aluminum piping for delivery system.

E. When placing of concrete is temporarily halted or delayed, provide construction joints as shown on Drawings and as specified.

F. Place in lifts not exceeding 24 in. and compact with internal mechanical vibrator equipment.

1. Insert vibrator so area visibly affected by vibrator overlaps adjacent just-vibrated area by few inches.
2. Slabs: Insert vibrators for full depth of slab.
3. Walls: Insert vibrators along each face (i.e., just behind reinforcing) and allow vibrator to sink into previous lifts as deep as will easily penetrate.
4. Do not spread concrete with vibrators.

G. If in process of pouring wall, pour is stopped unexpectedly, leave surface of joint level but rough. Roughened surface shall have amplitude of 1/4 in. minimum. Before depositing new concrete against hardened concrete, retighten forms.

H. When heat or wind conditions will result in evaporation of 0.2 lb/sf/hr or more, use evaporation retardant in accordance with manufacturer's recommendations to minimize plastic shrinkage cracking.

3.04 JOINTS

A. Unless otherwise noted, construction joints shown are optional. Joints not shown on Drawings shall be approved by ENGINEER. Locate to miss splices in reinforcement.

B. Before concrete placed, construction joints shall be cleaned and laitance removed and surface wetted. Remove standing water.

C. Locate vertical construction joints in walls minimum of one-half wall height from corners or other intersecting walls or at midpoint between corners or intersecting walls. Locate horizontal joints in walls within middle third of wall height.

D. Construction joints shall have keys or roughened surfaces. Where roughened surface used, surface shall have amplitude of 1/4 in. minimum.

E. Install premolded joint filler where noted in accordance with manufacturer's recommendations. Joint filler shall be compatible with sealant and suitable for intended purpose.

F. Clean and prime joints in accordance with manufacturer's written instructions before applying sealant.

3.05 EMBEDDED ITEMS

A. Cast pipe and other embedded items into concrete as placement progresses. Do not provide blockouts.

B. Following restrictions shall be adhered to, except for slabs on grade, unless otherwise noted.

1. Duct, conduit, pipe, and fittings, when placed within slab and walls, shall not be larger than 1/3 thickness of slab or wall nor placed closer than 3 outside dia clear from each other.
2. Reinforcing steel shall be in-place before embedded items placed and reinforcing cut or removed shall be replaced with additional reinforcing as indicated on Drawings or approved by ENGINEER.

C. Do not place ducts, conduits, and pipes in slabs on grade. Place minimum 4 in. under bottom of slab.

D. Set items such as bolts, anchors, piping, and frames in concrete as shown on Drawings.

E. Set miscellaneous items according to templates and setting diagrams.

F. Place items constructed of dissimilar metals to avoid physical contact with reinforcing. Secure item and reinforcing to ensure they will not shift and come into contact during pouring. Contact between reinforcing and other metal, other than bare, coated or plated carbon steel not permitted, unless approved by ENGINEER.

G. Support wall pipes from formwork to prevent contact with reinforcing.

3.06 REPAIR OF SURFACE DEFECTS

A. General:

1. Prior to starting repair work, except as specified otherwise, obtain ENGINEER'S approval of proposed repair techniques and mixes.
2. Develop patching techniques and mixes on portion of as-cast surface selected by ENGINEER for this purpose. Dress surface of patches remaining exposed to view to match color and texture of adjacent surfaces.

B. Tie Holes:

1. Fill tie holes, except where sealant is indicated, with patching mortar as specified in Section 03 01 30.

C. Defective Areas:

1. Remove honeycombing, stone pockets, spalls, and other defective concrete down to sound concrete. If chipping required, make edges perpendicular to surface. Do not feather edges.
2. Fill defective area with patching mortar as specified in Section 03605.

3.07 FINISHING SLABS AND FLATWORK

A. Slab Finishes:

Description	Concrete Finish
Sealer Applied Floors and Slabs	2 Trowelings
Exterior Exposed Slabs	Float and Broom Finish
Exterior Walks	Float and Broom Finish

B. After placement, screed concrete with straightedges, power strike-offs or vibrating screeds.

C. After screeding, bull float or darby surface to eliminate ridges and to fill in voids left by screeding.

D. Float:

1. Use magnesium or aluminum hand floats or power floats with slip on float shoes after concrete has stiffened to point where 1/4 in. maximum indentation can be imparted by normal foot pressure. Do not use combination blades for floating.
2. Float finish shall result in uniform smooth granular texture.
3. After floating, check slab tolerances with 10-ft straightedge. Fill low spots with fresh concrete.
4. Do not sprinkle with dry cement or add water.

E. Trowel:

1. Use steel trowels after floating.
2. Initial Troweling: Power or hand with trowel blade kept flat against concrete surface to prevent washboard or chatter effect.
3. Second Troweling: By hand if 2 trowelings scheduled.
4. Successively trowel with trowels progressively smaller and tipped more to increase compaction of concrete surface.
5. Allow time between trowelings for concrete to become harder.

F. Broom Finish: Use fine, soft-bristled broom and broom at right angles to direction of traffic to give nonskid finish. Texture shall be approved by ENGINEER.

G. Floor Sealer:

1. Apply in accordance with manufacturer's written instructions.
2. Apply first coat after final troweling, surface water glaze has dissipated, and when surface is hard enough to sustain foot traffic on same day as pour.
3. When floor has been water cured, apply first coat after curing has been completed. Apply within one day of floor being dry enough for application.
4. Apply second coat after Work is complete and building ready for occupancy.

H. For special coatings or finishes, see Room Finish Schedule on Drawings.

3.08 FINISHING FORMED CONCRETE

A. Ordinary Finish: Finish resulting directly from formwork for surfaces which will be hidden from view by earth, submergence in water or wastewater or subsequent construction.

1. Patch honeycombing, stone pockets, form ties, spalls, and other irregularities as specified in this section and cure.
2. Where joint marks or fins on submerged surfaces exceed 1/4 in., grind smooth.

B. Smooth Finish: Interior concrete surfaces permanently exposed to view and concrete surfaces scheduled to be painted.

1. After removal of forms, patch or point up defects as specified and cure.
2. Grind joint marks and fins smooth with adjacent surface. Remove oil stains and rinse surface.
3. After grinding and cleaning, dampen concrete and paint entire surface with Cement Grout. Work Cement Grout into surface with cork or other suitable float. When grout has set to where it will not be pulled out of holes or depressions, brush off surface with dry burlap or carpet.
4. Prepare surfaces to be painted in accordance with paint manufacturer's requirements.

C. Rubbed Finish: Exterior cast-in-place concrete surfaces permanently exposed to view extending to 6 in. below finish grade.

1. After removal of forms, patch or point up defects as specified and cure.
2. Remove joint marks, fins, and stains as described for smooth finish.
3. Apply heavy coat of Finishing Grout. After first coat has set, apply second coat. When second coat has set, float to uniform texture.
4. Follow manufacturer's written instructions for finishing concrete.
5. Finish color shall be gray.

3.09 PROTECTION AND CURING

A. Protect concrete from frost and keep moist for minimum curing period of 7 days after placing in accordance with ACI 308.

B. Formed Surfaces:

1. Wet cure by spraying surfaces during curing period as frequently as drying conditions may require to keep concrete surfaces moist.
2. Ceilings, walls, columns, and beam sides may be cured by leaving forms in-place. For vertical surfaces, apply water to run down on inside of forms, if necessary, to keep concrete wet.
3. After forms are removed, wet cure for remainder of curing period or apply curing compound.
4. Do not use curing compound where epoxy, urethane, mortar bed, grout, additional concrete or other coatings or adhesives will be applied.

C. Concrete Flatwork:

1. Start curing activities as soon as free water has disappeared from surface of concrete after placing and finishing.
2. Cure flatwork using liquid curing compound or wet cure.
3. Do not use curing compound where epoxy, urethane, mortar bed, grout, additional concrete or other coatings or adhesives will be applied.

D. Curing Compound:

1. Apply curing compound at uniform rate sufficient to comply with requirements for water retention as specified and as measured in accordance with ASTM C156.
2. Cover areas subjected to direct sunlight during curing period with ambient temperature expected to exceed 80ºF with white pigmented compound, others may be covered with fugitive dye compound.

E. Protect from damaging mechanical disturbances, particularly load stresses, heavy shock, and excessive vibration.

F. Protect finished concrete surfaces from damage caused by construction equipment, materials or methods, and rain or running water.

G. Do not load self-supporting structures to overstress concrete.

3.10 REMOVAL OF FORMING AND SHORING

A. Do not remove forming or shoring until member supported has acquired sufficient strength to safely support own weight and any imposed loads. Forming shall remain in place for at least minimal time recommended by ACI 347R. In addition, forming for horizontal members such as elevated slabs and beams shall remain in place minimum of 7 days. In no case shall forming for horizontal members be removed before concrete has reached at least 70% of its specified design strength.

B. Reshore areas as required to carry additional imposed loads.

C. Repair damage to structure caused by early removal of forming and shoring at no additional cost to OWNER.

3.11 FIELD QUALITY CONTROL

A. Obtain samples of concrete in accordance with ASTM C172. Transport cylinders to place on-site where they can be stored under conditions affecting concrete they represent without being disturbed for first 24 hrs.

B. Make slump tests daily and when requested by ENGINEER, in accordance with ASTM C143. Make slump tests from same batch from which strength tests are made.

C. When air-entrained concrete used, make air content tests daily and when requested by ENGINEER in accordance with ASTM C231.

D. If measured slump or air content falls outside limits specified, make check test immediately on another portion of same sample. In event of second failure, concrete shall be considered to have failed to meet requirements of Specifications and will be rejected.

E. Strength test for each class of concrete consists of 4 cured standard cylinders made from composite samples secured from single load of concrete in accordance with ASTM C172. Make compressive strength tests on 1 cylinder at 7 days and 2 cylinders at 28 days. Test results at 28 days shall be average strength of 2 specimens as determined in accordance with ASTM C39, except if 1 specimen in test shows manifest evidence of improper sampling, molding or testing, it will be disregarded. Test remaining cylinder if needed.

F. Make strength test for each following condition for each class of concrete.

1. Each day's pour.
2. Each change of source.

3. Each 100 cu yds of concrete poured.
4. When temperatures are below or expected to fall below 45□F within 48 hrs after concrete placed, make 2 additional cylinders and cure in field under conditions approximating conditions affecting concrete they represent. Test one at 7 days, other at 28 days.

G. Strength level of individual class of concrete considered satisfactory if following requirements met.

1. Average of all sets of 3 consecutive strength tests equal or exceed specified 28 day compressive strength.
2. No individual strength test falls below specified 28 day compressive strength by more than 500 psi.

H. If analysis of strength tests indicates above requirements are not being met, make immediate adjustments to mix. Also, if likelihood of low strength concrete is confirmed, make additional tests as required by ENGINEER to determine strength of concrete in-place in portion of structure identified with deficient cylinders. If tests and analysis verify Work in-place is not in conformance with Specifications, ENGINEER will determine whether or not Work in-place is adequate for intended use in location. If Work is determined inadequate, CONTRACTOR shall follow such remedial or replacement measures which ENGINEER may require. CONTRACTOR shall bear costs in connection with testing, engineering analyses, remedial work, and replacement required under terms of this paragraph.

* * * END OF SECTION * * *

SECTION 03 62 00
EPOXY GROUT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Material for grouting reinforcing bars into existing concrete, and other uses where noted.

B. Alternatives:

1. CONTRACTOR may use premixed adhesive anchor material as specified in Section 05 50 00 when approved by ENGINEER, rather than using field mixed grout as specified herein.

1.02 SUBMITTALS

A. Product Data:

1. Manufacturer's literature.

B. Submit in accordance with Section 01 33 00.

PART 2 PRODUCTS

2.01 MATERIALS

A. Epoxy:

1. Manufacturers:

a. Sikadur Hi-Mod or Sikadur Hi-Mod gel, by Sika Corporation.
b. Five Star Epoxy Grout, by Five Star Products, Inc.

B. Sand: Hard, durable, oven dry.

PART 3 EXECUTION

3.01 PREPARATION

A. Clean contact surfaces of oil, grease, and other foreign matter. Chip away unsound concrete.

3.02 MIXING

A. Mix components of epoxy compound as directed by manufacturer's instructions immediately before combining liquid with sand.

B. After binder thoroughly mixed, add sand as recommended by manufacturer.

3.03 PLACING

A. Place in accordance with manufacturer's written instructions following requirements regarding temperature and pot life.

B. Provide suitable materials where necessary to retain grout until hardened.

3.04 CURING

A. Cure as recommended by manufacturer.

* * * END OF SECTION * * *

SECTION 03 63 00
NONSHRINK GROUT

PART 1 GENERAL

1.01 SUBMITTALS

A. Product Data:

1. Manufacturer's literature.

B. Submit in accordance with Section 01 33 00.

PART 2 PRODUCTS

2.01 MATERIALS

A. Manufacturers:

1. Fluid Grout 100, Five Star Products, Inc.
2. Masterflow 713 Grout. Master Builders.
3. Euco NS Grout, Euclid Chemical Company.
4. Crystex, L&M Construction Materials, Inc.
5. Sika Grout 212 by Sika Corporation.

B. Grout:

1. Cement base, nonmetallic, nongas forming, nonshrink, preblended and ready-to-use requiring only addition of water at Project site.
2. Comply with ASTM C1107 and CRD C621, Grade B.
3. Of moderate fluidity with minimum compressive strength of 5,000 psi at 28 days and shall not bleed.

C. Water:

1. Clean and free from injurious chemicals and deleterious materials.

PART 3 EXECUTION

3.01 PREPARATION

A. Clean grout contact surfaces of oil, grease, scale, and other foreign matter. Chip away unsound concrete leaving surface level but rough.

B. Underside of base plates of machinery, rails, and bolts shall be free of grease, oil, dirt or coatings.

3.02 MIXING AND PLACING

A. Mix and place in accordance with manufacturer's written instructions.

B. Provide sealing materials where necessary to retain grout until hardened.

C. Work grout from one side to other. Avoid trapping air under base plates.

D. Remove plastic anchor bolt sleeve tops where used, and fill with grout at same time base plates are grouted.

3.03 CURING

A. Cure with curing compound or as recommended by grout manufacturer.

* * * END OF SECTION * * *

SECTION 13 10 00
PREFABRICATED CONTROL BUILDING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Prefabricated, pre-tested pump control building.
2. Building moving and installation.
3. Electrical panel, receptacles, and lights.
4. Heating, Air Conditioner, dehumidifier, and ventilation systems.
5. Pump Control Center and Instrumentation.
6. Telemetry Equipment.

1.02 SYSTEM DESCRIPTION

A. Design Criteria:

1. Design loads, including, but not limited to, wind and snow according to historical Waterloo, IA weather conditions. Structure Roof and walls – the sum of the ratios of applied loads over allowable loads must be less than 1.0.
2. Building shall comply with applicable State of Iowa and local codes and ordinances.
3. Building shall be weather-tight and completely pre-wired prior to shipment.
4. Walls shall have a minimum effective R-Value of 15.5 at a maximum panel thickness of 5”.
5. Roof shall have a minimum effective R-Value of 21 at a maximum panel thickness of 7”.
6. Steel Roof Panel specifications:

a. Material: Structural strength ASTM-A653 grade 80 steel pre-painted to ASTM-A755 specifications.
b. Rib Spacing: 16” on center.
c. Hail Resistance: Class 4.
d. Fire Rating: Class A.
e. Coating: G100 galvanization plus zinc phosphate.
f. Tensile Strength: Nominal 100,000 PSI.
g. Thickness: 0.0157”
h. Weight: 0.77 PSF.
i. Minimum yield strength: 82 KSI.
j. Wind Load: 182 PSF (based on 2ft girt spacing).
k. Live Load: 127 PSF (based on 2ft purlin spacing).

7. Faux-cinder block panel system shall have the following typical properties:

a. Linear Variation with Change in Moisture Content: M.D.: -0.006 in/ft., C.D.: 0.003 in./ft.
b. Wet Flexural Strength: Avg. 1155.51 psi.
c. Water Tightness: No water droplets observed on any specimen.
d. Freeze-thaw: No damage or defects observed.
e. Warm Water: No evidence of cracking, de-lamination, swelling, or other defects observed.
f. Heat-Rain: No crazing, cracking, or other deleterious effects, surface or joint changes observed in any specimen.
g. Mean Coefficient of Linear Thermal Expansion: Avg. 3.18*10^-6in./in. F.
h. Surface Burning: Flame Spread: 0, Smoke Developed: 5.
i. Wind Load: Positive: Avg. 148.03 psf. Negative: Avg. 120.29 psf.
j. Water Penetration: No water leakage observed into wall cavity.
k. Weather Resistant: No cracking, checking, crazing, erosion, or other detrimental effects observed.
l. Steady-State heat flux and thermal Transmission Properties Test: test results showing that the panels have a thermal resistance of R value of 1.23 F.

m. Fire resistant: The walls successfully endured a 60-minute fire exposure without developing excessive unexposed surface temperature or allowing flaming on the unexposed side of the assembly.

1.03 SUBMITTALS

A. General:

1. Submit Product Data and Shop Drawings in sufficient detail to confirm compliance with requirements of this section and in accordance with Section 01 33 00. Submit Product Data and Shop Drawings in one complete submittal package. Partial submittals are unacceptable.

B. Building shop drawings:

1. Structure elevations.

a. Exterior colors shall be noted in a table, which notes specific colors for each item:

i. Exterior
ii. Louvers
iii. Ventilation Fan
iv. Fascia
v. Soffits
vi. Doors
vii. Trim
viii. Junction boxes
ix. Roof steel

b. Elevations shall be labeled by site orientation.
c. All major items shall be identified with leaders.
d. Scale noted.
e. Elevations' width, length, and height
f. Roof pitch.

2. Structure floor plan

a. Typical abbreviations and component descriptions
b. Floor plan, which details pertinent dimensions
c. Site orientation

3. Structure mounting details

a. Plan and section view of proposed concrete foundation
b. Anchoring detail

C. Control panel shop drawings:

1. Submit in accordance requirements specified in Section 40 95 13 and this Section.

2. Typical symbols and abbreviations

a. Explanations for symbols and abbreviations that are commonly used in the schematics
3. Control elevations and nameplate schedule..

a. Control panel(s) front elevation(s).

i. Tag/location for individual compartments/panels
ii. Dimensions
iii. Door component layout(s) with numerical ID for each component depicted.

b. Nameplate schedule

i. Item tag/location
ii. Numerical ID
iii. Device tag (based on internal schematic tag)
iv. Notes
v. Text height
vi. Nameplate text

4. Control subpanel layout

a. Control panel(s) subpanel layout(s).

i. Tag/location for individual compartments/panels
ii. Item type ID number

b. Subpanel layout schedule

i. Item tag/location.
ii. Numerical ID
iii. Tag prefix
iv. Component description

5. Schematics

a. Each sheet shall have two sets of sequential rung numbers
b. Component tags and wire numbers shall reference the first rung they appear at within the drawing set.
c. Voltage characteristics shall be identified.
d. Ampacity/trip rating shall be identified for fuses, circuit breakers and similar.
e. Each component or circuit shall be described in a margin to the right.
f. Spare rungs may be reserved between pages to accommodate future additions or for unused optional features.

6. Field connections page.

a. Termination points required to be connected to by the site electrician shall be duplicated at the end of the drawing set, so that all required field connections are depicted in one dedicated location.

D. Product Documentation

1. Datasheets for all major equipment shall be included with specific selections indicated with red boxes, underlines, arrows, and/or text.

1.04. OPERATION & MAINTENANCE MANUALS (O&M):

A. Submit in accordance with Sections 01 33 00 and 01 78 23.

B. Building drawings:

1. Cover with the following information.

a. Product model number
b. Project description
c. Equipment description
d. project locations

e. Local area map with install location noted
f. Drawing set index

2.. Structure elevations

a. Exterior colors shall be noted in a table, which notes specific colors for each item:

i. Exterior
ii. Louvers
iii. Ventilation Fan
iv. Fascia
v. Soffits
vi Doors
vii. Trim
viii. Junction boxes
ix. Roof steel/shingles

b. Elevations shall be labeled by site orientation
c. All major items shall be identified with leaders.
d. Scale noted
e. Elevations' width, length, and height
f. Roof pitch

3. Structure floor plan

a. Typical abbreviations and component descriptions
b. Floor plan, which details pertinent dimensions
c. Site orientation

4. Structure mounting details

a. Plan and section view of proposed concrete foundation
b. Anchoring detail

C. Control panel drawing set:

1. Cover with the following information:

a. Product model number
b. Project description
c. Equipment description
d. Project locations
e. Local area map with install location noted.
f. Drawing set index

2. Typical symbols and abbreviations.
a. Explanations for symbols and abbreviations commonly used in the schematics

3. Control elevations and nameplate schedule

a. Control panel(s) front elevation(s).

i. Tag/location for individual compartments/panels
ii. Dimensions
iii. Door component layout(s) with numerical ID for each component depicted

b. Nameplate schedule

i. Item tag/location

ii. Numerical ID
iii. Device tag (based on internal schematic tag).
iv. Notes
v. Text height
vi. Nameplate text.

4. Control subpanel layout.

a. Control panel(s) subpanel layout(s).

i. Tag/location for individual compartments/panels
ii. Item type ID number

b. Subpanel layout schedule.

i. Item tag/location
ii. Numerical ID
iii. Tag prefix.
iv. Component description.

5. Schematics

a. Each sheet shall have two sets of sequential rung numbers.
b. Component tags and wire numbers shall reference the first rung they appear at within the drawing set.
c. Voltage characteristics shall be identified.
d. Ampacity/trip rating shall be identified for fuses, circuit breakers and similar.
e. Each component or circuit shall be described in a margin to the right.
f. Spare rungs may be reserved between pages to accommodate future additions or for unused option features.

6. Field connections page.

a. Termination points required to be connected to by the site electrician shall be duplicated at the end of the drawing set, so that all required field connections are depicted in one dedicated location.

D. Product Documentation.

1. Datasheets for all major equipment shall be included with specific selections indicated with red boxes, underlines, arrows, and/or text.
2. Manufacturer manuals shall be included for all components which are programmable, configurable, or have specific maintenance requirements.

1.05 QUALITY ASSURANCE

A. The manufacturer shall be a company specializing in manufacturing prefabricated control buildings with minimum 10 years' experience.

B. The manufacturer shall have provided at least twenty (20) successful installations of prefabricated control buildings in the last five (5) years.

C. The manufacturer shall provide, or provide a modified version of, their standard product to meet these specifications.

D. Upon request, the manufacturer shall provide the following information:

1. Successful installations list with locations, dates and drawings, as proof of conformance to the above requirements.
2. Minimum of three (3) end-user/customer references.

1.06 WARRANTY

A. Guarantee against defective materials and workmanship for 1 year from Substantial Completion.

1. Manufacturer shall furnish replacement parts for any component proven defective within the provided equipment, whether assembled by them or other manufacturers during the warranty period, excepting only those items which are normally consumed in service.

B. Manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Deterioration includes, but is not limited to, the following:

a. Color fading more than 7 NBS Rating (Hunter) units when tested in accordance with ASTM D2244 and ASTM D-3964.

2. Finish Warranty Period: 30 years from date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Arrow building manufactured by Starnet Technologies.

2.02 CONTROL BUILDING

A. The walk-in module specified herein shall be designed to be set on and anchored to the foundation assembly described below. The interior pump control center (PCC) shall be pre-installed prior to delivery. System module shall be adequately sized to incorporate all controls specified herein and to include utility and standby generator power connections, indicating lights, selector switches, pump control logic, Adjustable Frequency Drives, alarms, etc., where specified to be associated with the lift station.

2.03 VALVES AND PIPING

A. AIS Compliant Valves and piping within the building shall be field assembled by the Contractor. The following items, properly sized for the application, are furnished by the control building supplier and installed by the contractor prior to building placement or after building has been set in permanent location:

1. 8” swing check valves
2. 8” and 10” Plug valves.
3. Air Release Valve
4. 10” Magnetic Flow tube and Transmitter
5. Mechanical Piping penetrations through the foundation

2.04 BUILDING GENERAL DESCRIPTION

A. Building shall be completely pre-wired automatic walk-in style control system for pump control and alarming. The building shall include:

1. Airgap method Termination Junction Box (TJB) for wet well connections pre-installed on module exterior.
2. Permanent Generator Termination Junction Box.

3. Radar Level Reader
4. 4 Float Switches, anchor, and suspension kit.
5. Fiberglass Entry Doors with Owner provided key lock.
6. Exterior Light with photocell.
7. Interior Lighting.
8. Pump Protection Modules.
9. Telemetry equipment.
10. ArcSafe® Pump Control Center (PCC) pre-installed in building.
11. Generator Automatic Transfer Switch (ATS) pre-installed, supplied by Generator supplier
12. 400 Amp Main Disconnect Switch

2.05 BUILDING CONSTRUCTION

A. Roof and Walls

1. Core material shall be Type 1 expanded polystyrene (EPS) foam plastic with a minimum thickness of 3-1/2".

    a. The EPS shall be supplied by a manufacturer having ICC-ES evaluation reports, which are listed in the ICC-ES approved quality control documentation.

2. Panel facing material shall be 7/16"-thick, Exposure 1, oriented strand board (OSB) with a span rating of 24/16 and complying with the performance-rated panel requirements specified in U.S. Department of Commerce Product Standard PS-2 and supplied by a manufacturer listed in the ICC-ES approved quality control documentation.
3. Roof covering shall comply with Chapter 15 of the IBC, or IRC Section R901, as applicable. Roofs with hot -asphalt or hot-coal tar pitch are prohibited.
4. The exterior face of wall panels is required to be covered with a wall covering complying with the applicable code or recognized in a current ICC-ES evaluation report.
5. A water-resistive barrier shall be installed over the panels in accordance with IBC Section 1404.2 or IRC Section R703.2, as applicable, prior to application of the wall covering.
6. The manufacturer of the wall and roof structure material shall have the following evidence submitted.

    a. Reports of tests conducted in accordance with ASTM E 119.
    b. Reports of a room corner fire test conducted in accordance with NFPA 286.

7. The wall and roof panels shall have a label containing the name and address of the panel manufacturer, the product panel number, the evaluation report number and the name of the inspection agency.
8. ½" non-combustible gypsum core drywall shall be installed between structurally insulated panels and interior surface FRP panels.
9. Interior wall and ceiling surfaces shall be white FRP panels.

B. Exterior Requirements

1. Building shall be provided with a standing seam metal roof over synthetic weather barrier felt and faux-cinder block exterior, as shown on the drawings and described.
2. Building wall exterior shall be covered with faux-cinder block exterior panel system.

    a. Panel system shall be constructed of fiber cement stone panels based on autoclaved, wood fiber reinforced cement panels. Wood fiber bundles mixed with Portland cement and silica.

3. Faux-cinder block panel system shall meet or exceed the following criteria:

    a. Panel system shall be constructed of fiber cement stone panels based on autoclaved, wood fiber reinforced cement panels. Wood fiber bundles mixed with Portland cement and silica.

4. Faux-cinder block panel system shall meet or exceed the following criteria:

    a. ICC Evaluation Service, Inc. (ICC-ES) Evaluation Report No. ESR-1694.
    b. ICC-ES Legacy Report No. 5915.
    c. Panel Canadian Construction Materials Centre (CCMC) Evaluation Report No. CCMC 13083-R.

C. Floor Requirements:

1. Building shall be constructed with an integral steel frame base.
2. Floor decking shall be constructed of gray slip-resistant fiberglass.

    a. Interlocking plank.
    b. Fine grit gray surface.
    c. 2” channel depth.

D. Door Requirements:

1. Min. 32 inch wide, standard height
2. Moisture-resistant fiberglass exterior doors.
3. Hold-open type door closer shall be provided.
4. Painted to match building as indicated.
5. Ensure doorframe and molding will not absorb moisture and is resistant to splitting, rotting, and insect damage.

E. Door Lockset:

1. Grade 2 ANSI/BHMA certified.
2. Vandal resistant clutching lever and knob design.
3. Code control; 6-digit programming code required to add and delete user codes.
4. Mechanical key override.
5. Emergency exit feature; allows for panic-free exit.
6. Certifications and Standard Features:

    a. Latch: 1” x 2-1/4” radius corner faceplate, 7/8” housing diameter, Triple-Option square corner, radius corner and circular drive-in faceplates.
    b. Strikes: 1-5/8” x 2-1/4”, square and radius corner, full lip, no box, latch strike.
    c. Backset: Universal backset, fits 2-3/8” to 2-3/4” backsets.
    d. Cylinder: 5-pin solid brass, keyed 5-pin, C keyway, keyed different.
    e. Keys: Nickel silver cut keys, 5-pin, C-section.
    f. Codes: Pre-set random six-digit programming code, two pre-set four-digit user codes (19 code capacity).
    g. Minimum 5-1/2” center-to-center distance between cross bore holes.
    h. 9-volt battery included with average three year battery life.
    i. All-metal chassis and escutcheons.
    j. Silicone rubber, wear-resistant buttons with LED backlight.
    k. ANSI A 156.2-2003 bored locks and latches.
    l. A 156.5-2001 Grade 2 cylinders.

F. Hydraulic Door Closer:

1. Heavy-duty, hold-open type.
2. ANSI A156.4 Grade 2.
3. Finish: Aluminum painted.
4. Max. door opening: 140 degrees.
5. Interior/Exterior rated.

G. Ventilation Requirements:

1. A ventilation fan shall be provided and installed in each room of the enclosure, for cooling.
2. Ventilation fan shall have an aluminum filter, permanently lubricated & thermally protected motor and polymeric fan blade.
3. The steel housing of the fan shall have foam insulated door for energy efficiency.
4. Air delivery shall be no less than 360 CFM with sound levels no greater than 8.0 Sones.
5. All air and sound ratings shall be certified by HVI and UL listed.
6. A backdraft damper, wall mounted, shall be provided and installed as part of the enclosure.
7. Backdraft damper shall be constructed of 16-gauge extruded aluminum frame, aluminum blades, galvanized steel tie rods and stainless-steel hardware with felted edges for quiet operation.
8. The damper shall be rated at a max velocity (FPM) of 2000.

H. Terminal Junction Box (TJB) and Vented Skirt requirements:

1. TJB with vented skirt shall be pre-installed on Building by manufacturer.
2. 16-gauge plated steel, with Rolex Brown factory powder-coat baked enamel.
3. Drip shield top and seam-free sides, front, and back.
4. Quarter-turn latch and locking hasp.
5. Vented skirt shall be a minimum of 18” High with proper venting to accommodate Airgap method of dispersing potentially explosive gases.
6. Vented skirt to have open bottom to accommodate conduit stub-ups from Wet well.
7. Overall dimensions of TJB and vented skirt shall not exceed 38” high x 24” wide x 8” deep.
8. Provide conduit stub-ups from wet well to vented skirt with duct-putty seal.
9. Use sealing cord-grip connector for all penetrations from vented skirt into TJB, to provide a gas-tight seal.
10. Refer to Building manufacturer As-built shop drawings prior to stubbing-up conduits to terminate in vented skirt to ensure proper location.
11. Provide spare connection terminals through wall for flood light, pump hoist, and trash basket hoist.

I. Lifting and Mounting:

1. Building shall be provided with integral fastening provisions which shall serve as the attachment location for both the lifting eyes and the anchoring plates. Provided by Building manufacturer.

2.06 CONTROL SYSTEM

A. Pump Control Center (PCC)

1. Provide Prefabricated Control Module with a complete pre-installed, pre-tested ArcSafe® Pump Control Center, including all required equipment, accessories, wiring and adjusting as indicated, and installed in accordance with applicable National, State and Local Codes.
2. The PCC shall be completely prewired automatic ArcSafe® system for pump control and alarming. The entire panel shall have a minimum Short Circuit Current Rating of 35kA. The control system shall be designed to ensure operation of wet wells categorized as hazardous – Class 1, Division 1. The control panel shall be UL listed and carry a UL Label indicating suitable for use with intrinsically safe circuits extending to classified hazardous locations. The PCC shall be an ArcSafe® PCC as manufactured by Starnet Technologies provided by Electric Pump.
3. Controls shall comply with the requirements specified in Sections 40 90 10, 40 95 13, 43 13 29 and this Section.

B. Panel Equipment

1. Shall comply with the requirements specified in Section 40 95 14 and this Section.

2. Primary Pump Controller with Operator Interface (PPC)

a. PPC shall utilize a level reader for automatic operation of pumps, as indicated.
b. PPC shall display Wet well level as determined by the level reader.
c. Shall comply with the requirements as specified in Section 43 13 29.

3. Redundant Float Backup Pump Controller (BPC)

a. BPC shall utilize 4 floats for backup operation of pumps during conditions when the Primary Controller is either failed or forced off.

4. Telemetry System

a. Telemetry equipment shall be provided as factory installed in the PCC.
b. Shall comply with the requirements as specified in Section 40 95 35.

5. Motor Starters mounted in separate compartments.

a. Starters shall be provided in individual compartments, separated from PPC, BPC, and ATS.
b. Starters shall comply with the requirements specified in section 43 13 29.
c. Provide type, quantity, and with ratings to accommodate the described pumps of the project as indicated.

6. Lighting Transformer to step down line voltage to 120 volts.

a. 600V rated primary side circuit breaker.
b. 5kVA Transformer, open-type, mounted in line voltage compartment.
c. 1-Pole and 2-Pole load side 250V rated circuit breakers as required.

7. Transient-Voltage Surge-Suppressor (TVSS)

a. 75kA Imax per mode.
b. Configured for appropriate voltage, determined by the site utility power.
c. Accessory contacts to indicate condition of TVSS if “OK”.
d. Separate press-to-test, 30mm White Indicating Light, door mounted.
e. UL 1449 Listed.

8. Molded Case Circuit Breakers

a. 65kAIC at 480Vac.
b. Thermal-magnetic protection.
c. UL Listed.

9. 205Vac Distribution Circuit Breakers

a. 10kAIC at 240Vac.
b. Front-mount through-door cable-in/cable-out
c. Thermal-magnetic protection.

10. Uninterruptible Power Supply

a. 24Vdc 10 Amp UPS System, in Pump Control Panel.
b. Input voltage range: 22.5-30Vdc (24Vdc nominal).
c. Integrated battery: 12V 5Ah.
d. Operational temperature range: 32 to 104 degrees Fahrenheit.
e. UPS shall provide temporary power to Primary Controller and Telemetry System when normal and/or generator power fails.
f. UL Listed.

11. Room Heater

    a. The PCC shall be provided with a factory-installed, wall mounted Heater with integral thermostat.
    b. Electric fan forced heater shall be 120V AC, commercially approved.
    c. Heater shall have a lubricated motor, tangential blower, heavy gauge steel finned heating element and an automatic high temperature shutting system.
    d. Amps AC: 12.5/6.3
    e. Watts: 1500/750
    f. BtuH: 5120/2560

12. 24Vdc Power Supplies

    a. Power Supply Input: 85-264Vac / 100-370Vdc.
    b. Power Supply Output: 24Vdc nominal.
    c. Wattage rating is sufficient for application.
    d. DIN rail mount.
    e. UL Listed.

13. Pilot Devices
    a. Indicating Lights

        I. 30.5mm Heavy Duty
        II. Full voltage LED Type.
        III. Push-to-test.
        IV. UL Listed.

    b. Pushbuttons

        I. 30.5 Heavy Duty.
        II. UL Listed.

14. Terminal Block (Interface) Relays

    a. Screw-type connection.
    b. Pluggable relay.
    c. LED status indication.
    d. DIN rail mount.
    e. Coil voltage and contact configuration to match application.
    f. UL Listed.

15. Control Relays and Sockets

    a. 10 amp contact(s)
    b. Compact power type relay.
    c. LED status indication.
    d. DIN rail mount socket base.
    e. Coil voltage and contact configuration to match application.
    f. UL Listed.

16. Timer Relays

    a. Multiple user-selectable timing functions and timing ranges.
    b. LED status indication.
    c. DIN rail mount.
    d. 12-240 Vac/Vdc.
    e. 250 Vac rated contacts.
    f. UL Listed.

17. Elapsed Runtime Meters

    a. Display: Six-digit LCD, 0.20 in.
    b. Accuracy: ± 0.1%
    c. Resolution: 0.1 hour (6 minutes)
    d. Solid-state hour meter.
    e. Record and display up to 99,999.9 hours, rollover and continue timing.
    f. Time accumulation indicated by flashing hourglass icon.
    g. UL recognized.
    h. Power Supply: 12-48 Vdc/20-60 Vac.

18. Terminal Blocks

    a. Screw connection type.
    b. Feed-through type.
    c. UL Listed.

19. Analog Isolators / Repeaters

    a. Active Converter, 3-Way.
    b. Calibrated change over via DIP switch.
    c. Power Supply: 24Vdc ± 15%
    d. UL Listed.

20. Temperature Transmitters

    a. Range: 0-135 degrees Fahrenheit.
    b. Accuracy: ± 2.5°F
    c. Repeatability: ± 0.5°F
    d. Output: 4 to 20 mA or 1 to 5 Vdc (user selectable)
    e. Power Supply: 12-24Vdc

21. Intrinsically Safe Barriers (For level reader connection)

    a. Repeater power supply and input isolation amplifier.
    b. Sends fed or active 0/4-20 mA signals from the Ex area to a load (active or passive) to the safe area.
    c. Electrical 3-way isolation, SIL 2 in accordance with IEC 61508.
    d. Power Supply: 19.2-30Vdc (24Vdc nominal).
    e. Screw type connection.
    f. LED power status indication.
    g. UL Listed.

22. Intrinsically Safe Relays (For float connection)

    a. 2-channel Ex-I NAMUR isolation amplifier.
    b. 3-way isolation, SIL 2.
    c. Power Supply: 19.2 … 253 Vac/dc
    d. Screw type connection.
    e. LED indicators for supply voltage, switching state, and malfunction according to NAMUR NE 44.
    f. 2-Channel 2PDT contacts.
    g. UL Listed.

23. Phase Monitor Relay

    a. Detects phase loss, low voltage, phase reversal.
    b. Automatic reset.
    c. UL recognized.

d. 10 amp @ 240Vac resistive SPDT contacts.

24. Pre-wired Field Terminals

a. PCC shall arrive onsite with factory wiring to terminals for the following field connections:

I. Wet well – Pumps, floats, and level reader.
II. Telemetry equipment.
III. Incoming Power.

C. PCC Construction

1. The ArcSafe® Pump Control Center specified herein shall comply with the requirements specified in Section 40 95 13 and be designed to be a compartmentalized control center with all included ArcSafe® modular units having interconnects, power, and control wiring factory installed and tested. Modular units shall include the following:

a. Pump Control Panel (Housing Primary and Backup Pump Controllers as well as telemetry equipment.
b. Individual starter compartments.
c. TVSS compartments.
d. 120V AC power distribution compartment.
e. Lighting transformer and line-voltage circuit breaker compartment.
f. Separate compartment/housing for field connection terminals.

2. The control panel unit shall be the product of a manufacturer that is authorized by Underwriters Laboratories, Inc. to build products in compliance with UL Standard 698A (Enclosed Industrial Control Panel – Enclosure in Non-Hazardous area with extensions into hazardous area).

3. Constructed as a single assembly with modular compartments.

4. All internal wiring shall be provided by manufacturer and shall comply with the requirements specified in Section 26 02 00.

5. Termination compartments shall not contain any exposed current carrying conductors where exposed segment of conductor exceeds 0.125 inches.

6. Total enclosure shall be adequately sized to incorporate all controls specified herein and to include normal and emergency power connections, indicating lights, selector switches, pump control logic, motor starters, telemetry equipment, etc.

7. All lugs and terminals for line voltage field wiring shall be “finger-safe”.

8. All current carrying conductors shall be fully insulated. The use of bus bars and/or exposed metal lugs shall not be allowed.

D. Safety Provisions and Studies

1. The pump control system shall be connected to the level sensors through intrinsically safe barriers and relays.
2. The completed assembly shall conform to all applicable federal, state, and local codes & regulations.
3. Procedures and Hazard Levels:

a. Manufacturer shall provide written procedures for servicing in compliance with OSHA 1910 and NFPA 70E. Manufacturer shall provide Labels for NFPA 70E hazard levels, for each compartment as well as a written procedure.

b. Hazard Levels shall be determined by using simulation software that is the product of a UL registered firm, and meets the requirements set forth by the following:

I. ISO 9001:2009
II. 10 CFR 21
III. ASME NQA-1
IV. CAN/CSA-Q396.1.2
V. 10 CFR 50 Appendix B
VI. ANSI/ASME N45.2
VII. ANSI/IEEE 730.1
VIII. ANSI N45.22

c. Hazard Level determinations and written procedures shall be completed under the direct supervision of, and signed by, a State Licensed P.E.

4. The enclosure shall have a separate hinged door with interlocked pad-lockable disconnect handle for each individual motor starter compartment. Disconnects shall include flexible cable mechanisms to operate circuit breakers in separate breaker compartments. Units shall be designed such that ALL power (including that at line-side lugs) is removed from each starter compartment when disconnect is open. All control wiring within motor starter compartments shall be sourced from the starter control power supply such that all circuits within the compartment are de-energized by the disconnect.
5. The PCC shall include a separate low voltage Pump Control Panel (PCP) compartment with lockable door. All Voltages within the PCP compartment shall be 24V or lower. Thru-wall pull-apart terminal strips shall be used for interconnecting.

E. Control System – Products and Performance

1. Pump controls shall comply with the requirements specified in Section 43 13 29.

2. Primary Pump Controller (PPC) and a separated and independent Backup (Secondary) Pump Controls (BPC) shall be provided.

F. Pump Starters

1. Adjustable Frequency Drives (AFD)

a. AFD motor starters shall be provided in the PCC for pump control. Each starter shall be installed in an electrically isolated compartment with door-interlocked disconnect. Circuit breaker shall be remote mounted and connected via flexible cable mechanism to the Starter Compartment disconnect operator.
b. AFD Shall comply with the requirements specified in Section 26 09 23.21.

G. Breaker/Transformer Compartment

1. Circuit breakers shall be provided in the PCC for each motor starter and for control power transformers. Breakers shall be thermal-magnetic type. Pump and Transformer breakers shall have a short circuit interrupting capacity of 35kA at 480V. Circuit Breakers shall be UL Listed.
2. Lighting Transformer shall be 5kVA open type iron core. Transformer Breaker shall be accessible to switch on/off through door. Transformer secondary shall feed remote front mount breakers in separate 120V AC compartment.
3. Three spare breakers shall be provided for flood light, pump hoist, and trash basket hoist. Flood light, pump hoist, and trash basket hoist not provided by Building Manufacturer.

2.07 FABRICATION

A. Factory fabricate complete building, with pump controls, HVAC, telemetry equipment, and electrical work pre-installed at factory.
B. Factory prewire building, ready for connection to service at Project site.

C. Accessibility:

1. Minimum clearance for panels: Locate panels no lower than 15 inches and no higher than 48 inches above the floor where reach is unobstructed.

2.08 SOURCE QUALITY CONTROL

A. Manufacturer shall perform the following inspections and tests before shipment from factory.

1. Completed assemblies and control panels shall be tested at the factory prior to shipment. Panels shall be energized at the main disconnect using the project specific voltage configuration. Controls shall be tested to confirm proper operation in all modes (floats, level reader, etc.).

2. Factory witness testing shall be available to the Engineer and Owner upon request.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, including concrete bases; accurate placement, pattern and orientation of anchors; critical dimensions, and other conditions affecting performance of the Work.
B. Examine roughing-in for electrical and communication systems to verify actual locations of connections before building installation.
C. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. Provide concrete foundation as required by manufacturer. Placement of piping stubbed up through concrete slab shall be coordinated with manufacturer.
B. Coordinate delivery with manufacturer at least 4 weeks prior to shipment to the site. Provide properly sized crane and spreader bars for offloading and setting the Building on the foundation.
C. Place and install building according to manufacturer's written instructions. Set building plumb and aligned.
D. Provide anchor bolts, epoxy, and anchors with templates for correct placement into concrete. Fasten building securely to concrete base with anchorage.
E. Connect electrical power and communication systems.
F. Perform startup checks of heating and cooling units in accordance with manufacturer's written instructions.

3.03 FIELD CALIBRATION, ADJUSTMENTS AND TESTING

A. Devices requiring field calibration shall be calibrated in the presence of the Engineer and/or Owner and be documented.

3.04 FIELD QUALITY CONTROL AND START-UP

A. Manufacturer's Field Service:

1. Supplier's or manufacturer's technician for equipment specified herein shall be present at job site for minimum man-days indicated, travel time excluded, for service during plant construction, plant startup, and training of OWNER'S personnel for plant operation. Include minimum of:

a. 2 man-days for Installation Services
b. 1 man-day for Instructional Services.

B. Provide Operation & Maintenances manuals (including as-built wiring diagrams) for pumps, motors, controls, electrical, and instrumentation. The O&M manuals shall be submitted to and approved by the Contractor and then submitted to the Engineer. The manuals shall be completed at the time of start-up. Contractor shall also provide machine-specific Lockout and Tag-out procedures for all station equipment. Owner's representative shall sign off on the start-up. Start-up shall include the respective representatives for the following:

a. Pumps
b. Control Building
c. Electrical Controls and Instrumentation
d. Owner
e. Engineer

C. Demonstrate proper operation of all system features and functions to the Owner's representative and Engineer. Coordinate installation and start-up scheduling with Owner and Engineer.

* * * END OF SECTION * * *

SECTION 22 05 29
PIPE HANGERS, SUPPORTS, AND ANCHORS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. System of pipe supports and anchors with necessary inserts, bolts, nuts, restraining and hanger rods, washers, miscellaneous steel, and other accessories.

1.02 SYSTEM DESCRIPTION

A. Design Requirements:

1. Design, detail and installation of pipe support system shall be responsibility of CONTRACTOR.
2. Pipe support system components shall withstand dead loads imposed by weight of pipes filled with water plus insulation, plus live loads due to thermal expansion, vibration, internal test pressures, and have minimum safety factor of 5.
3. Absence of pipe supports and details on Drawings shall not relieve CONTRACTOR of responsibility for providing them throughout project as required.

1.03 SUBMITTALS

A. Shop Drawings

1. Manufacturer's data, dimensions, sizes, types, location, maximum loading, thrust anchorage and manufacturer's instructions.

B. Submit in accordance with Section 01 33 00.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Superstrut.

B. Anvil, International Inc.

C. Carpenter-Patterson.

D. Unistrut.

E. B-line.

F. Or equal.

2.02 GENERAL

A. MSS types indicated are typical of types and quality of standard pipe supports and hangers to be employed.

B. Provide factory fabricated piping hangers and supports, clamps, hanger rod attachments, building attachments, saddles, adjustable rollers, shields, stanchions, thrust anchorage, concrete anchors and other miscellaneous products of MSS SP-58 type indicated or shop fabricated supports; comply

with MSS SP-58 and manufacturer's published product information. Where MSS type not indicated, provide proper selection for installation requirements and comply with MSS SP-58 and manufacturer's published product information.

2.03 MATERIALS

A. Hangers, supports, rollers, saddles, stanchions, rods, clamps, protective shields, metal framing, support components, and hanger accessories shall be galvanized steel unless otherwise noted.

1. Pipe supports located outside shall be 316-stainless steel.

2.04 HORIZONTAL PIPING HANGERS AND SUPPORTS

A. General:

1. Unless otherwise shown or specified, hangers for 2-1/2 in. and smaller pipe shall be split-ring, adjustable swivel, clevis or roller type, hangers for 3 in. pipe or greater shall be clevis or roller type.
2. Hangers for use with spring supports shall be split-ring or clamp type.
3. Each hanger shall be designed to permit at least 1-1/2 in. vertical adjustment after installation.

B. Adjustable Swivel Split-Ring Hanger: MSS Type 6.

C. Adjustable Clevis Hanger: MSS Type 1, fabricated from steel.

D. Adjustable Band Hanger: MSS Type 7, fabricated from steel.

E. Adjustable Swivel-Band Hanger: MSS Type 10.

F. Clamp: MSS Type 4.

G. Single Roll Support: MSS Type 41, including axle roller and threaded sockets.

H. Adjustable Roller Hanger: MSS Type 43, including axle roller and clevis.

I. Roll/Stand: MSS Type 44, including roller, stand, and axle.

J. Adjustable Roll/Base: MSS Type 46, including roller, adjustable base, and stand.

K. Steel Brackets: Welded structural steel shapes complying with following.

1. Light Duty: MSS Type 31.
2. Medium Duty: MSS Type 32.
3. Heavy Duty: MSS Type 33.

L. Adjustable Saddle Support:

1. MSS Type 38, including saddle, pipe, and reducer.
2. Fabricate base support from steel pipe and include cast iron flange or welded steel plate.

M. Stanchion Saddle Support:

1. MSS Type 37, including saddle and U-bolt.
2. Fabricate base support from steel pipe and include cast iron flange or welded steel plate.

N. Strap or wire hangers not acceptable.

2.05 VERTICAL PIPING CLAMPS

A. 2-Bolt Riser Clamp: MSS Type 8, galvanized or plastic coated.

B. 4-Bolt Riser Clamp: MSS Type 42, include pipe spacers at inner bolt holes, galvanized or plastic coated.

2.06 HANGER RODS AND ATTACHMENTS

A. Hanger Rods:

1. ASTM A36, threaded both ends or continuous threaded.
2. Rods shall conform to following sizes.

Pipe Size	Minimum Rod Dia (in.)
Up to 2 in.	3/8
2-1/2 in and 3 in.	1/2
4 in.	5/8
6 in.	3/4
8 in. to 12 in.	7/8
14 in. and Up	1
Trapeze Hangers	As Required

B. Turnbuckles: MSS Type 13.

C. Weldless Eye Nut: MSS Type 17.

D. Eye Socket: MSS Type 16.

E. Clevis: MSS Type 14.

2.07 BUILDING ATTACHMENTS

A. Individual Concrete Inserts:

1. MSS Type 18, malleable iron.
2. MSS Type 19, steel.
3. Minimum Safe Load: 1,100 lbs.

B. Continuous Concrete Inserts:

1. Superstrut.
2. Unistrut.
3. Anvil, International Inc.
4. Or equal.

C. Top Beam C-Clamp: MSS Type 19.

D. C-Clamps: MSS Type 23, steel.

E. Single-Side Clamp: MSS Type 25.

F. Top I-Beam Clamp: MSS Type 25.

G. Side Beam Clamp: MSS Type 20.

H. Concrete Anchors:

1. Comply with Section 05 50 00.
2. Minimum Safety Factor: 5.

2.08 SADDLES AND SHIELDS

A. Protection Saddles: MSS Type 39.

B. Protection Shields: MSS Type 40.

C. Wood Insulation Saddle:

1. Elcen Metal Products Company.
2. Or equal.

2.09 MISCELLANEOUS MATERIALS

A. Metal Framing Systems:

1. Superstrut, galvanized.
2. Unistrut, galvanized.
3. Anvil, International Inc. galvanized.
4. Or equal.

B. Shop-Fabricated Anchors and Supports:

1. Steel Plates, Shapes, and Bars: ASTM A36.
2. Restraining Rods: ASTM A307.
3. Fabricate in accordance with Section 05 50 00.

C. Concrete: Class B in accordance with Section 03 30 00.

PART 3 EXECUTION

3.01 GENERAL

A. Proceed with installation of hangers, supports, and anchors after required building structural work is complete and concrete support structure has reached 28 day compressive strength as specified in Section 03 30 00.

B. Install hangers, supports, clamps, and attachments from building structure. Comply with MSS SP-69. Group parallel runs of horizontal piping to be supported together on trapeze type hangers where possible.

C. Install supports to provide indicated pipe slopes and maximum pipe deflections allowed by ANSI B31.1 are not exceeded.

D. Except as otherwise indicated for exposed continuous pipe runs, install hangers and supports of same type and style as installed for adjacent similar piping.

E. Do not support piping from other piping.

F. Prevent contact between dissimilar metals. Where concrete or metal pipe support is used, place 1/8 in. thick teflon, neoprene rubber or plastic strip under piping at point of bearing. Cut to fit entire area of contact between pipe and support.

G. Prevent electrolysis in support of copper tubing by use of hangers and supports which are copper plated, plastic coated or by other recognized industry methods. Electrician's tape is not an acceptable isolation method.

H. Apply anti-seize compound to nuts and bolts.

3.02 INSTALLATION OF BUILDING ATTACHMENTS

A. Support piping from structural framing, unless otherwise noted.

B. Concrete Inserts:

1. Locate inserts so total load on insert does not exceed manufacturer's recommended maximum load. Location of inserts shall be approved by ENGINEER.
2. Where necessary to anchor supports to hardened concrete or completed masonry, use concrete anchors.

C. Attach to structural steel with beam clamps.

3.03 THRUST ANCHORS AND GUIDES

A. Thrust Anchors:

1. For suspended piping, center thrust anchors as closely as possible between expansion joints and between elbows and expansion joints. Anchors shall hold pipe securely and be sufficiently rigid to force expansion and contraction movement to take place at expansion joints or elbows and preclude separation of joints.
2. Provide thrust anchors as required to resist thrust due to changes in dia or direction or dead ending of pipe lines. Anchorage shall be required wherever bending stresses exceed allowable for pipe. Wall pipes may be used as thrust anchors.

B. Pipe guides shall be provided adjacent to sliding expansion joints in accordance with recommendations of National Association of Expansion Joint Manufacturers.

3.04 PIPE SUPPORT

A. Spacing:

Type of Pipe	Maximum Pipe Support Spacing (ft)
Steel	
3 in.	12
2-1/2 in.	11
2 in.	10
1-1/2 in.	9
1 in.	7
3/4 in.	6
1/2 in.	5

B. Where piping of various sizes is to be supported together, space supports for smallest pipe size or install intermediate supports for smaller dia pipe.

C. Provide minimum of 2 pipe supports for each pipe run.

D. Where piping connects to equipment, support by pipe support and not by equipment, unless approved by equipment manufacturer.

E. Unless otherwise shown or authorized by ENGINEER, place piping running parallel to walls approximately 1-1/2 in. out from face of wall and at least 3 in. below ceiling.

F. Pedestal pipe supports shall be adjustable with stanchion, saddle, and anchoring flange.

G. Piping supports for vertical piping passing through floor sleeves shall be galvanized steel riser clamps.

H. Piping passing through sleeves or openings in interior wall sleeves shall be carried by supports or hangers. Do not rest on wall.

I. Support piping in manner preventing undue strain on valve, fitting or equipment. Provide pipe supports at changes in direction or elevation, adjacent to flexible couplings, adjacent to nonrigid joints, and where otherwise shown. Do not install pipe supports and hangers in equipment access areas.

J. Install supports to allow controlled movement of piping systems, permit freedom of movement between pipe anchors, and facilitate action of expansion joints, expansion loops, expansion bends, and similar units.

K. Piping shall be free to move when expands or contracts, except where fixed anchors are indicated. Where adequate hanger rod swing length cannot be provided or where pipe movement based on expansion of 1 in./100 ft for each 100°F change in temperature exceed 1/2 in., provide approved roller supports.

L. Support piping 6 in. and larger on trapeze hangers with rollers.

M. Stacked horizontal runs of piping along walls may be supported by metal framing system attached to concrete insert channels.

3.06 BURIED PIPING

A. Provide unlugged bell and spigot or bell tees, Y-branches, and bends deflecting 11-1/4° or more and plugs with reaction blocking, anchors, joint harness or other acceptable means for preventing movement of pipe and joints caused by internal pressure.

B. Concrete Blocking:

1. Extend from fitting to solid undisturbed earth and installed so joints accessible for repair.
2. Bearing area of concrete reaction blocking shall be as shown on Drawings.
3. If adequate support against undisturbed ground cannot be obtained, install metal harness anchorages consisting of steel rods across joint and securely anchored to pipe and fitting or other adequate anchorage facilities to provide necessary support.
4. Should lack of solid vertical excavation face be due to improper trench excavation, cost of furnishing and installing metal harness anchorages in excess of Contract value of concrete blocking replaced by such anchorages shall be provided by CONTRACTOR.

C. Provide reaction blocking, anchorages or other supports for fittings installed in fills or other unstable ground or above grade as shown on Drawings.

* * * END OF SECTION * * *

SECTION 23 11 23

NATURAL GAS SYSTEMS

PART 1 GENERAL

1.01 SUMMARY

A. Gas Utility: Mid-American Energy Company, 6500 Grand Ave, West Des Moines, IA.

1. Contact Representative: Jordyn Weber (319) 291-4728.

B. Gas Utility Charges: Consult with utility as to extend of its work, cost, fees and permits involved for extension of Gas Utility distribution system to point of services termination and meters. Pay such costs and fees; obtain permits.

1. Install new 2-in. natural gas service/meter along South side of Operator Buidling as shown on Drawing 02-CF-01. Natural gas service size based on available pressure at existing natural gas main in Ansborough Ave (verify with local utility) and a approximate developed length of 900 feet as shown on Drawing 02-CF-02.
2. Extend 1.5-in. natural gas from meter over to generator. Provide 1.5-in. gas cock, 1.5-in. pressure regulating valve, and 1-in. drip leg at generator installed in accordance with manufacturer's instructions. Install flexible NG connector provided with generator by Division 26.
3. Stand-by power generator total connected load: 2,397 CFH NG
4. Inlet supply pressure at meter to be determined by local utility.
5. Supply pressure downstream of meter to be 2 psi.
6. Supply pressure downstream of pressure regulator at generator to be 11 in. w.c. Provide pressure regulator.

1.02 SUBMITTALS

A. Product Data: Submit manufacturer's technical product data and installation instructions for natural gas systems materials and products.

B. Submit in accordance with Section 01 33 00.

1.03 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Firms regularly engaged in manufacture of natural gas systems products, of types, materials, and sizes required, whose products have been in satisfactory use in similar service for not less than 5 yrs.

B. Installer's Qualifications: Firm with at least 3 yrs of successful installation experience on projects with natural gas systems work similar to that required for Project.

C. Regulatory Requirements:

1. ANSI Compliance: Fabricate and install natural gas piping in accordance with ASME/ ANSI B31.9.
2. NFPA Compliance: Fabricate and install natural gas systems in accordance with NFPA 54.
3. Utility Compliance: Fabricate and install natural gas systems in accordance with local gas utility company.
4. Fabricate and install natural gas systems in accordance with International Mechanical Code (2021) and International Fuel Gas Code (2021).

1.04 MAINTENANCE

A. Tools:

1. Furnish 2 valve wrenches for each type of gas valve installed that require valve wrench.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Manufacturer's equipment used as basis of design for Project is name indicated in Specification for particular type of equipment or application contained in these Contract Documents. If no manufacturer listed, basis of design is industry standard indicated.

B. Manufacturers: Subject to compliance with requirements above, provide equipment of 1 of following manufacturers to greatest extent possible.

1. Gas Cocks:

a. DeZurik Corporation.
b. McDonald Manufacturing Company.
c. Rockwell International, Flow Control Division.
d. Or equal.

2.02 MATERIALS AND PRODUCTS

A. General:

1. Provide piping materials and factory-fabricated piping products of sizes, types, pressure ratings, and capacities indicated. Where not indicated, provide proper selection determined by CONTRACTOR to comply with installation requirements.
2. Provide materials and products complying with NFPA 54 where applicable; base pressure rating on natural gas piping system maximum design pressures.
3. Provide sizes and types matching piping and equipment connection fittings of materials which match pipe materials used in natural gas systems.
4. Where more than 1 type materials or products indicated, selection is CONTRACTOR'S option.

2.03 BASIC PIPES AND PIPE FITTINGS

A. Provide pipes and pipe fittings complying in accordance with following.

1. Gas Service Piping:

    a. All pipe sizes: Black steel pipe; Schedule 40; wrought steel buttwelding fittings.

        1) Wrapping: Machine wrap pipe using 50% overlap wrap, with polyvinyl chloride (PVC) tape. Hand wrap fittings using 100% overlap wrap extending 6 in. beyond fitting onto wrapped pipe. Comply with tape manufacturer's installation instructions.

    b. Pipe sizes 1/2 in. through 12 in.: Thermoplastic gas pressure pipe, tubing, and fittings complying with ASTM D2513.
    c. Pipe sizes 2 in. through 12 in.: Reinforced epoxy resin gas pressure pipe and fittings complying with ASTM D2517.

2. Gas Distribution Piping (Above Grade):

    a. Pipe size 2 in. and smaller: Black steel pipe; Schedule 40; malleable iron threaded fittings.
    b. Pipe size 2-1/2 in. and larger: Black steel pipe; Schedule 40; wrought steel butt welding fittings.

2.04 BASIC PIPING SPECIALTIES

A. Provide the following piping specialties complying with Industry Standards.

1. Dielectric unions.
2. Pipe sleeves.
3. Sleeve seals.

2.05 SPECIAL VALVES

A. Gas Cocks: Provide AGA certified cocks of plug or ball valve configuration meeting following requirements for service pressures required.

1. Building Service Entrance Valves:

    a. 1/2 in. through 2 in.: Lock-wing gas stop less check.
    b. 2 in. through 3 in.: Lock-wing gas stop less check.

2. Branch Main and Unit Isolation Valves: Provide 1 of following for branch main isolation and at each unit.

    a. 1/2 in. through 2 in.:

        1) Flat-tee head gas stop with top check.
        2) Square head gas stop with top check.
        3) Lever handle gas stop with top check.
        4) Furnace pilot gas stop with 1/8 in. pilot tap and top check.

    b. 2 in. through 3 in.:

1) Flat-tee head gas stop less top check.
2) Square head gas stop less top check.

3. Construction:

a. Low pressure gas stops (less than 2 psig): ASTM B62 bronze, ASME B1.20.1 threaded end connections.
b. Medium pressure gas stops (less than 25 psig): ASTM B62 bronze, ASME B1.20.1 threaded end connections.
c. High pressure gas stops (less than 100 psig): ASTM A126, Class B iron body, ASME B1.20.1 threaded connections.

2.06 PRESSURE REGULATING VALVES

A. Regulators for Inlet Pressures of 2 psi and Less Natural Gas Service:

1. Provide single stage, corrosion-resistant gas pressure regulators with aluminum die cast body, corrosion resistant integral parts, and threaded ends for gas pipe up to 2 in. for inlet and outlet gas pressures, specific gravity and volume flow indicated on Drawings.

a. Provide automatic vent limiter orifice vent where allowed by ANSI standards.

B. Regulators for Inlet Pressures over 2 psi Natural Gas Service:

1. Provide two stage, corrosion resistant gas pressure regulators with aluminum die cast body, corrosion resistant integral parts, over-pressure protection device (ANSI certified up to 65 psi), and threaded ends for gas pipe up to 2 in., and flanged ends for gas pipe 2-/12 in. (and larger) for inlet and outlet gas pressures, specific gravity, and volume flow indicated on Drawings.

a. Provide direct hard piped atmospheric vent to outside of building for regulators controlling pressures 2 psi and higher.

2.07 GAS METER

A. Provide diaphragm type, positive displacement gas meters with aluminum cases, temperature compensated, with internal corrosion resistant components; threaded ends for 2 in. and smaller, flanged ends for 2 1/2 in. and larger for gas working pressures, specific gravity, and volume flow indicated.

1. New gas service and meter to be provided by Local Utility. Meter size and natural gas service pipe size serving facility to be evaluated and determined by the local utility.

2.08 BASIC IDENTIFICATION

A. Provide following identification complying with the International Mechanical Code and International Fuel Gas Code.

1. Gas Service: Underground type plastic line markers.
2. Gas Valves: Plastic weatherproof valve tags.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine areas and conditions under which natural gas system materials and products to be installed.

B. Do not proceed with Work until unsatisfactory conditions corrected.

3.02 GAS SERVICE

A. Arrange with utility company to provide gas service with shutoff at terminus to termination point indicated on drawings.

B. Extend service pipe from utility's terminus to inside generator equipment housing, under utility's direction and in accordance with following:

1. Install service pipe through sleeve embedded in concrete slab.

C. Provide shutoff outside generator enclosure in adjustable gas service valve box with cover set flush to finished grade.

3.03 INSTALLATION OF NATURAL GAS PIPING

A. Install natural gas piping in accordance with International Mechanical Code.

B. Use sealants on metal gas piping threads chemically resistant to natural gas. Use sealants sparingly and apply to only male threads of metal joints.

C. Remove cutting and threading burrs before assembly of piping.

D. Do not install defective piping or fittings. Do not use pipe with threads which are chipped, stripped or damaged.

E. Plug each gas outlet, including valves, with threaded plug or cap immediately after installation and retain until continuing piping or equipment connections complete.

F. Ground gas piping electrically and continuously within Project, and bond tightly to grounding connection.

G. Install drip-legs in gas piping where indicated and required by code or regulation.

H. Install "Tee" fitting with bottom outlet plugged or capped at bottom of pipe risers.

I. Use dielectric unions where dissimilar metals joined together.

J. Install piping with 1/64 in./ft (1/8%) downward slope in direction of flow.

K. Install piping parallel to other piping but maintain minimum of 12 in. clearance between gas piping and steam or hydronic piping above 200°F (93°C).

L. For piping running through ducts or air plenums, install in welded conduit, ventilated to outside on both ends.

M. For risers running through concrete or asphalt, install through minimum 6 in. pipe sleeve. Fill annular space with gravel.

N. Install magnesium anodes for underground steel pipe, one 5 lb. anode for up to 100 ft in length and one 5 lb. anode for each additional 100 ft.

O. Install magnesium anodes for each underground steel or malleable iron fitting, isolated between 2 sections of plastic pipe; one 3 lb. anode for each fitting.

P. Trench, backfill, and compact in accordance with Section 31 23 33.

3.04 INSTALLATION OF VALVES

A. Gas Cocks: Provide at connection to gas train for each gas-fired equipment item and on risers and branches where indicated.

B. Locate gas cocks where easily accessible and protected from possible injury.

C. Pressure Regulating Valves: Install as indicated; comply with utility requirements. Extend atmospheric vent pipe to the outdoors, full size of outlet. Install gas shutoff valve upstream of each pressure regulating valve.

3.05 EQUIPMENT CONNECTIONS

A. Connect gas piping to each gas-fired equipment item, with drip-leg and shutoff gas cock. Comply with equipment manufacturer’s instructions.

3.06 INSTALLATION OF GAS METER

A. Install gas meter in accordance with local utility company's installation instructions and comply with requirements.

1. Hang meter on free standing support bracket embedded in concrete or from wall mounted support bracket as applicable.

3.07 FIELD QUALITY CONTROL

A. Piping Tests: Inspect, test, and purge natural gas systems in accordance with NFPA 54 and local utility requirements.

3.08 CLEANING, FLUSHING, INSPECTING

A. Clean exterior surfaces of installed piping systems of superfluous materials and prepare for application of specified coatings (if any). Flush out piping systems with clean water before

proceeding with required tests. Inspect each run of each system for completion of joints, supports and accessory items.

1. Inspect pressure piping in accordance with procedures of ANSI B31.1.

3.10 PIPING TESTS

A. Test pressure piping in accordance with ANSI B31.1.

END OF SECTION

SECTION 26 02 00
BASIC MATERIALS AND METHODS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Raceway Systems
2. Wire, Cables and Connectors
3. Wiring Devices
4. Motor Starters
5. Motor and Circuit Disconnects
6. Fuses
7. Panelboards
8. Transformers

1.02 SUBMITTALS

A. Approval of equipment supplied in this section is contingent upon CONTRACTOR verification of available fault current from electric utility.

1. Notify ENGINEER if available fault current is higher than specified equipment.

B. Product Data:

1. Submit for disconnects, motor starters, panelboards, circuit breakers, overcurrent protective devices, and transformers.
2. Product data sheets with printed installation instructions.

C. Shop Drawings:

1. Submit for motor starters.
2. Show enclosure dimensions, nameplate nomenclature, electrical ratings, and thermal unit schedule.
3. Wiring diagrams and schematics.

D. Operation and Maintenance (O&M) Data:

1. Maintenance data for materials and products for inclusion in Operating and Maintenance Manual.

E. Submit in accordance with Section 01 33 00.

1.03 QUALITY ASSURANCE

A. Items provided under this section shall be listed or labeled by UL or other Nationally Recognized Testing Laboratory (NRTL).

1. Term "NRTL" shall be as defined in OSHA Regulation 1910.7.
2. Terms "listed" and "labeled" shall be as defined in National Electrical Code, Article 100.

B. Regulatory Requirements:

1. National Electrical Code (NEC): Components and installation shall comply with National Fire Protection Association (NFPA) 70.

PART 2 PRODUCTS

2.01 METAL CONDUIT AND TUBING

A. Galvanized Rigid Steel Conduit: ANSI C80.1.

B. Plastic-Coated Steel Conduit and Fittings: NEMA RN 1.

C. Electrical Metallic Tubing and Fittings: ANSI C80.3 with compression-type fittings.

D. Flexible Metal Conduit: Zinc-coated steel.

E. Liquidtight Flexible Metal Conduit: Flexible steel conduit with PVC jacket.

2.02 NONMETALLIC CONDUIT

A. Rigid Nonmetallic Polyvinyl Chloride (PVC) Conduit: NEMA TC 2, 80 PVC.

2.03 FITTINGS

A. Fittings for steel conduits:

1. Steel or malleable iron, zinc galvanized or cadmium plated.
2. Do not use set screw or indentor type fittings.
3. Do not use aluminum or die cast fittings.
4. EMT and GRS Connectors and Couplings:

    a. Threaded.
    b. Insulated throat.
    c. Gland compression type.
    d. Rain and concrete type.

5. Comply with ANSI C80.4.
6. Comply with NEMA FB 1, compatible with conduit materials.

B. Conduit bodies:

1. Malleable iron with galvanized finish.

C. Fittings for flexible metal conduit.

1. Insulated throat type.
2. Threaded.
3. Grounding type.
4. Liquidtight: 1 piece sealing "O" rings with connectors when entering boxes or enclosures.

D. Expansion Joints:

1. Conduit expansion fittings complete with copper bonding jumper, Cooper Crouse-Hinds Type XJ.
2. Conduit expansion/deflection fittings with copper bonding jumper, Cooper Crouse-Hinds Type XD.

E. Seals:

1. Wall entrance, OZ/Gedney Type FSK or FSC.

F. PVC Conduit Fittings:

1. NEMA TC3; match to conduit type and material.

G. Drain Fittings:

1. Automatic Drain Breather:

a. Explosionproof.

1) Safe for Class I, Groups C and D.

b. Capable of passing minimum 25 cc water/min and minimum 0.05 cu ft air/min at atmospheric pressure.

2. Condensate Drain:

a. Conduit outlet body, Type T.
b. Threaded, galvanized plug with 3/16 in. drilled holed through plug.

H. Hazardous Areas:

1. Explosionproof.
2. Horizontal seal fittings, Cooper Crouse-Hinds Type EYS.
3. Vertical seal fittings, Cooper Crouse-Hinds Type EYD.
4. Vertical seal fittings shall have drain plug.

2.04 BOXES

A. Of indicated types, sizes and NEMA enclosure classes. Where not indicated, provide units of types, sizes, and classes appropriate for use and location. Provide items complete with covers and accessories required for intended use. Provide gaskets for units in damp or wet locations.

B. Fasteners:

1. General Use: Corrosion resistant screws and hardware including cadmium and zinc plated items.
2. Damp or Wet Locations: Stainless steel screws and hardware.

C. Outlet Boxes:

1. Boxes shall be of type, shape, size, and depth to suit each location and application.
2. Steel Boxes: Sheet steel with stamped knockouts, threaded screw holes and accessories suitable for each location including mounting brackets and straps, cable clamps, exterior rings and fixture studs.

3. Cast Boxes: Iron alloy, waterproof, with threaded raceway entries and features and accessories suitable for each location, including mounting ears, threaded screw holes for devices and closure plugs.

D. Pull and Junction Boxes:

1. Boxes shall have screwed or bolted on covers of material same as box and shall be of size and shape to suit application.
2. Galvanized Steel Boxes: Flat rolled, code gauge, sheet steel with welded seams. Hot-dip galvanized after fabrication. Cover shall be gasketed.
3. Stainless-Steel Boxes: Fabricate of stainless steel conforming to Type 304 of ASTM A167. Cover shall be gasketed.
4. Galvanized Cast-Iron Boxes: Molded of cast iron alloy with gasketed cover and integral threaded conduit entrances.
5. Boxes Approved for Classified Locations: Cast metal or cast nonmetallic boxes conforming to UL 886 listed and labeled for use in specific location classification, and with specific hazardous material encountered. Conduit entrances shall be integral threaded type.

2.05 WIRES, CABLES, AND CONNECTORS

A. Building wires and cables with insulation type, cable construction, and rating as required to meet application and NEC requirements.

B. Manufacturers:

1. Wire and Cable:

a. Southwire.
b. Houston Wire and Cable.
c. Belden.
d. American Insulated Wire Corp.
e. Republic Wire.
f. Superior Essex.

2. Connectors:

a. FCI-Burndy.
b. Thomas and Betts.
c. Blackburn, Thomas and Betts.

C. Copper wire only.

D. 600 v insulation (ASTM standard compounds) and color code conductors for low voltage (secondary feeders and branch circuits) as required by NEC.

1. Type THWN Stranded: Single conductor No. 12 AWG minimum for branch circuit and feeder conductors size No. 8 AWG and smaller.
2. Type XHHW Stranded: Single conductor for branch circuits, feeders, and service conductors larger than No. 8 AWG.
3. Provide grounding conductor when run with circuit conductors with same insulation as circuit conductors.
4. Type USE Stranded: Single conductor for under-ground direct burial.

5. Type THWN Stranded: Single conductor No. 12 AWG minimum for 120 v control wiring and No. 14 AWG minimum for graphic indication, nonshielded instrumentation and other control wiring operating at less than 120 v unless otherwise noted on Drawings.

    a. Provide high density polyethylene jacketed multi-wire cable assemblies in underground conduit or duct.

6. PVC insulation, tinned copper (19 by 27) stranded, No. 16 AWG, twisted pair cabled with aluminum mylar shielding, stranded, tinned, No. 18 AWG copper drain wire, and overall black FR-PVC, 90°C, 600 volt jacket for interference sensitive instrumentation wiring.
7. Vinyl insulated, tinned copper, solid, twisted pair, cabled conductors and silver gray vinyl jacket for telephone inter-communications.

    a. Up to 4 conductors/cable, 22 AWG solid wire.
    b. Over 4 conductors/cable, 24 AWG solid wire.
    c. Provide high density polyethylene jacketed multi-wire cable assemblies in underground conduit or duct.

E. 2000v insulation:

1. For VFD motors: Belden VFD cable per manufacturer recommendations.
2. No substitutes.

F. Joints, Taps, and Splices:

1. Joints, Taps, and Splices in Conductors No. 10 AWG and Smaller: UL listed preinsulated compression spring-type solderless connectors.
2. Joints, Taps, and Splices in Conductors No. 8 AWG and Larger: Solderless 2 or 4 -bolt compression type connectors of type that will not loosen under vibration or normal strains.

G. Terminations:

1. Power Conductors: Compression crimp type lugs.
2. Control and Instrumentation Conductors: Compression crimp type fork tongue, insulated support type lugs on terminal strips. Do not splice.

2.06 WIRING DEVICES

A. Manufacturers:

1. Hubbell Wiring Device Division.
2. Pass and Seymour/Legrand
3. Appleton Electric Company.
4. Cooper Crouse-Hinds Company.

B. Color: Ivory unless otherwise indicated or required by NEC.

C. Switches:

1. General Use Lighting Switches: 20 amp toggle, equal to Hubbell No. 1221-I series.

D. Receptacles:

1. General use duplex receptacles: NEMA No. 5-20R, grounding type, 20 amp Hubbell No. 5362 Specification Grade.
2. Special purpose receptacles as shown on Drawings and schedules.

E. Ground-Fault Circuit Interrupter Receptacles (GFCI).

1. Ratings: 120 vac., 20 amp.
2. Tripping Requirement: UL Class A.
3. Construction:

    a. Shallow depth.
    b. Line and load terminal screws.
    c. Noise suppression.
    d. Feed through.
    e. Standard duplex wall plates shall fit.
    f. NEMA 5-20R configuration.

4. Meet requirements of UL 943 ground-fault circuit interrupters.

F. Wiring Device Plates and Covers:

1. Wall plates for wiring devices with ganging and cut-outs as indicated, provided with metal screws for securing plates to devices, screw heads colored to match finish of plate.
2. Plates for Flush Mounted Devices:

    a. Hubbell high-impact smooth nylon in Ivory color.

3. Device plates for surface mounted Type FS or FD boxes to be Type FSK galvanized steel.
4. Device plates for surface mounted, 4 in. sq boxes to be 1/2 in. raised galvanized steel covers.
5. Weatherproof plates and covers for exterior devices or devices in damp locations to be galvanized gray cast malleable with gasketed, lift cover plate.
6. Weatherproof plates and covers suitable for wet locations while in use.

    a. Hinged and gasketed cover/enclosure to maintain weather tight seal while the equipment is plugged into it. TayMac or equal.

2.07 MOTOR STARTERS

A. Manufacturers:

1. Square D, Schneider Electric.
2. Allen Bradley, Rockwell Automation.

B. Enclosures:

1. NEMA 1 in electrical equipment building.
2. As otherwise indicated and as required by NEC.

C. Manual Starters:

1. Minimum short circuit withstand rating in combination with motor circuit protective device shall be 10,000 symmetrical amps or as indicated on Drawings.

D. Manual Motor Starter Construction:

1. Quick make and break toggle action.
2. Double break silver alloy contacts.
3. 1-piece melting alloy type thermal overload units.
4. Starter inoperative unless thermal unit in position.
5. Padlock provision.
6. Pilot light.
7. NEMA standards for size and hp rating.

2.08 MOTOR AND CIRCUIT DISCONNECTS

A. Manufacturers:

1. Square D, Schneider Electric.

B. Enclosed Circuit Breaker Construction:

1. Dual cover interlock.
2. External trip indication.
3. Provisions for control circuit interlock.
4. Padlock provisions for padlock in Off position.
5. Handle attached to box, not cover.
6. Handle position indicates On, Off or Tripped.
7. Provisions for insulated or groundable neutral.

C. Permanent Trip Circuit Breakers:

1. Thermal and magnetic protection.
2. Magnetic protection only in combination with motor starters and motor circuit protectors (MCP).
3. Single magnetic trip adjustment.
4. Single-handle common trip, 2 and 3 poles (handle ties not acceptable).
5. Push-to-trip test button.
6. Bolt-on type.
7. Quick make and break toggle action.
8. Handle trip indication.
9. Handle position indication, On, Off, and Tripped centered.
10. UL listed for type of wire specified.
11. UL listed short circuit rating (integrated equipment rating).

    a. Up to 240 v: 22,000 RMS symmetrical amp minimum.
    b. Up to 480 v: 42,000 RMS symmetrical amp minimum.

D. Safety Switches:

1. NEMA heavy duty Type HD.
2. Dual cover interlock.
3. Visible blades.
4. Provisions for control circuit interlock.
5. Pin type hinges.
6. Tin plated current carrying parts.
7. Quick make and break operator mechanism.
8. Handle attached to box, not cover.
9. Handle position indication, On in up position and Off in down position.
10. Padlock provisions for up to 3 padlocks in Off position and On position.
11. UL listed lugs for type and size of wire specified.
12. Spring reinforced fuse clips for Class R fuses.
13. Provisions for insulated or groundable neutral.
14. UL listed short circuit rating 200,000 RMS amp with Class R fuses.
15. Service Entrance Rated, as required per Contract Drawings.

E. Enclosures:

1. NEMA 1 in electrical equipment building.
2. NEMA 4X stainless steel with watertight hubs for outdoor and wet locations.
3. NEMA 7 in hazardous classified locations.
4. As otherwise indicated and as required by NEC.

2.09 FUSES

A. Manufacturers:

1. Cooper Bussmann.
2. Ferraz Shawmut.
3. Littelfuse.

B. 600 Vac and 250 Vdc Fuses:

1. Class RK 1, 1-end rejection or to fit mountings specified, 1/10 to 600 amps, 200,000 amp interrupting rating.

a. Bussmann Low-Peak. LPN-R, dual element, time delay with short circuit protection for motor, transformer, welder, feeder, and main service protection.

C. Spare Fuses:

1. 10%, minimum of 3, of each type and rating of installed fuses.

2.10 PANELBOARDS

A. Manufacturers:

1. Square D, Schneider Electric.

B. Panelboard Ratings:

1. UL listed short circuit rating (integral equipment rating):

a. Up to 240 v: 22,000 RMS symmetrical amp minimum.
b. Up to 480 v: 42,000 RMS symmetrical amp minimum.
c. As shown on Drawings.

C. Panelboard Construction:

1. Main breaker or main lugs only, per panelboard schedule.
2. Flush or surface mounted as indicated on panelboard schedule.
3. NEMA Type 1 enclosure, unless otherwise indicated on panelboard schedule.
4. Equipment ground bus adequate for feeder and branch-circuit equipment ground conductors, bonded to box.
5. Listed for use as service equipment for panelboards with main service disconnect.
6. Molded case circuit breakers.
7. Terminals:

a. UL listed for type of wire specified.
b. Anti-turn solderless compression type.

8. Bussing:

    a. Distributed phase sequence type.
    b. 225 amps, 98% conductivity hard drawn copper or as shown on panelboard schedule or Drawings.
    c. Copper.
    d. Bussing and mounting hardware behind all usable space.

9. Gutters adequate for wire size used, 4 in. minimum.
10. Boxes:

    a. Code gauge galvanized steel.
    b. Without knockouts.

11. Fronts:

    a. Rust inhibiting primer, baked enamel finish.
    b. Dead front safety type.
    c. Concealed hinges.
    d. Flush stainless steel cylinder tumbler type locks with spring loaded door pulls.
    e. Circuit Directory:

        1) Suitable for complete descriptions.
        2) Clear plastic cover.
        3) Typewritten card.

12. Special features as shown on Drawings.
13. Engraved laminated nameplate:

    a. Stock melamine plastic laminate.
    b. Legend in black letters on white face and punched for mechanical fasteners.
    c. Except as otherwise indicated, provide single line of text, with 1/2 in. high lettering on 1-1/2 in. high label (2 in. high where two lines are required). Text shall match terminology and numbering of Contract Documents and Shop Drawings.

D. Panelboard Circuit Breakers:

1. Thermal and magnetic protection.
2. Single-handle common trip, 2 and 3 poles (handle ties not acceptable).
3. Bolt-on type unless otherwise noted on Drawings.
4. Quick make and break toggle action.
5. Handle trip indication.
6 Handle position indication, On, Off, and Tripped centered.
7. UL listed for type of wire specified.
8. UL listed short circuit rating (integrated equipment rating).

    a. Up to 240 v: 22,000 RMS symmetrical amp minimum.
    b. Up to 480 v: 42,000 RMS symmetrical amp minimum.

9. HACR breakers for air conditioning units.

2.11 TRANSFORMERS

A. Manufacturers:

1. Square D, Schneider Electric.

B. Materials and Equipment:

1. Dry type, air cooled.
2. Insulation:

a. Below 30 kVa: Class F or better, having 115°C rise, average maximum over 40°C ambient temperature.

3. Copper windings.
4. Cores: High grade, non-aging, sheet silicone steel laminations having core plating insulation on both sides of each lamination.
5. Terminal boards.
6. Taps: Two 2-1/2% taps above and below.
7. Overload Capacity: Not less that 10% for intermittent operation.
8. Size: kVa as indicated on Drawings and schedules.
9. Transformers shall be quiet type for installation in areas of low ambient noise levels. Maximum sound levels shall not exceed NEMA standards.
10. Cabinets: Sheet steel, phosphatized having one prime coat and two finish coats of baked enamel.

a. Indoor, ventilated unless otherwise indicated.

11. Nameplate: Metal nameplate listing manufacturer's name, serial number, type, class, kVa voltage, frequency, and showing internal wiring diagram.
12. Comply with UL 506.

PART 3 EXECUTION

3.01 RACEWAY SYSTEMS

A. Outdoors, Damp or Wet Locations: Use following wiring methods unless otherwise noted on Drawings:

1. Exposed: Galvanized rigid steel.
2. Concealed: Galvanized rigid steel.
3. Underground Power: Schedule 80 PVC or PVC-coated rigid steel conduit.
4. Underground Shielded Instrumentation Cables: Schedule 80 PVC or PVC-coated rigid steel conduit.
5. Connection to Vibrating Equipment (including transformers and hydraulic, pneumatic, or electric solenoid or motor-driven equipment): Liquidtight flexible metal conduit.
6. Underground Control Cables: Schedule 80 PVC or PVC-coated rigid steel conduit.

B. Indoor Dry Locations: Use following wiring methods unless otherwise noted on Drawings.

1. Connection to Vibrating Equipment (including transformers and hydraulic, pneumatic, or electric solenoid or motor-driven equipment): Flexible metal conduit.
2. Exposed: Galvanized rigid steel conduit.
3. Concealed: Electrical metallic tubing.

C. Hazardous Classified Locations: Use following wiring methods unless otherwise noted on Drawings.

1. Exposed and Concealed: Galvanized rigid steel conduit or PVC-coated steel conduit.

D. Use 3/4 in. minimum trade size conduit unless otherwise noted except conduit runs to room light switches may be 1/2 in.

E. Raceways Embedded in Slabs: Following restrictions shall be adhered to, unless otherwise noted.

1. Use galvanized rigid steel conduit.
2. Conduits, when placed within slab and walls, shall not be larger than 1/3 thickness of slab or wall nor placed closer than 3 outside dia clear from each other.
3. Reinforcing steel shall be in-place before embedded items placed and reinforcing cut or removed shall be replaced with additional reinforcing as indicated on Drawings or approved by ENGINEER.
4. Do not place conduits in slabs on grade. Place minimum 4 in. under bottom of slab.
5. Secure raceways to reinforcing rods to prevent sagging or shifting during concrete placement.
6. Space raceways laterally to prevent voids in concrete.
7. Install in middle third of slab thickness where practical, and leave at least 1 in. (25 mm) concrete cover.
8. Run conduit larger than 1 in. trade size parallel to or at right angles to main reinforcement and spaced on center of at least 3 times conduit trade diameter with minimum 2 in. concrete covering. Conduits over 1 in. may not be installed in slab without approval of ENGINEER.
9. When at right angles to reinforcement, place conduit close to slab support.
10. Conduits embedded in concrete frame shall comply with applicable provisions of ACI 318.

F. Examine surfaces to receive raceways, wireways, and fittings for compliance with installation tolerances and other conditions affecting performance of raceway system.

G. Coordinate layout and installation of raceway and boxes with other construction elements to ensure adequate headroom, working clearance, and access.

H. Complete conduit installation prior to installing cables.

I. Raceway systems shall be continuous from outlet to outlet and from outlets to cabinets, junction or pull boxes.

J. Enter and secure to boxes ensuring electrical continuity from point of service to outlets.

K. Conduit shall be run concealed except exposed surface conduit may be installed where noted on Drawings or where concealment found to be impractical or impossible, and only with approval of ENGINEER.

L. Provide watertight conduit system where installed in wet places, underground or where buried in masonry or concrete.

1. Use threaded hubs when entering top of enclosures.
2. Use sealing type locknuts when entering sides or bottom of enclosures.

M. Conduit runs extending through areas of different temperature or atmospheric conditions or partly indoors and partly outdoors shall be sealed, drained, and installed in manner preventing drainage of condensed or entrapped moisture into cabinets, motors or equipment enclosures.

N. Route conduit runs above suspended acoustical ceilings not interfering with tile panel removals.

O. Cap conduits after installation to prevent entry of debris.

P. Connections to motors and equipment subject to vibration shall be maximum of 3 ft long. Locate where least subject to physical abuse.

Q. Install conduit expansion fittings complete with bonding jumper in following locations.

1. Conduit runs crossing structural expansion joint.
2. Conduit runs attached to 2 separate structures.
3. Conduit runs where movement perpendicular to axis of conduit may be encountered.

R. Keep raceways at least 6 in. away from parallel runs of flues and steam or hot water pipes. Install horizontal raceway runs above water and steam piping.

S. Install separate ground conductor inside flexible conduit connections.

T. Use approved flexible connections in hazardous locations.

U. Use explosionproof fittings and seals in hazardous areas in accordance with NEC.

V. PVC Coated Galvanized Rigid Steel Conduit: Use only fittings approved for use with that material. Patch nicks and scrapes in PVC coating after installing conduit.

W. Transition under floor conduit to galvanized rigid steel conduit before rising above floor. Wrap with plastic tape to provide 40 mil thick cover to height of 6 in. above floor.

3.02 BOXES

A. Cap unused knockout holes where blanks have been removed and plug unused conduit hubs.

B. Support and fasten items in accordance with Section 16070.

C. Do not burn holes, use knockout punches or saw.

D. Provide outlet box accessories as required for each installation such as mounting brackets, fixture studs, cable clamps, and metal straps for supporting outlet boxes compatible with outlet boxes being used and meeting requirements of individual wiring situations.

E. Sizes shall be adequate to meet NEC volume requirements, but in no case smaller than sizes indicated.

F. Location of outlets and equipment shown on Drawings is approximate. Verify exact location.

G. Flush outlets shall have edges or plaster flush with finished wall or ceiling surfaces so plates can be drawn tightly to wall or ceiling surfaces.

H. Minor modification in location of outlets and equipment is considered incidental up to distance of 10 ft with no additional compensation, provided notification of modification is given prior to roughing in of outlet.

I. Outlet Boxes and Fittings: Install outlet and device boxes and associated covers and fittings of materials and NEMA types for each location in conformance with following requirements unless otherwise noted on Drawings:

1. Interior Dry Locations: Sheet steel, NEMA type 1 for flush mounting and feraloy Type FS or FD cast boxes with threaded conduit hubs for surface mounting.
2. Locations Exposed to Weather or Dampness: Galvanized, cast metal, NEMA Type 3R.
3. Wet Locations: Stainless Steel, NEMA type 4X enclosures.
4. Hazardous (Classified) Locations: NEMA type listed and labeled for location and class of hazard indicated.

J. Pull and Junction Boxes: Install pull and junction boxes of materials and NEMA types suitable for each location.

K. Mounting height as follows unless otherwise shown on Drawings:

1. Switches: 48 in. above floor.
2. ac Receptacles and Telephone Outlets: 15 in. above floor or 6 in. above counters, counter back-splashes, and baseboard radiators in finished areas; 48 in. above floor in unfinished areas.
3. Pushbuttons: 48 in. above floor.
4. Motor Starters and Disconnect Switches: 60 in. above floor.
5. Thermostats: 60 in. above floor.

3.03 WIRE AND CABLE

A. Install wires and cables as indicated, according to manufacturer's written instructions and NECA "Standard of Installation".

B. Run wire and cable in conduit unless otherwise indicated on Drawings.

C. On branch circuits, use standard colors.

D. Run ground wire with power circuits; conduit shall not be grounding path.

E. Provide separate conduit systems for following.

1. Line voltage control.
2. Low voltage control.
3. Shielded instrumentation.
4. Exit lights.
5. As required by NEC.

F. Where power cables and instrument/signal cables enter and pass through same handhole or distribution box, steel barrier or steel conduit separation shall be maintained to avoid magnetic interaction between power cables and instrumentation conductors. In manholes and handholes, provide Type C conduit outlet body with 3/16 in. holes drilled in bottom for drainage.

G. Run instrumentation cable into control cabinets only if terminated therein.

H. Terminate control, instrumentation, and communication cables on terminal strips in separate terminal cabinets located near conduit entrances of buildings or as shown on Drawings.

I. Color Coding: Conductors for lighting and power wiring as indicated below.

Phase	208/120 v	480/277 v
A	Black	Brown
B	Red	Orange
C	Blue	Yellow
Travelers	Pink	Purple
Neutral	White	Gray
Ground	Green	Green

J. Color coding for intrinsically safe systems shall be light blue.

3.04 JOINTS, TAPS, AND SPLICES

A. Where preinsulated spring connectors are used for motor and equipment connections, tape connector to wire to prevent loosening under vibration.

B. Each tap, joint or splice in conductors No. 8 AWG and larger shall be taped with 2 half-lap layers of vinyl plastic electrical tape and finish wrap of color coding tape where required by code.

C. Cable splices shall be made only in handholes, wireways, distribution boxes, and junction boxes.

3.05 WIRING DEVICES

A. Do not install devices until wiring is complete.

B. Do not use terminals on wiring devices (hot or neutral) for feed-through connections, looped or otherwise. Make circuit connections by using wire connectors and pigtails.

C. Install gasket plates for devices or system components having light emitting features such as switch with pilot light and dome lights. Where installed on rough textured surfaces, seal with black self-adhesive polyfoam.

D. Ground receptacles with insulated green ground wire from device ground screw to bolted outlet box connection or as shown on Drawings.

E. Install GFCI receptacles as required by NEC.

3.06 MOTOR STARTERS

A. Examine area to receive motor starters to ensure adequate clearance for starter installation.

B. Anchor firmly to wall or structural surface.

C. Support and fasten in accordance with Section 16070.

3.07 MOTOR AND CIRCUIT DISCONNECTS

A. Locate disconnect switches as shown on Drawings and required by NEC.

B. Provide control circuit interlock as required by NEC.

C. Overcurrent protective devices.

1. Install fuses just prior to energizing equipment.
2. Locate circuit breakers as shown on Drawings.

D. Install on equipment rack or anchor firmly to wall or structural surface.

E. Support and fasten in accordance with Section 16070.

3.08 PANELBOARDS

A. Support panel cabinets independently to structure with no weight bearing on conduits.

B. Install recessed panelboards to allow cover to be drawn tight against wall to provide neat appearance.

C. Install panelboards so top breaker is not higher than 6 ft 0 in. above floor.

D. Adjacent panel cabinets shall be same size and mounted in horizontal alignment.

E. Install typewritten directory in each panelboard, accurately indicating rooms or equipment being served after final circuit changes have been made to balance circuit loads.

F. Install filler plates in unused spaces.

3.09 TRANSFORMER

A. Install wall mounted transformers on prefabricated brackets designed for that purpose.

B. Install floor mounted transformers on 4 in. high concrete housekeeping pads.

C. Tighten bus connections and mechanical fasteners.

D. Adjust voltage taps for required system voltage and check grounding requirements.

3.10 FIELD QUALITY CONTROL

A. Control Circuits, Branch Circuits, Feeders, Motor Circuits, and Transformers:

1. Megger check of phase-to-phase and phase-to-ground insulation levels.

    a. Do not megger check solid state equipment.

2. Continuity.
3. Short circuit.
4. Operational check.

B. Wiring Devices:

1. Test receptacles with Hubbell 5200, Woodhead 1750 or equal tester for correct polarity, proper ground connection, and wiring faults.

3.11 ADJUSTMENT AND CLEANING

A. Motor Starters and Disconnects:

1. Adjust covers and operating mechanisms for free mechanical movement.
2. Tighten wire and cable connections.
3. Verify overcurrent protection thermal unit size with motor nameplate to provide proper operation and compliance with NEC.
4. Clean interior of enclosures.
5. Touch up scratched or marred surfaces to match original finish.

B. Circuit Breakers:

1. Adjustable settings shall be set to provide selective coordination, proper operation, and compliance with NEC.

* * * END OF SECTION * * *

SECTION 26 05 26
GROUNDING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Grounding of electrical systems and equipment and basic requirements for grounding for protection of life, equipment, circuits, and systems.
2. Grounding requirements specified in this Section may be supplemented in other Sections of these Specifications.

1.02 SUBMITTALS

A. Certificates for field testing agency, signed by CONTRACTOR, certifying that agency complies with requirements specified in "Quality Assurance" Article below.

B. Report of Field Tests and Observations: Certified by CONTRACTOR.

C. Test Results:

1. Certified field tests and observation reports indicating and interpreting test reports for compliance with performance requirements.

D. Submit in accordance with Section 01 33 00.

1.03 QUALITY ASSURANCE

A. Comply with UL 467.

B. Items provided under this section shall be listed or labeled by UL or other Nationally Recognized Testing Laboratory (NRTL).

1. Term "NRTL" shall be as defined in OSHA Regulation 1910.7.
2. Terms "listed" and "labeled" shall be as defined in National Electrical Code, Article 100.

C. Regulatory Requirements:

1. National Electrical Code (NEC): Components and installation shall comply with National Fire Protection Association (NFPA) 70.

PART 2 PRODUCTS

2.01 GROUNDING AND BONDING PRODUCTS

A. Governing Requirements: Where types, sizes, ratings, and quantities indicated are in excess of NEC requirements, more stringent requirements and greater size, rating, and quantity indications govern.

2.02 WIRE AND CABLE GROUNDING CONDUCTORS

A. Conform to NEC Table 8, except as otherwise indicated, for conductor properties, including stranding.

1. Material: Copper.

B. Equipment Grounding Conductors: Insulated with green color insulation.

C. Grounding-Electrode Conductors: Stranded cable.

D. Underground Conductors: Bare, tinned, stranded, except as otherwise indicated.

E. Bare Copper Conductors:

1. Solid Conductors: ASTM B3.
2. Assembly of Stranded Conductors: ASTM B8.
3. Tinned Conductors: ASTM B33.

2.03 MISCELLANEOUS CONDUCTORS

A. Grounding Bus: Bare, annealed-copper bars of rectangular cross section.

B. Braided Bonding Jumpers: Copper tape, braided No. 30 AWG bare copper wire, terminated with copper ferrules.

C. Bonding Straps: Soft copper, 0.05 in. (1 mm) thick and 2 in. (50 mm) wide, except as indicated.

2.04 CONNECTOR PRODUCTS

A. Pressure Connectors: High-conductivity-plated units.

B. Bolted Clamps: Heavy-duty type.

C. Exothermic-Welded Connections: Provided in kit form and selected per manufacturer's written instructions for specific types, sizes, and combinations of conductors and connected items.

2.05 GROUNDING ELECTRODES AND TEST WELLS

A. Grounding Rods: Copper-clad steel.

1. Size: 3/4 in. by 120 in. (19 by 3000 mm).

B. Test Wells: Fabricate from 15 in. (400 mm) long, square-cut sections of 8 in. (200 mm) diameter, Schedule 80, PVC pipe or as detailed on Drawings.

PART 3 EXECUTION

3.01 APPLICATION

A. Equipment Grounding Conductors: Comply with NEC Article 250 for types, sizes, and quantities of equipment grounding conductors, except where specific types, larger sizes, or more conductors than required by NEC are indicated.

1. Install equipment grounding conductor with circuit conductors for items below in addition to those required by Code:

a. Feeders and branch circuits.
b. Lighting circuits.
c. Receptacle circuits.
d. Single-phase motor or appliance branch circuits.
e. Three-phase motor or appliance branch circuits.
f. Flexible raceway runs.

2. Isolated Equipment Enclosure Circuits: For designated equipment supplied by branch circuit or feeder, isolate equipment enclosure from supply raceway with nonmetallic raceway fitting listed for purpose. Install fitting where raceway enters enclosure, and install separate equipment grounding conductor. Isolate equipment grounding conductor from raceway and from panelboard grounding terminals. Terminate at equipment grounding-conductor terminal of applicable derived system or service, except as otherwise indicated.

B. Separately Derived Systems: Where NEC requires grounding, ground according to NEC Paragraph 250-26.

C. Metal Poles Supporting Outdoor Lighting Fixtures: Ground pole to grounding electrode in addition to separate equipment grounding conductor run with supply branch circuit.

D. Common Ground Bonding with Lightning Protection System: Bond electric power system ground directly to lightning protection system grounding conductor at closest point to electric service grounding electrode. Use bonding conductor sized same as system grounding conductor and install in conduit.

E. Piping Systems and Other Equipment: Comply with NEC Article 250 for bonding requirements.

3.02 INSTALLATION

A. Ground electrical systems and equipment according to NEC requirements, except where Drawings or Specifications exceed NEC requirements.

B. Grounding Rods: Locate minimum of 1 rod length from each other and at least same distance from any other grounding electrode.

1. Drive until tops are 2 in. (50 mm) below finished floor or final grade, except as otherwise indicated.
2. Interconnect with grounding-electrode conductors. Use exothermic welds, except at test wells and as otherwise indicated. Make these connections without damaging copper coating or exposing steel.

C. Grounding Conductors: Route along shortest and straightest paths possible, except as otherwise indicated. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.

D. Underground Grounding Conductors: Use bare copper wire. Bury at least 24 in. (600 mm) below grade.

E. Metal Water Service Pipe: Provide insulated copper grounding conductors, sized as indicated, in conduit, from building's main service equipment, or grounding bus, to main metal water service entrances to building. Connect grounding conductors to main metal water service pipes by grounding-clamp connectors. Where dielectric main water fitting is installed, connect grounding conductor to street side of fitting. Do not install grounding jumper across dielectric fittings. Bond grounding-conductor conduit to conductor at each end.

F. Bond interior metal piping systems and metal air ducts to equipment grounding conductors of associated pumps, fans, blowers, electric heaters, and air cleaners. Use braided-type bonding straps.

G. Test Wells: One for each driven grounding electrode system, except as otherwise indicated. Set top of well flush with finished grade or floor. Fill with 1 in. 25 mm) maximum-size crushed stone or gravel.

H. Ufer Ground (Concrete-Encased Grounding Electrode): Fabricate according to NEC Paragraph 250-81(c), using minimum of 20 ft (6 m) of bare copper conductor not smaller than No. 4 AWG. Where base of concrete foundation is less than 20 ft (6 m) in length, coil excess conductor within base of concrete foundation. Bond grounding conductor to reinforcing steel to at least 4 locations, and to anchor bolts. Extend grounding conductor below grade and connect to building grounding grid or to grounding electrode external to concrete.

3.03 CONNECTIONS

A. Make connections so possibility of galvanic action or electrolysis is minimized. Select connectors, connection hardware, conductors, and connection methods so metals in direct contact will be galvanically compatible.

1. Use electroplated or hot-tin-coated materials to assure high conductivity and to make contact points closer in order of galvanic series.
2. Make connections with clean, bare metal at points of contact.
3. Make aluminum-to-steel connections with stainless-steel separators and mechanical clamps.
4. Make aluminum-to-galvanized steel connections with tin-plated copper jumpers and mechanical clamps.
5. Coat and seal connections having dissimilar metals with inert material to prevent future penetration of moisture to contact surfaces.

B. Exothermic-Welded Connections: Use for connections to structural steel and for underground connections, except those at test wells. Comply with manufacturer's written instructions. Welds that are puffed up or that show convex surfaces indicating improper cleaning are not acceptable.

C. Equipment Grounding-Wire Terminations: For No. 8 AWG and larger, use pressure-type grounding lugs. No. 10 AWG and smaller grounding conductors may be terminated with winged pressure-type connectors.

D. Noncontact Metal Raceway Terminations: Where metallic raceways terminate at metal housings without mechanical and electrical connection to housing, terminate each conduit with a grounding bushing. Connect grounding bushings with bare grounding conductor to grounding bus or terminal in housing. Bond electrically noncontinuous conduits at both entrances and exits with grounding bushings and bare grounding conductors, except as otherwise indicated.

E. Connections at Test Wells: Use compression-type connectors on conductors and make bolted- and clamped-type connections between conductors and grounding rods.

F. Tighten screws and bolts for grounding and bonding connectors and terminals according to manufacturer's published torque-tightening values. Where these requirements are not available, use those specified in UL 486A and UL 486B.

G. Compression-Type Connections: Use hydraulic compression tools to provide correct circumferential pressure for compression connectors. Use tools and dies recommended by manufacturer of connectors. Provide embossing die code or other standard method to make visible indication that connector has been adequately compressed on grounding conductor.

H. Moisture Protection: Where insulated grounding conductors are connected to grounding rods or grounding buses, insulate entire area of connection and seal against moisture penetration of insulation and cable.

3.04 UNDERGROUND DISTRIBUTION SYSTEM GROUNDING

A. Handholes:

1. Install driven grounding rod close to wall and set rod depth so 4 in. (100 mm) will extend above finished floor.
2. Where necessary, install grounding rod before manhole is placed and provide No. 1/0 AWG bare, tinned-copper conductor from grounding rod into manhole through waterproof sleeve in manhole wall.
3. Protect grounding rods passing through concrete floor with double wrapping of pressure-sensitive tape or heat-shrunk insulating sleeve from 2 in. (50 mm) above to 6 in. (150 mm) below concrete.
4. Seal floor opening with waterproof, nonshrink grout.

B. Grounding System:

1. Ground pad-mounted equipment and noncurrent-carrying metal items associated with substations by connecting them to underground cable and grounding electrodes.

3.05 FIELD QUALITY CONTROL

A. Testing:

1. Subject completed grounding system to megger test at each location where maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal, and at ground test wells.
2. Measure ground resistance not less than 2 full days after last trace of precipitation, and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.
3. Perform tests by 2 point method according to Section 9.03 of IEEE 81.

B. Maximum grounding to resistance values are as follows:

1. Equipment Rated 500 kVA and Less: 10 ohms.
2. Handhole Grounds: 10 ohms.

C. Excessive Ground Resistance: Where resistance to ground exceeds specified values, notify ENGINEER promptly and include recommendations to reduce ground resistance and to accomplish recommended work.

D. Report: Prepare certified test reports, of ground resistance at each test location. Include observations of weather and other phenomena that may affect test results. Describe measures taken to improve test results.

3.06 RESTORATION

A. Restore surface features, including vegetation, at areas disturbed by work of this Section.

1. Re-establish original grades, except as otherwise indicated.
2. Where sod has been removed, replace it as soon as possible after backfilling is completed.
3. Restore areas disturbed by trenching, storing of dirt, cable laying, and other activities to their original condition.
4. Include topsoiling, fertilizing, liming, seeding, sodding, sprigging, and mulching.
5. Maintain restored surfaces.
6. Restore disturbed paving.

* * * END OF SECTION * * *

SECTION 26 05 29
SUPPORTING DEVICES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Supports from building structure for electrical items by means of hangers, supports, anchors, sleeves, inserts, seals, and associated fastenings.

1.02 QUALITY ASSURANCE

A. Items provided under this section shall be listed and labeled by UL or other Nationally Recognized Testing laboratory (NRTL).

1. Term "NRTL" shall be as defined in OSHA Regulation 1910.7.
2. Terms "listed" and "labeled" shall be as defined in National Electrical Code, Article 100.

B. Regulatory requirements:

1. National Electrical Code (NEC): Components and installation shall comply with National Fire Protection Association (NFPA) 70.

PART 2 PRODUCTS

2.01 MATERIALS

A. Steel or malleable iron.

B. Aluminum where indicated.

C. Stainless steel where indicated.

2.02 COATINGS

A. Protect steel and malleable iron supports, support hardware, and fasteners with zinc coating.

B. Products for use outdoors.

C. Use PVC coating where indicated on Drawings.

2.03 MANUFACTURED SUPPORTING DEVICES

A. Raceway Supports: Clevis hangers, riser clamps, conduit straps, threaded C-clamps with retainers, ceiling trapeze hangers, wall brackets, and spring steel clamps.

B. Fasteners: Types, materials, and construction features as follows:

1. Expansion Anchors: Carbon steel wedge or sleeve type.
2. Toggle Bolts: All steel springhead type.
3. Powder-Driven Threaded Studs: Heat-treated steel, designed specifically for intended service.
4. Nuts, Washers, and Bolts: Stainless steel in outdoor applications.

C. U-Channel Systems: Channels, with 9/16-in. dia holes, at minimum of 8 in. on center, in top surface. Provide fittings and accessories that mate and match with U-channel and are of same manufacture.

2.04 FABRICATED SUPPORTING DEVICES

A. Shop- or field-fabricate supports or manufacture supports assembled from U-channel components.

B. Brackets: Fabricated of angles, channels, and other standard structural shapes. Connect with welds and machine bolts to form rigid supports. Comply with Section 05 50 00.

C. Pipe Sleeves: Provide pipe sleeves of 1 of following:

1. Sheet Metal: Fabricate from galvanized sheet metal; round tube closed with snaplock joint, welded spiral seams, or welded longitudinal joint. Fabricate sleeves from following gage metal for sleeve diameter noted:

a. 3 in. and smaller: 20 ga.
b. 4 in. to 6 in.: 16 ga.
c. Over 6 in.: 14 ga.

2. Steel Pipe: Fabricate from Schedule 40 galvanized steel pipe.
3. Plastic Pipe: Fabricate from Schedule 80 PVC plastic pipe.

2.05 FIRE RESISTANT JOINT SEALERS

A. Manufacturers:

1. "Dow Corning Fire Stop Foam," Dow Corning Corp.
2. "Pensil 851," General Electric Co.
3. Or equal.

B. Two-part, foamed-in-place, silicone sealant formulated for use in through-penetration fire-stopping around cables, conduit, pipes, and duct penetrations through fire-rated walls and floors.

C. Sealants and accessories shall have fire-resistance ratings indicated, as established by testing identical assemblies in accordance with ASTM E 814, by Underwriters' Laboratories, Inc., or other testing and inspection agency acceptable to authorities having jurisdiction.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install supporting devices to fasten electrical components securely and permanently in accordance with NEC requirements.

B. Coordinate with structural system and with other electrical installation.

C. Raceway Supports: Comply with NEC and following requirements:

1. Conform to manufacturer's recommendations for selection and installation of supports.
2. Strength of each support shall be adequate to carry present and future load multiplied by safety factor of at least 4. Where this determination results in safety allowance of less than 200 lbs, provide additional strength until there is minimum of 200 lbs safety allowance in strength of each support.

3. Install individual raceway hangers and riser clamps as necessary to support raceways. Provide U-bolts, clamps, attachments, and other hardware necessary for hanger assembly and for securing hanger rods and conduits.
4. Support individual horizontal raceways by separate pipe hangers. Spring steel fasteners may be used in lieu of hangers only for 1 in. and smaller raceways serving lighting and receptacle branch circuits above suspended ceilings only. For hanger rods with spring steel fasteners, use 1/4 in. dia or larger threaded steel. Use spring steel fasteners that are specifically designed for supporting single conduits or tubing.
5. In vertical runs, arrange support so load produced by weight of raceway and enclosed conductors is carried entirely by conduit supports with no weight load on raceway terminals.

D. Vertical Conductor Supports: Install simultaneously with installation of conductors.

E. Miscellaneous Supports: Support miscellaneous electrical components as required to produce same structural safety factors as specified for raceway supports. Install metal channel racks for mounting cabinets, panelboards, disconnects, control enclosures, pull boxes, junction boxes, transformers, and other devices.

F. Sleeves: Install in concrete slabs and walls and other fire-rated floors and walls for raceways and cable installations. For sleeves through fire rated-wall or floor construction, apply UL listed firestopping sealant in gaps between sleeves and enclosed conduits and cables.

G. Conduit extending through roof shall pass through ceiling box at roof line.

1. Provide 14 ga minimum copper box complete with watertight soldered seams and flanged to serve as pitch pocket for each conduit.
2. Install conduit and pitch pocket in advance of roofing work.

H. Fastening: Unless otherwise indicated, fasten electrical items and their supporting hardware securely to building structure, including but not limited to conduits, raceways, cables, cable trays, busways, cabinets, panelboards, transformers, boxes, disconnect switches, and control components in accordance with following:

1. Fasten by means of wood screws or screw-type nails on wood, toggle bolts on hollow masonry units, concrete inserts or expansion bolts on concrete or solid masonry, and machine screws, welded threaded studs, or spring-tension clamps on steel. Threaded studs driven by powder charge and provided with lock washers and nuts may be used instead of expansion bolts and machine or wood screws. Do not weld conduit, pipe straps, or items other than threaded studs to steel structures. In partitions of light steel construction, use sheet metal screws.
2. Holes cut in concrete shall not cut main reinforcing bars. Fill holes that are not used.
3. Load applied to any fastener shall not exceed 25% of proof test load. Use vibration- and shock-resistant fasteners for attachments to concrete slabs.

* * * END OF SECTION * * *

SECTION 26 05 43
UNDERGROUND DUCTS AND MANHOLES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Ducts.
2. Duct banks.
3. Handholes.

1.02 DEFINITIONS

A. Duct: General term for electrical conduit and other raceway, either metallic or nonmetallic, specified for use underground, embedded in earth or concrete.

B. Duct Bank: Group of 2 or more ducts in continuous run between 2 points.

C. Underfloor Conduits.

1. Conduits which run underground within perimeter of building walls under building floor. This may consist of 1 conduit, or several conduits grouped together.

D. Duct Bank Conduits

1. Conduits which run under ground outside perimeter of building walls. This may consist of 1 conduit, or several conduits grouped together.

E. Underground Conduits

1. Underground conduits are both underfloor conduits and duct bank conduits.

F. Handhole: Below-the-surface enclosure in connection with ducts into which people reach, but do not enter, for purpose of installing, operating, or maintaining equipment or wiring.

1.03 SUBMITTALS

A. Submittals are not required if CONTRACTOR supplies materials or equipment of specified or named manufacturers. If CONTRACTOR proposes substitutions to material or equipment of specified or named manufacturers, submittals identified below are required.

1. Product data.
2. Submit in accordance with Section 01 33 00.

1.04 QUALITY ASSURANCE

A. Items provided under this section shall be listed or labeled by UL or other Nationally Recognized Testing Laboratory (NRTL).

1. Term "NRTL" shall be as defined in OSHA Regulation 1910.7.
2. Terms "listed" and "labeled" shall be as defined in National Electrical Code, Article 100.

B. Regulatory Requirements:

1. National Electrical Code (NEC): Components and installation shall comply with National Fire Protection Association (NFPA) 70.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Store precast concrete units at site as recommended by manufacturer to prevent physical damage. Arrange so identification markings are visible.

B. Lift and support precast concrete units only at designated lifting or supporting points.

1.06 SEQUENCING AND SCHEDULING

A. Coordination of Work:

1. Coordinate layout and installation of manholes and handholes with final arrangement of ducts as influenced by actual final location of other utilities in field.
2. Coordinate elevations of duct and raceway entrances into manholes and handholes with final profiles of ducts and raceways as determined by coordination with other utilities, underground obstructions, and buildings.
3. Establish locations and elevations to suit field conditions and assure duct runs drain to manholes, handholes, or as shown on Drawings.

PART 2 PRODUCTS

2.01 DUCTS AND FITTINGS

A. Comply with Section 26 02 00.

2.02 CAST-IN-PLACE CONCRETE

A. Comply with Section 03 30 00 for concrete and Section 03 20 00 for reinforcing.

B. Aggregate For Duct Encasement: 3/8 in. maximum size.

C. Strength: 3,000 psi minimum 28 day compressive strength.

2.03 DUCT BANK ACCESSORIES

A. Duct Supports: Rigid PVC spacers selected to provide minimum duct spacings and concrete cover depths indicated, while rigidly supporting ducts during concreting.

2.04 HANDHOLE HARDWARE AND ACCESSORIES

A. Frames and Covers: Cast iron conforming to ANSI C2, Rule 323. Furnish with cast-in legend, "Electric" or "Signal" as appropriate. Cover-to-frame bearing surfaces machined.

B. Pulling Eyes in Walls: Eyebolt with rebar fastening insert. 2 in. dia eye, 1 in. by 4 in. long bolt. Working load embedded in 6-in., 4,000 psi concrete: 13,000 lbs minimum tension.

C. Pulling and Lifting Irons in Floor: 7/8 in. dia hot-dipped galvanized, bent steel rod, stress relieved after forming, and fastened to reinforced rod. Exposed triangular shaped opening. Ultimate yield strength, 40,000 lbs shear, 60,000 lbs tension.

D. Bolting Inserts for Cable Stanchions: Flared, threaded inserts of noncorrosive, chemical resistant, nonconductive thermoplastic material. 1/2 in. internal dia by 2-3/4 in. deep, flared to 1-1/4 in. minimum at base. Tested ultimate pull-out strength: 12,000 lbs, minimum.

E. Expansion Anchors for Installation After Concrete is Cast: Zinc-plated carbon steel wedge type with stainless steel expander clip 1/2 in. bolt size, 5,300 lb rated pull-out strength, and 6,800 lb rated shear strength, minimum.

F. Cable Stanchions: Hot-rolled, hot-dipped galvanized "T" section steel, 2-1/4 in. size, punched with 14 holes on 1-1/2 in. centers for cable arm attachment.

G. Cable Arms: 3/16 ga hot-rolled, hot-dipped galvanized sheet steel pressed to channel shape, approximately two 12 in. wide by 14 in. long and arranged for secure mounting in horizontal position at any position on cable stanchions.

H. Cable Support Insulators: High glaze, wet process porcelain arranged for mounting on cable arms.

I. Ground Rods: Solid copper clad steel, 3/4 in. dia by 10 ft. length.

J. Ground Wire: Stranded bare copper, No. 6 AWG, minimum.

2.05 RACEWAY/DUCT SEALING COMPOUND

A. Compound:

1. Nonhardening, putty-like consistency workable at temperatures as low as 35°F.
2. Compound shall not slump at temperature of 300°F and shall readily adhere to clean surfaces of plastic ducts, metallic conduits, conduit coatings, concrete, masonry, lead, cable sheaths, cable jackets, insulation materials, and common metals.

PART 3 EXECUTION

3.01 WIRING METHOD

A. General: Install ducts for wiring runs indicated. Provide sizes as indicated.

B. Single Duct Runs: PVC externally coated rigid steel conduit, direct buried in earth.

C. Duct Banks: Schedule 40 PVC.

3.02 EXCAVATION AND BACKFILL

A. Conform to 2026 SUDAS except as modified below:

1. Do not use heavy-duty, hydraulic-operated compaction equipment.
2. Excavation: Cut trenches neatly and uniformly, and slope uniformly to required pitch.
3. For direct-buried, nonencased ducts prepare trench bottoms free from stones, soft spots, and sharp objects. Where necessary, add 3 in. layer of stone-free sand or earth to trench bottom and compact to density of adjacent undisturbed soil to provide suitable bearing for ducts. Backfill over and around ducts on bottom of trench with stone-free sand or earth to 6 in. minimum above tops of ducts and compact by hand or pneumatic tamper to density of adjacent undisturbed earth.
4. For each additional layer of direct-buried ducts above bottom ducts, backfill over and around each layer of ducts with stone-free sand or earth to 12 in. minimum above tops of ducts and compact by hand or pneumatically to density of adjacent undisturbed earth.

5. Separation Between Direct-Buried, Nonencased Ducts: 3 in. minimum for like services, and 6 in. minimum between power and signal ducts.

3.03 INSTALLATION OF DUCTS

A. Slope: Pitch ducts to drain towards manholes and handholes and away from buildings and equipment unless otherwise shown on Drawings. Minimum slope shall be 4 in. in 100 ft. Where necessary to achieve this between manholes, slope ducts from high point in run to drain in both directions.

B. Curves and Bends: Use manufactured elbows for stub-ups at equipment and at building entrances. For other curves and bends, except as otherwise indicated, use manufactured long sweep bends with minimum radius of 24 in. in both horizontal and vertical directions.

C. For ducts containing fiber optic cables, provide bends with minimum radius of 20 times cable diameter.

D. Make joints in ducts and fittings watertight in accordance with manufacturer's instructions. Stagger couplings so those of adjacent ducts do not lie in same plane.

E. Duct Entrances to Handholes: End bells spaced approximately 10 in. center to center for 5 in. ducts and varied proportionately for other duct sizes. Change from regular spacing to end bell spacing shall start 10 ft from end bell and shall be made without reducing duct line slope and without forming trap in line. Grout end bells into manhole walls from both sides to provide watertight entrances. Provide groundable end bushings on metal ducts and connect to system grounding conductor.

F. Stub-ups: Duct stub-ups to equipment shall be galvanized rigid steel. For equipment mounted on outdoor concrete pads, steel conduit shall extend minimum of 5 ft away from edge of pad. Install insulated grounding bushings on terminations. Couple steel conduits to ducts with adapters designed for purpose and encased concrete.

G. Sealing: For ducts to be wired in this Project, provide temporary closure at terminations. For spare ducts, seal bore of ducts at terminations. Use sealing compound and plugs as required to withstand 15 psi minimum hydrostatic pressure.

H. Pulling Cord: Provide 100 lb test nylon cord in ducts including spares.

I. Marker Tape: Provide plastic marker tape over ducts at 12 in. below finished grade.

3.04 INSTALLATION OF HANDHOLES, GENERAL

A. General:

1. Provide manholes/handholes of sizes, shapes, and locations as indicated.
2. Determine final elevation of ducts as influenced by possible adjustments in other utilities and surface features and discovery of underground obstructions before installing manholes/handholes. Obtain ENGINEER'S approval for manhole/ handhole installation adjustments necessitated by obstructions.
3. Install units plumb and level and with orientation and depth coordinated with arrangement of connecting ducts to minimize bends and deflections required for proper entrances.

B. Elevation:

1. Handholes: Install handholes with depth as indicated. Where indicated, cast handhole cover frame directly into roof of handhole and set roof surface 1 in. above grade.

C. Access: Install access to manhole/handhole through cast-iron frame and cover. For manholes, use 30 in. cover except as indicated. Use 30 in. cover for handholes, except use 24 in. covers for 2 ft. by 2 ft. handholes. Install brick chimney to support frame and cover and to connect cover with manhole/handhole roof opening. Provide moisture-tight masonry joints and waterproof grouting of cast iron frame to chimney. Set frames in paved areas and traffic ways flush with finished grade. Set other frames 1 in. above finished grade.

D. Dampproofing: Apply dampproofing to exterior surfaces of units after concrete has cured 3 days, minimum. After ducts have been connected and grouted in, and prior to backfilling, dampproof joints and connections and touch up abrasions and scars. Dampproof exterior of manhole/handhole chimneys after brick mortar has cured at least 3 days.

E. Hardware: Install removable hardware including pulling eyes, cable stanchions, cable arms, and insulators as required for installation and support of cable and conductors and as indicated.

F. Field-Installed Bolting Anchors: Do not drill deeper than 3-7/8 in. for anchor bolts installed in field. Use minimum of 2 anchors for each cable stanchion.

G. Grounding: Install ground rod through floor of each manhole/handhole with top protruding 4 in. above floor. Seal floor opening against water penetration with waterproof nonshrink grout. Ground exposed metal components and hardware with bare copper ground conductor. Train conductors neatly around corners. Install on walls and roof using cable clamps secured with expansion anchors.

3.05 INSTALLATION OF CAST-IN-PLACE HANDHOLES

A. Comply with Section 03 30 00 and construct manholes/handholes as indicated.

B. Finish interior surfaces with smooth troweled finish.

3.06 TESTING

A. Field Quality Control:

1. Grounding: Test manhole grounding provisions to ensure electrical continuity of bonding and grounding connections. Make ground-resistance test at each ground rod and submit report of results. Use an instrument specifically designed for ground-resistance measurements.
2. Duct Integrity: Rod ducts with mandrell 1/4 in. smaller in diameter than internal diameter of ducts. Where rodding indicates obstructions in ducts, remove obstructions and retest.
3. Water Tightness: Make internal inspection of manholes/handholes three months after completion of construction for indications of water ingress. Where leakage is noted, remove water found and seal leakage sources. Reinspect after 2 months and reseal remaining leakage sources. Repeat process at two month intervals until leakage is corrected.

3.07 CLEANING AND RESTORATION

A. Clean Ducts: Clean full length of ducts with round bristle brush with dia 1/2 in. greater than internal diameter of duct.

B. Clean Handholes: Clean internal surfaces of manholes including sump. Remove foreign material.

3.08 RESTORATION

A. Restore surface features at areas disturbed by excavation and reestablish original grades except as otherwise indicated.

B. Where sod has been removed, replace it as soon as possible after backfilling is completed.

C. Restore all areas disturbed by trenching, storing of dirt, cable laying, and other work to their original condition.

D. Include necessary topsoiling, fertilizing, liming, seeding, sodding, sprigging, or mulching.

E. Restore disturbed paving as indicated.

* * * END OF SECTION * * *

SECTION 26 05 53
ELECTRICAL IDENTIFICATION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Identification of electrical materials, equipment, and installations.

1.02 QUALITY ASSURANCE

A. Regulatory Requirements:

1. National Electrical Code: Components and installation shall comply with NFPA 70.

PART 2 PRODUCTS

2.01 RACEWAY AND CABLE LABELS

A. Manufacturer's Standard Products: Where more than one type is listed for specified application, selection is Installer's option, but provide single type for each application category. Use colors prescribed by ANSI A13.1, NFPA 70, or as specified elsewhere.

B. Conform to ANSI A13.1, Table 3, for minimum size of letters for legend and minimum length of color field for each raceway or cable size.

1. Color: Black legend on orange field.
2. Legend: Indicates voltage.

C. Adhesive Labels: Preprinted, flexible, self adhesive vinyl. Legend is overlaminated with clear, wear and chemical resistant coating.

D. Pretensioned, Wraparound Plastic Sleeves: Flexible, preprinted, color coded, acrylic bands sized to suit diameter of line it identifies and arranged to stay in place by pretensioned gripping action when placed in position.

E. Colored Adhesive Tape: Self adhesive vinyl tape not less than 3 mils thick by 1 to 2 in. wide (0.08 mm thick by 25 to 51 mm wide).

F. Underground Line Warning Tape: Permanent, bright colored, continuous printed, vinyl tape with following features:

1. Size: Not less than 6 in. wide by 4 mils thick (152 mm wide by 0.102 mm thick).
2. Compounded for permanent direct burial service.
3. Embedded continuous metallic strip or core.
4. Printed Legend: Indicates type of underground line.

G. Tape Markers: Vinyl or vinyl cloth, self adhesive, wraparound type with preprinted numbers and letters.

2.02 ENGRAVED NAMEPLATES AND SIGNS

A. Manufacturer's Standard Products: Where more than one type is listed for specified application, selection is Installer's option, but provide single type for each application category. Use colors prescribed by ANSI A13.1, NFPA 70, or as specified elsewhere.

B. Engraving stock, melamine plastic laminate, 1/16 in. (1.6 mm) minimum thick for signs up to 20 sq in. (129 sq cm), 1/8 in. (3.2 mm) thick for larger sizes.

1. Engraved Legend: Black letters on white face.
2. Punched for mechanical fasteners.

C. Baked Enamel Signs for Interior Use: Preprinted aluminum signs, punched for fasteners, with colors, legend, and size as indicated or as otherwise required for application. 1/4 in. (6.4 mm) grommets in corners for mounting.

D. Exterior, Metal Backed, Butyrate Signs: Wear resistant, nonfading, preprinted, cellulose acetate butyrate signs with 0.0396 in. (1 mm), galvanized steel backing, with colors, legend, and size appropriate to application. 1/4 in. (6.4 mm) grommets in corners for mounting.

E. Fasteners for Plastic Laminated and Metal Signs: Self tapping stainless steel screws or No. 10/32 stainless steel machine screws with nuts, flat washers and lock washers.

2.03 MISCELLANEOUS IDENTIFICATION PRODUCTS

A. Cable Ties: Fungus-inert, self extinguishing, 1 piece, self locking, Type 6/6 nylon cable ties with following features:

1. Minimum Width: 3/16 in. (5 mm).
2. Tensile Strength: 50 lb (22.3 kg) minimum.
3. Temperature Range: Minus 40 to 185°F (-4 to 85°C).
4. Color: As indicated where used for color coding.

B. Paint: Alkyd-urethane enamel. Primer as recommended by enamel manufacturer.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install identification devices according to manufacturer's written instructions.

B. Install labels where indicated and at locations for best convenience of viewing without interference with operation and maintenance of equipment.

C. Lettering, Colors, and Graphics: Coordinate names, abbreviations, colors, and or designations used for electrical identification with corresponding designations used in Contract Documents or required by codes and standards. Use consistent designations throughout Project.

D. Sequence of Work: Where identification is to be applied to surfaces that require finish, install identification after completion of finish work.

E. Self Adhesive Identification Products: Clean surfaces of dust, loose material, and oily films before applying.

F. Identify Raceways and Exposed Cables of Certain Systems with Color Banding: Band exposed and accessible raceways of systems listed below for identification.

1. Bands: Colored adhesive tape or combination of both. Make each color band 2 in. (51 mm) wide, completely encircling conduit, and place adjacent bands of 2 color markings in contact, side by side.
2. Locate bands at changes in direction, at penetrations of walls and floors, at 50 ft (15 m) maximum intervals in straight runs, and at 25 ft (7.6 m) in congested areas.
3. Colors: As follows:

    a. Mechanical and Electrical Supervisory System: Green and blue.
    b. Communications System: Green and yellow.

G. Install Circuit Identification Labels on Boxes: Label externally as follows:

1. Exposed Boxes: Pressure sensitive, self adhesive plastic label on cover.
2. Concealed Boxes: Plasticized card stock tags.
3. Labeling Legend: Permanent, water proof listing of panel and circuit number or equivalent.

H. Identify Paths of Underground Electrical Lines: During trench backfilling, for exterior underground power, control, signal, and communications lines, install continuous underground plastic line marker located directly above line at 6 to 8 in. (150 to 200 mm) below finished grade. Where multiple lines installed in common trench or concrete envelope do not exceed an overall width of 16 in. (400 mm), use single line marker.

1. Install line marker for underground wiring, both direct buried and in raceway.

I. Color Code Conductors: Secondary service, feeder, and branch circuit conductors throughout secondary electrical system.

1. Field applied, color coding methods may be used in lieu of factory coded wire for sizes larger than No. 10 AWG.

    a. Colored, pressure sensitive plastic tape in half lapped turns for distance of 6 in. (150 mm) from terminal points and in boxes where splices or taps are made. Apply last 2 turns of tape with no tension to prevent possible unwinding. Use 1 in. (25 mm) wide tape in colors as specified. Adjust tape bands to avoid obscuring cable identification markings.
    b. Colored cable ties applied in groups of 3 ties of specified color to each wire at each terminal or splice point starting 3 in. (76 mm) from terminal and spaced 3 in. (76 mm) apart. Apply with special tool or pliers, tighten to snug fit, and cut off excess length.

J. Power Circuit Identification: Use metal tags or aluminum wraparound marker bands for cables, feeders, and power circuits in vaults, pull boxes, junction boxes, manholes, and switchboard rooms.

1. Legend: 1/4 in. (6.4 mm) steel letter and number stamping or embossing with legend corresponding to indicated circuit designations.
2. Fasten tags with nylon cable ties; fasten bands using integral ears.

K. Apply identification to conductors as follows:

1. Conductors to Be Extended in Future: Indicate source and circuit numbers.
2. Multiple Power or Lighting Circuits in Same Enclosure: Identify each conductor with source, voltage, circuit number, and phase. Use color coding for voltage and phase indication of secondary circuit.

3. Multiple Control and Communications Circuits in Same Enclosure: Identify each conductor by its system and circuit designation. Use consistent system of tags, color coding, or cable marking tape.

L. Apply warning, caution, and instruction signs and stencils as follows:

1. Install warning, caution, and instruction signs where indicated or required to ensure safe operation and maintenance of electrical systems and of items to which they connect. Install engraved, plastic laminated instruction signs with approved legend where instructions or explanations are needed for system or equipment operation. Install butyrate signs with metal backing for outdoor items.
2. Emergency Operating Signs: Install engraved laminate signs with white legend on red background with minimum 3/8 in. (9 mm) high lettering for emergency instructions on power transfer, load shedding, and or emergency operations.

M. Install identification as follows:

1. Apply equipment identification labels of engraved plastic laminate on each major unit of equipment, including central or master unit of each system. This includes communication, signal, and alarm systems, unless units are specified with their own self-explanatory identification. Except as otherwise indicated, provide single line of text with 1/2 in. (13 mm) high lettering on 1-1/2 in. (38 mm) high label; where 2 lines of text are required, use lettering 2 in. (51 mm) high. Use black lettering on white field. Apply labels for each unit of following categories of equipment.

    a. Panelboards, electrical cabinets, and enclosures.
    b. Access doors and panels for concealed electrical items.
    c. Electrical switchgear and switchboards.
    d. Motor starters.
    e. Push button stations.
    f. Power transfer equipment.
    g. Control devices.
    h. Transformers.

2. Apply designation labels of engraved plastic laminate for disconnect switches, breakers, push buttons, pilot lights, motor control centers, and similar items for power distribution and control components above, except panelboards and alarm/signal components where labeling is specified elsewhere. For panelboards, provide framed, typed circuit schedules with explicit description and identification of items controlled by each individual breaker.

* * * END OF SECTION * * *

SECTION 26 05 73
ELECTRICAL POWER SYSTEM STUDIES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Short circuit study, protective device evaluation study, and protective device coordination study on entire electrical power distribution system.
2. Portions of electrical distribution system from normal and alternate sources of power throughout distribution system. Normal system operating method, alternate operation, and operations which could result in maximum fault conditions shall be covered in study.

B. CONTRACTOR shall engage services of independent engineering firm for purpose of performing electric power system studies as specified.

1.02 SUBMITTALS

A. Study Report:

1. Provide summary of results of power system study in final report. Submit 5 bound copies of final report.
2. Include:

a. Description, purpose, basis, and scope of study and single diagram of portion of power system included within scope of study.
b. Tabulations of circuit breaker, fuse, and other protective device ratings versus calculated short circuit duties and commentary regarding same.
c. Protective device time versus current coordination curves, tabulations of relay and circuit breaker trip settings, fuse selection, and commentary regarding same.
d. Fault current calculations including definition of terms and guide for interpretation of computer printout.
e. Tabulation of appropriate tap settings for relay seal-in units.

B. Submit in accordance with Section 01 33 00.

1.03 QUALITY ASSURANCE

A. Regulatory Requirements:

1. National Electric Code (NEC): Components and installation shall comply with National Fire Protection Association (NFPA) 70.
2. National Electric Safety Code (NESC): Components and installation shall comply with American National Standards Institute (IEEE) C2.

B. Qualifications of engineering firm.

1. Corporately and financially independent engineering organization which can function as unbiased engineering authority, professionally independent of manufacturers, suppliers and installers of equipment or systems studied as specified.
2. Study report shall be signed and sealed by Professional Engineer registered in same State as project location.
3. Engineering organization may be same as testing organization.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

3.01 STUDIES

A. Studies include following.

1. New lift station building power distribution from utility transformer downstream including main disconnect, transfer switch, generator, and all 480v loads.
2. Cable, wire, and conduit systems.

B. Studies do not include equipment as shown on Drawings indicated as future.

3.02 SHORT CIRCUIT STUDY

A. Provide complete report with printout data sheets using digital computer type program as part of study.

B. Include utilities' short circuit contribution, resistance and reactance components of branch impedances, X/R ratios, base quantities selected, and other source impedances.

C. Calculate short circuit momentary duty values and interrupting duty values based on assumed 3-ph bolted short circuit at switch gear base medium voltage controller, switchboard, low voltage MCC, distribution panelboard, pertinent branch circuit panel, and other significant locations through system. Include short circuit tabulation of symmetrical fault currents and X/R ratios. List with respective X/R ratio each fault location, total duty on bus, and individual contribution from each connected branch.

3.03 EQUIPMENT DEVICE EVALUATION STUDY

A. Provide protective device evaluation study to determine adequacy of circuit breakers, molded case switches, automatic transfer switches, knife switches, controllers, surge arresters, busways, and fuses by tabulating and comparing short circuit ratings of these devices with calculated fault currents. Apply appropriate multiplying factors based on system X/R ratios and protective device rating standards. Notify ENGINEER of problem areas or inadequacies in equipment due to short circuit currents.

3.04 EQUIPMENT DEVICE COORDINATION STUDY

A. Provide protective device coordination study with necessary calculations and logic decisions required to select or check selection of power fuse ratings, protective relay characteristics and settings, ratios and characteristics of associated current transformers, and low voltage breaker trip characteristics and settings. Objective of study to obtain optimum protective and coordination performance from these devices.

B. Include as part of coordination study, medium and low voltage classes of equipment from utility's incoming line protective device down to and including largest rated device in 480 v MCCs and panelboards. Include phase and ground overcurrent protection as well as settings of other adjustable protective devices.

C. Draw time-current characteristics of specified protective devices on log-log paper or computer printout. Include with plots complete titles, representative one-line diagram and legends, , significant motor starting characteristics, complete parameters of transformers, complete operating bands of low voltage circuit breaker trip curves and fuses. Indicate types of protective devices selected, proposed relay taps, time dial and instantaneous trip settings, transformer magnetizing in-rush and ANSI transformer withstand parameters, cable thermal overcurrent withstand limits, and significant symmetrical and asymmetrical fault currents. Provide coordination plots for phase and ground protective devices on system basis. Provide sufficient number of separate curves to indicate coordination achieved.

D. Provide separate selection and settings of protective devices in tabulated form listing circuit identification, IEEE device number, current transformer ratios and connection, manufacturer and type, range of adjustment, and recommended settings. Tabulate recommended power fuse selection for medium voltage fuses where applied in system. Notify ENGINEER of discrepancies, problem areas or inadequacies.

E. Provide data for arc flash labels conforming to latest applicable standards to be provided and installed by electrical contractor.

3.05 PROTECTIVE DEVICE TESTING, CALIBRATION, AND ADJUSTMENT

A. Comply with Section 26 08 12.

* * * END OF SECTION * * *

SECTION 26 08 10
ELECTRICAL SYSTEM DEMONSTRATIONS

PART 1 GENERAL

1.01 SUMMARY

A. Demonstrate proper operation of electrical systems and equipment in presence of ENGINEER.

1.02 SUBMITTALS

A. Demonstration log.

B. Submit in accordance with Section 01 33 00.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

3.01 PERFORMANCE

A. Demonstrations:

1. Each piece of equipment.
2. Each integrated system.

B. Demonstration Log:

1. Keep log of individual demonstrations.
2. Data:

a. Date and time of demonstration.
b. OWNER'S representative.
c. Equipment or system demonstrated.
d. Result of demonstration.

1) Success or fail.
2) If failure, description of failure.
3) Corrective action taken.
4) Redemonstration result.

* * * END OF SECTION * * *

SECTION 26 08 12
TESTING ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SUMMARY

A. Description of Work:

1. Prior to energizing equipment, retain services of recognized independent testing laboratory for purpose of performing inspections and tests as herein specified.
2. Ensure electrical equipment supplied by CONTRACTOR and OWNER is operational within industry and manufacturer's tolerances and installed in accordance with Specifications.

1.02 SUBMITTALS

A. Test Reports:

1. 7 copies of complete testing report utilizing NETA printed forms.
2. Submit report no later than 30 days after testing complete.

B. Submit proof of testing agency qualification.

1.03 QUALITY ASSURANCE

A. Regulatory Requirements:

1. National Fire Protection Association (NFPA):

a. National Electrical Code (NEC) (NFPA 70) and **[Wisconsin]** amendments thereto.

2. Underwriters Laboratories, Inc. (UL).

B. Inspections and tests shall utilize following.

1. Project Specifications.
2. Project Drawings.
3. Manufacturer's instruction manuals applicable to each particular apparatus.

C. Testing Agency:

1. Meet federal, state, and local safety requirements for accreditation of testing laboratories, CFR Title 29, Part 1910; "Nationally Recognized Testing Laboratory." Membership in National Electrical Testing Association (NETA) constitutes proof of meeting such criteria.
2. Meet Federal Department of Commerce requirements for nationally independent testing laboratory certification.

D. Permanently record checks and tests and make available to ENGINEER.

1.04 PROJECT/SITE CONDITIONS

A. CONTRACTOR'S Responsibilities:

1. Supply source of test power to test laboratory at each test site.
2. Notify testing laboratory when equipment becomes available for acceptance tests.

3. Coordinate Work to minimize Project delay.
4. Supply complete set of electrical drawings, specifications, and pertinent change orders to testing laboratory prior to commencement of testing.

B. Testing Laboratory Responsibilities:

1. Notify ENGINEER prior to commencement of testing.
2. Provide material, equipment, labor, and technical supervision to perform such tests and inspections.

C. Recommendations for acceptance or rejection shall be given upon consultation of ENGINEER, OWNER, CONTRACTOR, and testing laboratory's representative.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

3.01 GENERAL

A. Test Work and equipment installed to ensure proper and safe operation in accordance with intent of Drawings and Specifications.

1. Check interlocking and automatic control sequences and test operation of safety and protective devices.
2. Correct defects found by Work of this section.
3. Cooperate with Power Company, supplier, and manufacturer representatives in order to achieve proper and intended operation of equipment.

B. Test, adjust, and record operating voltages at each system level before energizing branch circuits.

1. Transformer taps shall be adjusted to obtain as near as possible nominal system voltage.
2. Where transformer is under utility jurisdiction, obtain services of utility to correct voltage.
3. Replace devices and equipment damaged due to failure to comply with this requirement.

C. Balance load among feeder conductors at each panelboard, switchboard or substation and reconnect loads as necessary to obtain reasonable load balance on each phase. Electrical unbalance shall not exceed 7-1/2%.

3.02 SWITCHGEAR AND SWITCHBOARD ASSEMBLIES

A. Visual and Mechanical Inspections:

1. Inspect for physical damage.
2. Verify equipment supplied and connected in accordance with Specifications.
3. Inspect for proper alignment, anchorage, and grounding.
4. Check tightness of accessible bolted bus joints by calibrated torque wrench method. Refer to manufacturer's instructions for proper ft-lb levels.
5. Key interlock system shall be physically tested to ensure proper function.
6. Doors, panels, and sections shall be inspected for paint, scratches, and fit.
7. Mechanical operation of relays, switches, and other devices.

B. Electrical Tests:

1. Insulation Resistance Test: Measure insulation resistance of each bus section phase-to-phase and phase-to-ground for 1 min. Test voltage and minimum acceptable values in accordance with Paragraph 3.02.C.2.

C. Test Values:

1. Bolt torque levels shall be in accordance with manufacturer's instructions.
2. Insulation resistance test shall be performed in accordance with following.

Insulation Resistance Test Voltage	
Voltage Rating	**Test Voltage**
150 - 600 v	1,000 v
601 - 5,000 v	2,500 v
5,001 v and above	5,000 v

3. Values of insulation resistance less than rated kv +1 in megohms shall be investigated and corrected.

3.03 TRANSFORMERS

A. Visual and Mechanical Inspection:

1. Inspect for physical damage.
2. Verify equipment supplied and connected in accordance with Specifications.
3. Verify proper auxiliary device operation such as fans, indicators, and tap changers.
4. Check tightness of external bolted electrical joints in accordance with manufacturer's instructions.
5. Perform specific inspection and mechanical tests as recommended by manufacturer.

B. Electrical Tests:

1. Insulation resistance tests shall be performed winding-to-winding and winding-to-ground. Appropriate guard circuit shall be utilized over bushings. Test voltage and minimum acceptable values shall be in accordance with Paragraph 3.02.C.2.
2. Turns ratio test shall be performed between windings for tap positions. Final tap setting determined by testing laboratory upon completion of ratio testing. Acceptable values shall be in accordance with Paragraph 3.03.C.2.
3. Doble power factor tests shall be made of all high and low voltage windings. Acceptable values in accordance with Paragraph 3.03.C.3.
4. Exciting current test shall be performed on high voltage windings as follows.

    a. ac potential of not less than 2.5 kv nor more than 10 kv shall be applied to terminal H1. H2 shall be returned to UST terminal of Doble test set. H3 shall be grounded. Exciting current and voltage shall be recorded. Likewise H3 energized, H1 to UST, and H2 grounded.

5. Perform special tests and adjustments as suggested by manufacturer to tap changer, fan, pump control, and alarm function.

C. Test Values:

1. Insulation Resistance Test: Test voltages in accordance with Paragraph 3.02.C.2.
2. Turns ratio test results shall not deviate more than 1/2 of 1% from calculated ratio.
3. Power factor test results corrected to 20°C should not exceed 1% for free breathing, conservator or sealed tank transformers, unless satisfactory explanation received from manufacturer. Bushing power factor shall not deviate more than 10% from manufacturer's rating.

4. Dielectric fluid should comply with following.

   a. Dielectric breakdown (ASTM D877): 35 kv minimum.
   b. Neutralization number (ASTM D976): 0.025 mg-KOH/gm maximum.
   c. Interfacial tension (ASTM D971): 40 dynes/cm minimum.
   d. Color (ASTM D1500): 0.5 maximum.

5. Results of exciting current tests shall be analyzed and condition of insulation evaluated on basis of comparison with data obtained from manufacturer and **[Doble Engineering Company]**.

3.06 INSTRUMENT TRANSFORMERS

A. Visual and Mechanical Inspection:

1. Inspect for physical damage and compliance with Drawings.
2. Check mechanical clearances and proper operations of disconnecting and grounding devices associated with potential transformers.
3. Verify proper operation of grounding or shorting devices.

B. Electrical Tests:

1. Confirm transformer polarity electrically.
2. Verify connection at secondary CT leads by driving low current through leads and checking for this current at applicable devices.
3. Confirm transformer ratio.
4. Measure insulation resistance of transformer secondary and leads with 500 v megohm meter.
5. Measure transformer primary insulation with applicable over potential tests.
6. Verify connection of secondary PT leads by applying low voltage to leads and checking for this voltage at applicable devices.

3.07 METERING AND INSTRUMENTATION

A. Visual and Mechanical Inspection:

1. Examine devices for broken parts, indication of shipping damage, and wire connection tightness.
2. Verify meter connections in accordance with single line meter and relay diagram.

B. Electrical Tests:

1. Calibrate meters at midscale. Calibration instruments shall have precision no more than 50% of instrument being tested.
2. Calibrate watthour meters to 1/2%.
3. Verify instrument multipliers.

3.12 CIRCUIT BREAKERS - LOW VOLTAGE - MOLDED CASE, 225 AMP FRAME AND ABOVE

A. Visual and Mechanical Inspection:

1. Check circuit breaker for proper mounting, conductor size, and feeder designation.
2. Operate circuit breaker to ensure smooth operation.
3. Inspect case for cracks or other defects.
4. Check tightness of connection with torque wrench in accordance with manufacturer's recommendations.

B. Electrical Tests:

1. Measure contact resistance.
2. Time-current characteristic tests shall be performed by passing 300% rated current through each pole. Trip time shall be determined.
3. Instantaneous pickup current shall be determined by run-up or pulse method. Clearing times should be within 4 cycles or less.
4. Insulation resistance shall be determined pole-to- pole, across pole, and pole-to-ground. Test voltage shall be 1,000 vdc.

C. Test Values:

1. Contact resistance shall be compared to adjacent poles and similar breaker. Deviations of more than 50% shall be investigated and corrected.
2. Insulation resistance shall not be less than 50 megohms.
3. Trip times shall fall within manufacturer's published time-current characteristic tolerance bands.

3.13 GROUND FAULT SYSTEMS

A. Visual and Mechanical Inspection:

1. Inspect for physical damage and compliance with Drawings and Specifications.
2. Inspect neutral main bonding connection to ensure following.

    a. Zero sequence system grounded upstream of sensor.
    b. Ground strap systems grounded through sensing device.
    c. Ground connection made ahead of neutral disconnect link.

3. Inspect control power transformer to ensure adequate capacity for system.
4. Manual operate monitor panels (if present) for following.

    a. Trip test.
    b. No trip test.
    c. Non-automatic reset.

5. Record proper operation and test sequence.
6. Inspect zero sequence systems for symmetrical alignment of core balance transformers about current carrying conductors.
7. Verify ground fault device circuit nameplate identification by actuation observation.
8. Pickup and time delay settings shall be set in accordance with settings developed through coordination study and as approved by ENGINEER.

B. Electrical Tests:

1. Test in accordance with manufacturer's instructions.
2. Measure system neutral insulation resistance to ensure no shunt ground paths exist, neutral-ground disconnect link removed, neutral insulation resistance measured, and link replaced.
3. Relay pickup current shall be determined by primary injection at sensor and circuit interrupting device operated.
4. Relay timing shall be tested by injecting 150% and 300% of pickup current into sensor. Total trip time shall be electrically monitored.
5. System operation shall be tested at 55% rated voltage.
6. Zone interlock system shall be tested by simultaneous sensor current injective and monitoring blocking function.

C. Test Parameters:

1. System neutral insulation shall be minimum of 100 ohms, preferably 1 megohm or larger.
2. Relay pickup current shall be within 10% of device dial or fixed setting, and in no case greater than 1,200 amp.
3. Relay timing shall be in accordance with manufacturer's published time-current characteristic curves, but in no case longer than 1 sec.

3.14 GROUNDING SYSTEMS

A. Visual and Mechanical Inspection:

1. Inspect ground system for compliance with Drawings and Specifications.

B. Electrical Tests:

1. Fall of potential test in accordance with IEEE No. 81, Section 9.04 on main grounding electrode or system.
2. 2-point method test in accordance with IEEE No. 81, Section 9.03, to determine ground resistance between main grounding system and major electrical equipment frame, system neutral, and derived neutral points.
3. Alternate to 2-point method.

    a. Ground continuity test between main ground system and equipment frame, system neutral, and derived neutral point.
    b. Test shall be made by passing minimum of 10 amp dc current between ground reference system and ground point to be tested.
    c. Voltage drop shall be measured and resistance calculated by voltage drop method.

C. Test Values:

1. Main ground electrode system resistance to ground shall be no greater than 5 ohms for commercial or industrial systems and 1 ohm or less for generating or transmission station grounds, unless otherwise specified by ENGINEER.

3.15 INSTRUMENTS AND METERS

A. Voltmeters:

1. Clean glass.
2. Check movement for proper operation.
3. Electrically check calibration of cardinal points with reference to instrument with 1% minimum accuracy.
4. Verify proper switching in all positions.

B. Ammeter:

1. Clean glass.
2. Check movement for proper operation.
3. Electrically test current transformers for ratio and polarity.
4. Electrically check calibration at cardinal points with reference to instrument with 1% minimum accuracy.
5. Verify proper switching in all positions. Verify CT ratio and polarity.

C. Watthour/Demand Register Meters:

1. Clean glass.
2. Check movement for proper operation.

3. Electrically test and adjust watthour movement to 1% accuracy under light load, full load, and 50% power factor load.
4. Electrically test for creep and balance.
5. Electrically test interval timer.
6. Electrically test demand register.
7. Verify CT and PT ratio and polarity.

3.16 MOTOR CONTROL CENTERS AND MOTORS

A. Visual and Mechanical Inspection:

1. Inspect for physical damage, proper anchorage, and grounding.
2. Compare equipment nameplate data with Drawings or starter schedule.
3. Compare overload heaters with motor full load current for proper size.

B. Electrical Tests Motors 25 hp and Above:

1. Motor overload units shall be tested by injecting primary current through overload unit and monitoring trip time.

C. Test Values:

1. Overload tests shall be made at 300% of motor full load current. Trip times shall be in accordance with manufacturer’s tolerances. Values in excess of 120 sec shall be investigated and corrected.

* * * END OF SECTION * * *

SECTION 26 09 23.21
ADJUSTABLE SPEED DRIVE EQUIPMENT – ADJUSTABLE FREQUENCY

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. This section describes adjustable speed drive equipment included with process equipment specified in other sections.
2. Transmissions of data to main SCADA system must be coordinated with Automatic Systems, Jake McFarland, 2740 Ford St, Ames, IA 50010, 515-232-4770, jmcfarland@automaticsystemsco.com.

1.02 SYSTEM DESCRIPTION

A. Performance Requirements:

1. Provide Run-Fail, alarm, and equipment status functions in conformance with Section 40 90 10.
2. Unless otherwise specified, run signals shall be derived from motor starter normally open auxiliary contacts or inverter.
3. Electrical wiring and controls shall conform to Division 16.

B. Design Criteria:

1. Power drives from 480 vac, 3 phase, 60 hz. supply.
2. Capable of operation on electrical power system with 5% Total Harmonic Distortion (THD) present at adjustable speed drive.
3. Output voltage shall be varied proportionally to output frequency to maintain constant V/Hz up to nominal 60 hertz. Above 60 hertz, output voltage shall be constant.
4. Drive shall be suitable for operating standard NEMA Design B motors.
5. Drive shall consist of full wave diode bridge rectifier to convert incoming fixed voltage/frequency to fixed DC voltage to minimize generation of electrical noise back into line and provide displacement power factor of 0.95, over range of speeds and loads utilized.
6. Meet quality and program requirements of ISO 9001. Completed assembly shall be listed and labeled for purpose for which it is used by Underwriters Laboratories Inc.
7. Environmental:

    a. Relative Humidity: 0 - 95% non-condensing.
    b. Altitude: 0 - 3300 ft.
    c. Ambient temperature: -10° to 40°C.

8. Conform to NEMA standards.

1.03 SUBMITTALS

A. Submit information in 1 package in booklet form for drive and control associated with process equipment specified in other sections.

1.04 PROJECT/SITE CONDITIONS

A. Store Equipment specified in this Section at Temperature: -20°C to 65°C.

1.05 MAINTENANCE

A. Extra Materials:

1. Packaging:

a. Obtain spare parts from equipment manufacturer. Do not provide third-party equivalent replacements.
b. Package spare parts for protection against dirt, moisture, and static discharge. Label each package as to its contents with description and part number.
c. Size packages for convenient storage and handling. Packages should weigh no more than 30 lbs each and be no larger than 30 in. long by 18 in. deep by 18 in. wide, unless individual component exceeds these dimensions.
d. Do not place spare parts for different equipment items in same package.

2. Spare Parts:

a. PLC: Provide spare module for each type used on Project for following:

1) Processor.
2) Power supply.
3) I/O.

b. Provide 1 useable spare slot in each PLC I/O chassis.
c. Provide 20% spare I/O points wired to terminal blocks for each type of I/O for each PLC panel. Install spares in chassis grouped with similar I/O types.

3. Extra materials identified in Section 40 95 13 for equipment in this Section.

PART 2 PRODUCTS

2.01 GENERAL

A. Manufacturers:

1. SCHNEIDER VARIABLE SPEED DRIVE, ALTIVAR PROCESS ATV600, ATV630, SERIES, 380...480 V, IP21/UL TYPE
2. No substitutes.

B. Equipment provided in this section shall conform to following:

1. General Provisions for Instrumentation and Control: Section 40 90 10.
2. Instrument and Control Panel Construction: Section 40 95 13.
3. Panel and Field Devices: Section 40 95 14.
4. Field Electronic Transmitters: Section 40 95 15.
5. Disconnects, Fuses and Circuit Breakers: Section 26 02 00.

C. For standardization and maintenance, major equipment components in this section shall be responsibility of single drive manufacturer.

D. Motors:

1. In addition to equipment specification sections, comply with following:

a. Vertical Units:

1) Include drip shield.
2) Include high ring base with access holes for coupling floor mounted motors.
3) Design motor and base for reed critical frequency above 120% of base speed.

b. Not exceed insulation Class B temperature rise for continuous operation at any point in specified speed range when operating from inverter.
c. Include minimum of Class F rated insulation.
d. Include overtemperature switch in each phase when specified.
e. Include adequate thermal capacity for continuous operation under worst case temperature conditions with motor operating at rated torque, without reduction in motor insulation life of motor, under range of conditions specified.

2.02 PULSE WIDTH MODULATED (PWM) ADJUSTABLE FREQUENCY DRIVE - CENTRIFUGAL.

A. Inverters:

1. Input Power:

a. 460 v (+10%, -10%).
b. 3-ph, 3-wire, any phase sequence.
c. 60 Hz (±2%).
d. Withstand without component failure, line voltage transients up to 3,000 v, in accordance with ANSI 37.90.1.
e. Include copper wound, Class H insulation, 115°C rise, line reactor on inverter input to prevent disturbance to power line. When harmonic trap filter is supplied, include in harmonic trap filter panel.
f. Inverter input shall have 0.95 PF or greater throughout speed range.
g. Include MOVs on power line and input and output line chokes.
h. Line noise shall be limited to line notch depth of 20% or less. Meet voltage and current distortion limits in accordance with IEEE 519.

B. Inverter Construction:

1. Modular construction for ease of maintenance.
2. Easily accessible from front.
3. Construct boards of fire-retardant materials in accordance with NEMA Grade FR4 specifications.

C. Inverter Output Power:

1. Match to motor.
2. 3-ph, 3-wire.
3. Pulse width modulated wave form.
4. Rated Output: 460 v.
5. Frequency Range: 6 to 60°Hz, unless otherwise specified.
6. Frequency Accuracy: ±1% of setting any point in specified speed range in 24 hr period.
7. Rate full load output current in excess of sum of ac motor nameplate current of motor and increase of motor current due to harmonics.
8. Inverter output shall not cause motor current to increase in excess of values listed in table below:

Motor code letter	% Current Increase Due to Harmonics
E	2.4
F	3.0
G	3.7
H	4.7

9. Inverter output including harmonics shall not cause motor current to exceed motor nameplate full load current excluding service factor at maximum load BHP
10. Protection against opening or shorting of motor leads.
11. Ground Fault Protection.
12. Critical frequency avoidance circuit. Three set points selectable from 0 to maximum frequency. Band width of setpoints to be adjustable from 0 - 30 Hz.
13. Power transistors to be Insulated Gate Bipolar Transistors (IGBT's) with PIV rating of 1200 volts minimum.

D. Motor Performance:

1. 0.5% speed regulation in manual or automatic speed control mode for motors.
2. 110% starting torque.
3. 110% overload capacity for 1 min.

E. Drive Features:

1. Include offset, slope, minimum clamp, separate acceleration, and deceleration adjustments from 1.5 to 15 sec.
2. Provide potentiometer for speed input for manual speed control, startup and maintenance.
3. Design circuit to accept positive or negative signal, grounded or ungrounded.
4. Efficiency of Inverter for centrifugal pump motor:

    a. 100% rated speed and load: 97.5% or better.
    b. 70% rated speed and 50% load: 94% or better.
    c. 50% rated speed and 25% load: 87% or better.
    d. 30% rated speed and 9% load: 83% or better.

5. Adjustable current limit circuitry adjustable to 115% of rated current.
6. Two successive automatic restart attempts on nuisance shutdown.
7. RS232C communication capable of monitoring and setting operating and fault parameters.
8. Front of Enclosure Devices: Keypad.

F. Short Circuit and Drive Input Protection:

1. High speed current limiting fuses rated 200,000 AIC, specifically designed for solid state applications.
2. Instantaneous overcurrent trip shutdown set at 180%.
3. Undervoltage protection with automatic restart.
4. Input power thermal-magnetic circuit breaker with minimum 65,000 RMS symmetrical interrupting capacity with through-door operator and following features:

    a. Label in accordance with UL Standard 489.
    b. Provisions to lock in "OFF" position.
    c. Mechanical interlock to prevent opening cabinet door with disconnect in "ON" position, or moving disconnect to "ON" position while unit door is open.
    d. Auxiliary contact on main disconnect to isolate control when fed from external source.

e. Barriers and warning signs on terminals that are energized with power disconnect "OFF".

G. Internal Protective Features:

1. Output phase sequence to be independent of input phase sequence.
2. High or low sustained voltage shutdown.
3. Phase loss protection.
4. 120 vac grounded control circuits from internal control transformer to power associated equipment control devices powered from panel.
5. Anti-regenerative circuit to protect inverter during deceleration.
6. Electrically isolated low voltage logic.
7. Transistor overtemperature and overcurrent protection.
8. Current limit comparitor circuit to automatically phase back output current and frequency to prevent excessive currents from damaging motor insulation.
9. Static overspeed protection.
10. DC bus fuse protection.
11. MOV (metal oxide varistor) surge protection.

H. Inverter Adjustments:

1. Maximum Speed: 50% to 100% rated.
2. Minimum Speed: 0% to 70% rated.
3. Current limit: 50% to 115%.
4. Linear Acceleration: 5 to 25 sec.
5. Linear Deceleration: 5 to 25 sec.
6. Output v/Hz trim.
7. Current limit and torque boost.
8. Maximum voltage level.
9. Electronic thermal overload.
10. Torque limit.
11. Maximum voltage.

I. Inverter Diagnostic and Shutdown Protection Features:

1. External fault such as motor overload.
2. Low line voltage.
3. High line voltage.
4. Instantaneous Current overload.
5. Inverter overtemperature.
6. Overcurrent stall.
7. Overvoltage stall.
8. Ground Fault.
9. Blown input fuse.
10. Control Power supply failure.

J. Operator Interface:

1. Provide front of panel mounted keypad/display, capable of controlling drive and setting drive parameters.
2. Digital display shall include following functions:

a. Frequency.
b. Control mode - manual or auto.
c. Output frequency.
d. Percent output voltage.
e. Percent output current.

3. Keypad:

a. Digital.
b. Menu driven.
c. Stored in non-volatile memory.
d. Lockout code protected.
e. Key Functions:

1) Up/Down arrow keys.
2) Manual/Off/Auto keys.
3) Run/Stop keys.
4) Fault Clear/Reset keys.
5) Program key.
6) Read/Write keys.
7) Quick Setup key.

2.03 TITUS LIFT STATION PUMP ADJUSTABLE SPEED DRIVE SYSTEM

A. General:

1. Include adjustable frequency drive system with 2 wastewater pumps. Drive system includes, but not limited to, motors, inverters, motor control equipment, and pump control panel. Inverters and accessories shall be as specified in this section and listed in Schedule 1 to Section 26 09 23.
2. Install 3 phase power components in NEMA 1 enclosures with open chasis inverters. Paint with manufacturers standard exterior gray and interior white.
3. Design components to form complete control system, including necessary electrical interlocking and interwiring between components within structure, with terminal block provisions for connecting remote mounted devices with control system.
4. Provide door mounted, engraved nameplates for each door mounted or remote mounted device or unit of equipment in accordance with Section 22 05 53.
5. Include relays, breakers, and items necessary to achieve system performance specified. Furnish terminal blocks for interconnection between enclosures.
6. Furnish interconnecting conductors between adjustable speed cabinets and equipment excluding motors.
7. Terminate wiring inside enclosures.

B. Drive Enclosures:

1. Quantity 2.
2. Dimensions as shown on drawings.
3. Nema 1 enclosure with pad lockable disconnect switch.
4. Free-standing.
5. Provide pump protection (MAS module or equal)

C. Pump Control Panel:

1. 36 in. wide.
2. Free-standing.
3. Front of Panel Mounted Devices:

Description (Range)	Interface
Operator Interface Unit	
Back up pump control reset pushbutton	

4. Operator Interface Unit functions:

Description (Range)	Interface
Wet well level indication (0 to XX ft)	--
HOA switch for each pump	--
Reset pushbutton	--
VFD Run light for each pump	Signal from vfd
VFD fault for each pump	Signal from VFD
Elapsed time meter for each pump	--
Low wet well water level alarm light	
High wet well water level alarm light	
High motor temp light for each pump	
Seal fail for each pump	
Speed indicator for each raw wastewater pump	--
Level indicating controller	
Inverter fail alarm light for each inverter	--
Pump 1 Lead/Off Two position sequence selector switch	--
Pump 2 Lead/Off Two position sequence selector switch	
Pump Station Flow	Flow meter
Totalized Station Flow	Calculated from flow

a. Additional Panel Equipment:

1) PLC, Rockwell CompactLogix Series 1769 or 5380 Controllers.
2) UPS, sized for 10 minutes back up time.
3) Unpowered contacts for pump run, fail, high level and power fail alarm signals.
4) Cellular Telephone Modem.

D. Functional Description:

1. Liquid Level Control System:

a. Provide Liquid Level Control System in logic section, designed to maintain liquid level in common wet well between minimum and maximum level requirements using constant level control strategy. Level may deviate from level setpoint only when current pumping capacity is outside pumping range achievable with number of pumps currently operating.
b. Include level system and ramp and sequence control.

1) Level system shall provide 4-20 mAdc output control signal. Maximum signal shall represent maximum water level and minimum signal shall represent minimum water level.
2) Provide control signals in liquid level control unit to indicate wet well liquid level to initiate start and stop functions for 2 pumps, and to modulate speed of 2 pumps.
3) Provide signal offset capability to allow pump speed to be adjusted to allow pump capacity to be equalized between pumps.

c. Utilize 4-20 mAdc control signal supplied by level reader specified.
d. Provide with features and appurtenances, whether individually specified or not, to obtain operating requirements specified.
e. Pumps shall be sequentially started with time delays upon restoration of power.

f. Pump control shall include anti-backspin timers for each pump activated on pump stop to prevent respective pump from restarting until timer is timed out.

2. Automatic Operation:

a. Provide sequence control to logically determine from panel signals which pumps to be operative in automatic sequence.
b. Liquid level control system shall automatically operate 2 pump drives to maintain wet well level as described herein from selector switches for setting up pump sequence.
c. First (lead), second (lag) pump position shall be from adjustable speed inverters with any inverter arranged so it can operate in first or second.
d. Provide proportional wetwell level PID controller with operator entered wetwell level setpoint initially set at _____ ft.
e. Initially set proportional band at 1 ft. above and 1 ft. below wetwell level setpoint.
f. Calibrate minimum and maximum speed for each variable speed pump in field.
g. Control pump speed to allow pumping of all flows, from minimum to maximum flows achievable, with combination of pumps available.
h. Pumps shall not cycle at any steady flow condition.
i. Minimize pump cycling under transient flow conditions.
j. Do not allow more pumps operating than required to meet present flow condition.

3. On Rising Wetwell Level

a. Start first (lead) pump at maximum speed (with adjustable controlled rate of acceleration) when wetwell rises above proportional band.
b. If level continues to rise above proportional band start second pump at current controller setpoint after preset adjustable time delay (with adjustable controlled rate of acceleration).
c. Provide speed signal for each pump operating to equally share load with adjustable speed bias setting for each individual pump.

4. On Falling Wetwell Level:

a. As wet well level decreases, operating pump(s) shall reduce in speed until outflow equals inflow and level drops to wetwell level setpoint.
b. If level drops with operating pump(s) running at minimum speed, stop last pump started when wetwell level drops below proportional band, after preset adjustable time delay.
c. If wetwell level continues to drop with one pump running at minimum speed, stop lead pump when wetwell level drops below proportional band after preset adjustable time delay.

5. Provide three different minimum speed settings for each pump. Four different speed settings shall be used automatically depending on number of pumps operating.
6. On one drive failure, sequence shall be as above, except eliminate pump drive system which has failed to start.
7. Automatic Backup Control Mode, control shall be independent of PLC:

a. When High level float is activated and HOA switches are in "Auto" start lead pump at speed setting at preset speed. Provide additional float contacts or relay to provide High Wet Well Level indication.
b. If High level float is still activated after preset adjustable time delay, activate lag 1 pump at preset speed setting.
c. When Pump off level float is activated and HOA switches are in "Auto", stop all pump started in backup mode, Provide additional float contacts or relay to provide Low Wet Well Level indication.

d. Back up level control reset pushbutton will return wetwell control system to constant wetwell level automatic control.

8. High, Pump Off and low-level alarms shall be activated by float switches furnished and installed in wetwell at elevation shown on Drawings.
9. Stop pumps on low water level alarm in Hand or Auto, and high temp signal.
10. Provide seal fail indication, pump continues to run. Indication remains on until manually reset.
11. Receive the following from each drive:

    a. Drive running, discrete.
    b. Drive fault discrete.
    c. Drive in auto, discrete.
    d. Pump high temp, discrete.
    e. Pump seal fail, discrete.
    f. Speed, 4-20 mA.

12. Transmit the following to each drive:

    a. Drive required to run, discrete.
    b. Speed control, 4-20 mA.

13. Monitor flow 4 – 20 mAdc signal and provide Totalized Flow value and transmit over monitoring system.

14. Provide unpowered contacts/values for following signals. Signals/values to be transmitted over cellular telephone modem monitoring system using Ethernet communications:

    a. Backup control active.
    b. High-High Wet Well Level Alarm
    c. High Wet Well Level.
    d. Low Wet Well Level.
    e. Low-Low Wet Well Level Alarm.
    f. Common Alarm.
    g. Loss of Power Alarm.
    h. Pump 1 Run.
    i. Pump 2 Run.
    j. Pump 1 Fail.
    k. Pump 2 Fail.
    l. Pump 1 Seal Fail.
    m. Pump 2 Seal Fail.
    n. Generator Run.
    o. Generator Fail.
    p. Normal Power On.
    q. Emergency Power On.
    r. Totalized Flow.

15. Provide following 4-20 mA signals to to Operator Interface Unit or front of panel digital indicators:

    a. Wet Well Level.
    b. Instantaneous pump station flow.

E. Field Devices:

Description (Range)	Notes
Wet well level indication (0 to 11 ft)	Radar Level reader
High Level float switch (for automatic backup control mode)	Elevation: see drawings
Pump off Level float switch (for automatic backup control mode)	Elevation: see drawings
Low Level float switch	Elevation: see drawings
100 – 2,000 gpm or maximum of 2 pumps operating	Flow Meter (Section 40 09 23)

2.04 SOURCE QUALITY CONTROL

A. Inverter Testing:

1. Upon completion of manufacture and assembly, factory test drive at full load to demonstrate compliance with specified features and characteristics.
2. OWNER may witness factory testing of drives.
3. Provide 2 weeks notice to OWNER prior to testing of drives.
4. Component failure during testing will require repeating any test associated with failure of modified components to demonstrate proper operation.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install equipment in accordance with manufacturer's written instructions and approved submittals.

B. Except as shown on Drawings, retain services of drive manufacturer to provide final wiring interconnections between sections of adjustable speed cabinets.

3.02 FIELD QUALITY CONTROL

A. Manufacturer's Field Services:

1. Provide services as specified in process package systems.

SCHEDULE 1 TO SECTION 26 09 23.21 ADJUSTABLE FREQUENCY DRIVE EQUIPMENT	
	Pumps
Drive System Requirements	
Pump Tag No.	N/A
Motor Tag No.	N/A
Reference Specification Section	43 13 29
No. of Inverters	2
No. of Harmonic Trap Filters	0
No. of Input Line Reactors	0
No. of Inverter Bypass Contactors	0
No. of Mechanically Interlocked Reversing Contactors	0
No. of Circuit Breakers	1 per drive
No. of Motor Overloads	1 per drive
No. of Output Line Reactors	0

* * * END OF SECTION * * *

SECTION 26 32 13.13
PACKAGED NATURAL GAS ENGINE GENERATOR SYSTEMS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Engine generator set.
2. Cooling system.
3. Fuel system.
4. Combustion air intake and engine exhaust systems.
5. Starting system.
6. Provide one (1) complete system delivered to site in Waterloo, Iowa.
7. Include transfer switch per Section 26 36 00.
8. Generator will be located outdoors with transfer switch indoors. Coordinate locations with owner.

B. Generator is CONTRACTOR provided and CONTRACTOR installed.

1.02 DEFINITIONS

A. Standby Rating: Power output rating equal to power that generator set delivers continuously under normally varying load factors for duration of power outage with capability of 24 continuous operating hrs.

B. Operational Bandwidth: Total variation from lowest to highest value of parameter over range of conditions indicated, expressed as percentage of nominal value of parameter.

C. Power Output Rating: Gross electrical power output of generator set minus total power requirements of electric motor-driven accessories normally constituting part of engine assembly.

D. Steady-State Voltage Modulation: Uniform cyclical variation of voltage within operational bandwidth, expressed in Hz or cycles per second.

1.03 SYSTEM DESCRIPTION

A. Design Requirements:

1. System Includes: Standby-rated, automatically started natural gas-fueled engine coupled to ac generator unit. Engine and generator are factory-mounted and factory-aligned on structural steel skid. Subsystems and auxiliary components and equipment are as indicated.
2. Environmental Conditions: Engine generator system withstands following environmental conditions without mechanical or electrical damage or degradation of performance capability:

a. Ambient Temperature: -20°F to +115°F.
b. Altitude: Sea level to 1,000 ft (300 m).
c. Location: Outdoors

B. Performance Requirements:

1. Functional Description: When mode selector switch on control and monitoring panel is in “automatic” position, remote control contacts in one or more separate automatic transfer switches initiate starting and stopping of generator set. When mode selector switch is placed in “On” position, generator set starts manually. “Off” position of same switch initiates

shutdown of generator set. When unit is running, specified system or equipment failures or derangements automatically shut unit down and initiate alarms. Provide Auxiliary Contacts: Normally open SPDT contacts for generator run, generator fail, battery low, and battery high.

2. Rating: 10 amps at 120 vac.
3. System Performance

    a. Steady-State Voltage Operational Bandwidth: 1% of rated output voltage from no load to full load.
    b. Steady-State Voltage Modulation: Less than 0.25 Hz.
    c. Transient Voltage Performance: Not more than 10% variation for 50% step-load increase or decrease. Voltage recovers to remain within steady-state operating band within 2 sec.
    d. Steady-State Frequency Operational Bandwidth: 0.5% of rated frequency from no load to full load.
    e. Steady-State Frequency Stability: When system is operating at constant load within rated load, there are no random speed variations outside steady-state operational band and no regular or cyclical hunting or surging of speed.
    f. Transient Frequency Performance: Less than 3 Hz variation for 50% step-load increase or decrease. Frequency recovers to remain within steady-state operating band within 3 sec.
    g. Output Waveform: At no load, harmonic content measured line-to-line or line-to-neutral does not exceed 5% total and 3% for single harmonics. Telephone influence factor determined according to NEMA MG1 does not exceed 50.
    h. Sustained Short-Circuit Current: For 3-ph bolted short circuit at system output terminals, system will supply minimum of 300% of rated full-load current for not less than 10 sec and then clear fault automatically, without damage to any generator system component.
    i. Temperature Rise of Generator: Within acceptable limits for insulation systems used according to NEMA MG 1 when operating continuously at standby rating conditions.
    j. Starting Time: Maximum total time period for cold start, with ambient temperature at low end of specified range, is 10 sec. Time period includes output voltage and frequency settlement within specified steady-state bands.
    k. Engine sensors used for monitoring and control are to be conditioned to a 4-20ma signal level to enhance noise immunity, and connections shall be sealed to prevent corrosion and improve reliability.

1.04 SUBMITTALS

A. Product Data:

1. Engine-generator set equipment sizing calculation based on the load profile for each site. Refer to Section 2.02.B. for load profile.
2. Include data on features, components, ratings, and performance.
3. Include dimensioned outline plan and elevation drawings of engine generator set and other system components.
4. Engine Generator specification sheet.
5. Controls specification sheet(s).
6. Installation/Layout dimensional drawing.
7. Wiring schematic.
8. Sound data.
9. Emission certification.
10. Warranty statement.

B.

Shop Drawings:

1. Show connections, mounting, and support provisions and access and working space requirements.
2. Wiring Diagrams for System: Show power and control connections and distinguish between factory-installed and field-installed wiring.

C. Test Results:

1. Certified Summary of Prototype Unit Test Report: Submit certified copies of actual prototype unit test report if requested by ENGINEER.
2. Factory Project-Specific Equipment Test Reports: For units to be shipped for this Project showing evidence of compliance with specified requirements.
3. Field Test Report.

D. Operation and Maintenance Data:

1. Detailed Operating Instructions: Describe operation under both normal and abnormal conditions.
2. Lists: Tools, test equipment, spare parts, and replacement items recommended to be stored at site for ready access. Include part and drawing numbers, current unit prices, and source of supply.

E. Submit in accordance with Section 01 33 00.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Firms experienced in manufacturing equipment of types and capacities indicated that have record of successful in-service performance.

1. Emergency Service: System manufacturer maintains service center capable of providing training, parts, and emergency maintenance and repairs at Project site with 4 hrs maximum response time. Service support 24/7 and location within 200 miles.

B. Comply with NFPA 110 for requirements for Level 2 emergency power supply system.

C. Engine Exhaust Emissions: Comply with applicable Federal, State, and local government requirements.

D. Single-Source Responsibility: Obtain engine generator system components from single manufacturer with responsibility for entire system. Unit shall be representative product built from components that have proven compatibility and reliability and are coordinated to operate as unit as evidenced by records of prototype testing.

E. Items provided under this section shall be listed or labeled by UL or other Nationally Recognized Testing Laboratory (NRTL), where such listing or labeling is available.

1. Term “NRTL” shall be as defined in OSHA Regulation 1910.7.
2. Terms “listed” and “labeled” shall be as defined in National Electrical Code, Article 100.

F. Regulatory Requirements:

1. National Electrical Code (NEC): Components and installation shall comply with National Fire Protection Association (NFPA) 70.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver engine generator set and system components to their final locations in protective wrappings, containers, and other protection that will exclude dirt and moisture and prevent damage from construction operations. Remove protection only after equipment is made safe from such hazards.

1.07 MAINTENANCE

A. Extra Materials:

1. Furnish extra materials matching products installed, as described below, packaged with protective covering for storage, and identified with labels describing contents.

a. Fuses: 1 for every 10 of each type and rating, but not less than 1 of each.
b. Pilot Lights: 2 for every 6 of each type used, but not less than 2 of each.
c. Filters: 1 set each of lubricating oil, fuel, and combustion air filters.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Engine Generator Sets:

1. Cattle Congress Lift Station –

a. Caterpillar DG200 GC natural gas genset 200 kW site rated for standby or equivalent.
b. Kohler KG180 natural gas genset 180 kW site rated for standby or equivalent.
c. No substitute manufacturers.

2. Manufacturer to provide sizing data based upon loads provided in 2.20 B.1.

2.02 ENGINE GENERATOR SYSTEM

A. System is coordinated assembly of compatible components.

B. Ratings:

1. Cattle Congress Lift Station - 480v, 3-ph, 3-wire 60 Hz, 230 kW minimum.

Engine-generator set ratings are listed for reference in base bid. Contractor to configure engine-generator set with vendor based on the following load profile, and provide vendor's equipment sizing calculation as shop drawing submittal for review by Engineer:

- (1) 75hp, 84.2A 460V lift pump controlled by VFD
- (1) 75hp, 84.2A 460V lift pump controlled by VFD
- (1) 7.5 kVA 480V/240 PRI, -240/120V SEC transformer with 10% lighting loads and 90% digital control power loads

C. Safety Standard: Comply with AMT B15.1.

D. Nameplates: Equip each major system component with conspicuous nameplate of component manufacturer. Nameplate identifies manufacturer of origin and address, and model and serial number of item.

2.03 ENGINE GENERATOR SET

A. Power Output Rating: Nominal ratings as indicated, with capacity as evidenced by records of prototype testing.

B. Skid: Welded steel base securely mounted with anchored mounting bolts. Adequate strength and rigidity to maintain alignment of mounted components without dependence on concrete foundation. Free from sharp edges and corners. Lifting attachments arranged to facilitate lifting with slings without damaging components.

C. Vibration Isolation: In accordance with manufacturer's recommendations. Integral vibration isolators may be provided. When integral vibration isolators are not provided, provide 95% efficient spring type vibration isolators as manufactured by Vibration Eliminator, Mason Company, or Equal. Mount isolators between steel base and floor or concrete pad.

D. Rigging Diagram: Inscribed on metal plate permanently attached to skid. Diagram indicates location and lifting capacity of each lifting attachment and location of center of gravity.

2.04 NATURAL GAS-FUELED ENGINE

A. Comply with NFPA 37.

B. Fuel: Natural Gas having a heating value of approximately 1000 BTU/ft^3.

C. Maximum Speeds:

1. Engine: 1,800 rpm.

D. Lubrication System: Pressurized by positive displacement pump driven from engine crankshaft. Mount following items on engine or skid:

1. Filter and Strainer: Rated to remove 90% of particles 5 microns and smaller while passing full flow.
2. Oil Cooler: Maintains lubricating oil at manufacturer's recommended optimum temperature.
3. Thermostatic Control Valve: Controls flow in system to maintain optimum oil temperature. Unit is capable of full flow and is designed to be fail-safe.
4. Crankcase Drain: Arranged for complete gravity drainage to easily removable container with no disassembly and without use of pumps or siphons or special tools or appliances.

E. Engine Fuel System: Comply with NFPA 54.

1. Natural gas carburetion.
2. Fuel solenoid with UL approved flexible fuel lines.
3. Fuel regulator.

F. Jacket Coolant Heater: Electric immersion type, factory-installed in jacket coolant system. Unit is rated and thermostatically controlled to maintain engine temperature of 25°C at low end of specified ambient temperature range.
1. Voltage: 120, 208, or 480.

G. Speed Governor: Mechanical type.

2.05 ENGINE COOLING SYSTEM

A. Closed-loop, liquid-cooled, with radiator factory-mounted on engine generator set skid and integral engine-driven coolant pumping.

1. Factory-piped and - rated for specified coolant.
2. Fan: Driven by multiple belts from engine shaft.

2.06 FUEL SUPPLY SYSTEM

A. Comply with NFPA 37 and NFPA 54.

B. Fuel Piping: Furnish flexible fuel connections with generator set. Installation is work of Section 23 11 23.

2.07 ENGINE EXHAUST SYSTEM

A. Muffler: Industrial-type, sized as recommended by engine manufacturer. Measured sound level in 20-75 Hz frequency band, according to "DEMA Test Code for Measurement of Sound from Heavy-Duty Reciprocating Engines" at distance of 25 ft from exhaust discharge, is 87 dB or less.

B. Connections from Engine to Exhaust System: Furnish flexible section of corrugated stainless steel pipe furnished with generator set.

C. Insulation for Mufflers and Exhaust Piping: Comply with Section 26 05 29.

2.08 STARTING SYSTEM

A. Description: 12 v or 24 v electric with negative ground and including following items:

1. Components: Size so they will not be damaged during full engine-cranking cycle with specified maximum ambient temperature.
2. Cranking Motor: Heavy-duty unit that automatically engages and releases from engine flywheel without binding.
3. Cranking Cycle: 60 sec.
4. Battery complies with SAE J537 and has adequate capacity within ambient temperature range specified in Part 1 to provide specified cranking cycle series at least twice without recharging.
5. Battery Cable: Size as recommended by generator set manufacturer for cable length required for connection to battery. Include required interconnecting conductors and connection accessories.
6. Battery Rack: Factory fabricated of metal with acid-resistant finish.
7. Battery-Charging Alternator: Factory-mounted on engine with solid-state voltage-regulation and 35 amp minimum continuous rating.

B. Battery Charger: Current limiting, automatic equalizing and float charging-type designed for operation from 120 v 60 Hz supply source. Unit complies with UL 508 and includes following features:

1. Operation: Equalizing charging rate of 10 amps is initiated automatically after battery has lost charge until an adjustable equalizing voltage is achieved at battery terminals. Unit then automatically switches to lower float-charging mode, and continues operating in that mode until battery is discharged again.
2. Automatic Temperature Compensation: Adjusts float and equalizes voltages for variations in ambient temperature from -40°C to +60°C to prevent overcharging at high temperatures and undercharging at low temperatures.
3. Automatic Voltage Regulation: Maintains output voltage constant regardless of input voltage variations up to +10%.
4. Ammeter and Voltmeter: Flush mounted in door. Meters indicate charging rates.
5. Safety Functions: Include sensing of abnormally low battery voltage arranged to close contacts providing "low battery voltage" indication on control and monitoring panel. Also include sensing of high battery voltage and loss of ac input or dc output of battery charger. Either of these conditions closes contacts that provide "battery charger malfunction" indication at system control and monitoring panel.

6. Enclosure and Mounting: NEMA Class 1 wall-mounted cabinet.

2.09 CONTROL AND MONITORING

A. Configuration: Operating and safety indications, protective devices, basic system controls, and engine gages are grouped on common control and monitoring panel mounted on generator set. Mounting method isolates control panel from generator set vibration.

1. Generator Circuit Breaker: Low-voltage, insulated case-type, conforming to Section 16414. Trip rating based on generator full load current.

B. Indicating and Protective Devices, and Controls: Include those required by NFPA 110 for Level 2 system plus following:

1. ac Voltmeter.
2. ac Ammeter.
3. ac Frequency Meter.
4. dc Voltmeter (Alternator Battery Charging).
5. Engine Coolant Temperature Gage.
6. Engine-Lubricating Oil Pressure Gage.
7. Running Time Meter.
8. Ammeter/Voltmeter Phase Selector Switch or Switches.
9. Generator Voltage Adjustment.
10. Frequency Adjustment.

C. Supporting Items: Include sensors, transducers, terminals, relays, and other devices, and wiring required to support specified items. Locate sensors and other supporting items on engine, generator, or elsewhere as indicated. Where not indicated, locate to suit manufacturer's standard.

D. Unpowered, normally open, auxiliary interlock contacts wired to terminal block.

1. Generator failure signal to remote location.
2. Generator run signal to remote location.
3. Two auxiliary interlocks for 120 v powered air louver control.

2.10 GENERATOR, EXCITER, AND VOLTAGE REGULATOR

A. Comply with NEMA MG 1 and specified performance requirements.

B. Drive: Generator shaft is directly connected to engine shaft. Exciter is rotated integrally with generator rotor.

C. Electrical Insulation: Class H or Class F.

D. Stator Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required.

E. Construction prevents mechanical, electrical, and thermal damage due to vibration, overspeed up to 125% of rating, and heat during operation at 100% of rated capacity.

F. Excitation uses no slip rings, collector rings, or brushes, and is arranged to sustain generator output under short circuit conditions as specified.

G. Enclosure: Provide with Level 2 Sound Attenuating Acoustical Enclsoure. Enclosure shall limit sound to 78 d(B)A measured @ 23' utilizing standard test methodology.

H. Instrument Transformers: Mounted within generator enclosure.

I. Voltage Regulator: Solid-state-type, separate from exciter, providing performance as specified.

1. Adjustment on control and monitoring panel provides +5% adjustment of output voltage operating band.

2.11 FINISHES

A. Indoor Enclosures and Components: Manufacturer's standard enamel over corrosion-resistant pretreatment and primer.

B. Outdoor Enclosures: Polyurethane enamel over corrosion-resistant pretreatment and manufacturer's compatible standard primer.

2.12 SOURCE QUALITY CONTROL

A. Factory Tests: Include prototype testing and Project-specific equipment tests (equipment manufactured specifically for this Project).

B. Prototype Testing: Performed on separate engine generator set using same engine model, constructed of identical or equivalent components and equipped with identical or equivalent accessories.

1. Tests: Conform to those required for Level 1 energy converters in paragraphs 3.2.1, 3.2.1.1, and 3.2.1.2 of NFPA 110.
2. Components and Accessories: Items furnished with installed unit that are not identical to those on tested prototype have been acceptably tested to demonstrate compatibility and reliability.

C. Project-Specific Equipment Tests: Test engine generator set and other system components and accessories prior to shipment. Test items individually and assembled and connected as complete system at factory in manner equivalent to that required at Project site. Record and report test data.

1. Mechanical operation test.
2. Ground tests.
3. Control wiring tests.
4. Operation test.

PART 3 EXECUTION

3.01 INSTALLATION

A. Anchor generator set and other system components on concrete bases conforming to Section 03 30 00 and as indicated. Provide anchorage according to manufacturer's recommendations.

B. Field Installation of Piping and Ductwork: Comply with Division 22 and 2023 SUDAS.

C. Maintain minimum working space around components according to manufacturer's approved submittals and NEC.

3.02 IDENTIFICATION

A. Identify system components according to Section 26 05 53.

3.03 FIELD QUALITY CONTROL

A. Manufacturer's Field Services:

1. Supplier's or manufacturer's representative for equipment specified herein shall be present at job site or classroom designated by OWNER for minimum mandays indicated, travel time excluded, to supervise final adjustment of system after installation is complete, system startup, and training of OWNER'S personnel for system operation. For each of the 2 systems include minimum of:

   a. 1 manday for Installation Services.
   b. 1/2 manday for Instructional Services.
   c. 1/2 manday for Post Startup Services.

2. Supplier or manufacturer shall direct services to system and equipment operation, maintenance, troubleshooting, and equipment and system related areas. See Section 01 78 23.

B. Tests: Provide services of qualified testing agency to perform tests listed below according to manufacturer's recommendations upon completion of installation of system. Use instruments bearing records of calibration within last 12 months, traceable to NIST standards, and adequate for making positive observation of test results. Include following tests:

1. Battery Tests: Measure charging voltage and voltages between available battery terminals for full-charging and float-charging conditions. Check electrolyte level and specific gravity under both conditions. Test for contact integrity of connectors.
2. Battery Charger Tests: Verify specified rates of charge for both equalizing and float-charging conditions.
3. System Integrity Tests: Verify proper installation, connection, and integrity of each element of engine generator system before and during system operation. Check for air, exhaust, and fluid leaks.
4. Simulation of malfunctions to verify proper operation of local and remote protective, alarm, and monitoring devices.
5. Load Test: Use variable load bank capable of simulating kVA, kW, and power factor of load for which unit is rated. Run unit at 25, 50, and 75% of rated capacity for 30 min each, and at 100% for 1 hrs. Record voltage, frequency, load current, battery-charging current, power output, oil pressure, and coolant temperature during test.
6. Exhaust System Back-Pressure Test: Use manometer with scale exceeding 40 in. of water. Connect to exhaust line close to engine exhaust manifold. Verify that back pressure at full-rated load is within manufacturer's published allowable limits for engine.
7. Exhaust Emissions Test: Conform to applicable government test criteria.

C. Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.

3.04 CLEANING

A. Upon completion of installation, inspect system components. Remove paint splatters and other spots, dirt, and debris. Touch up scratches and mars of finish to match original finish. Clean components internally using methods and materials recommended by manufacturer.

* * * END OF SECTION * * *

SECTION 26 36 00
TRANSFER SWITCHES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Automatic transfer switch (ATS) delivered to Prefabricated Building Manufacturer.
2. Provided by same vendor as Generator in specification 26 32 13.13.

1.02 SUBMITTALS

A. Product Data:

1. Submit for each transfer switch, including dimensioned plans, sections, and elevations showing minimum clearances; conductor entry provisions; gutter space; installed features and devices; and materials lists.
2. Wiring diagrams, elementary or schematic, differentiating between manufacturer-installed and field-installed wiring.
3. Single-line diagrams of transfer switch units showing connections between automatic transfer switch, bypass/isolation switch, power source, and load, plus interlocking provisions.

B. Test Results:

1. Certified reports of field tests and observations.

C. Miscellaneous:

1. Manufacturer's certificate of compliance to referenced standards and tested short-circuit closing and withstand ratings applicable to protective devices and current ratings used in this Project, as indicated and as specified in this section.

D. Operation and Maintenance (O&M) Data:

1. Include features and operating sequences, automatic and manual.
2. List factory settings of relays and provide relay setting and calibration instructions.

E. Submit in accordance with Section 01 33 00.

1.03 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Firms experienced in manufacturing equipment of types and capacities indicated and having record of successful in-service performance.

B. Emergency Service: Manufacturer maintains service center capable of providing emergency maintenance and repairs at Project site with 8 hr maximum response time.

C. Items provided under this section shall be listed or labeled by UL or other Nationally Recognized Testing Laboratory (NRTL).

1. Term “NRTL” shall be as defined in OSHA Regulation 1910.7.
2. Terms “listed” and “labeled” shall be as defined in National Electrical Code (NEC), Article 100.

D. Regulatory Requirements:

1. National Electrical Code: Components and installation shall comply with NFPA No. 70.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Caterpillar, Inc.

B. Kohler, Co.

2.02 TRANSFER SWITCH PRODUCTS, GENERAL

A. Open transition contactor based 480-volt three (3) phase, three (3) pole, three (3) wire and rated as follows .

1. 600 ampere, 65,000 AIC minimum at Cattle Congress Lift Station.

B. Solid-State Controls: Repetitive accuracy setting of +/-2% or better over an operating temperature range of -20ºC to 70ºC.

C. Resistance to Damage by Voltage Transients: Components meet or exceed voltage surge withstand capability requirements when tested according to ANSI C37.90.1. Components meet or exceed voltage impulse withstand test of NEMA ICS 1.

D. Enclosures: NEMA 12, conforming to UL 508, except as otherwise indicated.

E. Factory Wiring: Train and bundle factory wiring and identify consistently with Shop Drawings, by color code or by numbered or lettered wire and cable tape markers at terminations.

1. Designated terminals accommodate field wiring.
2. Power Terminals Arrangement and Field Wiring Space: Suitable for top, side or bottom entrance of feeder conductors as indicated.
3. Terminals: Pressure type, suitable for copper or aluminum conductors of sizes indicated.
4. Control Wiring: Equipped with lugs suitable for connection to terminal strips.

F. Electrical Operation: Accomplish by nonfused, momentarily energized solenoid or electric motor-operated mechanism, mechanically and electrically interlocked in both directions. Switches using components of molded case circuit breakers or contactors not designed for continuous duty, repetitive switching between active power sources are not acceptable.

G. Switch Action: Mechanically held in both directions for double-throw switches.

H. Switch Contacts: Use silver composition for switching load current. Provide separate arcing contacts for units rated 225 amps and more.

I. Overcurrent devices are not part of switch products.

2.03 AUTOMATIC TRANSFER SWITCHES (ATSs)

A. Comply with Level 1 equipment in accordance with to NFPA No. 110.

2.04 AUTOMATIC TRANSFER SWITCH FEATURES

A. Voltage sensing for each phase of normal source. Pick-up voltage adjustable from 85% to 100% nominal, and drop-out voltage adjustable from 75% to 98% pick-up value. Factory set for pick-up at 90% and drop-out at 85%.

B. Time-delay override of normal source voltage sensing delays transfer and engine start signals. Adjustable 0 to 6 sec; factory set at 1 sec.

C. Voltage/Frequency Lockout Relay: Prevents premature transfer. Voltage pick-up adjustable from 85% to 100% nominal. Factory set to pick-up at 90%. Pick-up frequency adjustable from 90% to 100% nominal. Factory set to pick-up at 95%.

D. Retransfer Time Delay: Adjustable from 0 to 30 min and factory set at 10 min. Provides automatic defeat of delay upon loss of voltage or sustained undervoltage of emergency source when normal supply has been restored.

E. Test Switch: Simulates normal source failure.

F. Switch-Position Pilot Lights: Indicate source to which load is connected.

G. Source Available Indicating Lights: Supervise sources via transfer switch normal and emergency source sensing circuits.

1. Normal Power Supervision: Green light with nameplate engraved “Normal Source Available.”
2. Standby Power Supervision: Red light with nameplate engraved “Standby Source Available.”

H. Unassigned Auxiliary Contacts: 2 normally open SPDT contacts for each switch position in addition to normal power and emergency power isolated contacts.

1. Rating: 10 amps at 240 vac.

I. Transfer Override Switch: Overrides automatic retransfer control so ATS remains connected to emergency power source regardless of condition of normal source. Pilot light indicates override status.

J. Engine Starting Contacts: 1 isolated normally closed and 1 isolated normally open. Contacts are gold-flashed or gold-plated and rated 10 amps at 32 vdc minimum.

K. Engine Shut-Down Contacts: Time delay adjustable from 0 to 5 min; factory set at 5 min.

2.05 FINISHES

A. Enclosures: Manufacturer's standard enamel over corrosion-resistant pretreatment and primer. Comply with NEMA rating identified earlier.

2.06 SOURCE QUALITY CONTROL

A. Factory test components, assembled switches, and associated equipment to ensure proper operation. Check transfer time and voltage, frequency, and time-delay settings for conformance with specified requirements. Perform dielectric strength test conforming to NEMA ICS 1.

PART 3 EXECUTION

3.01 INSTALLATION

A. Floor Mounting of Transfer Switches:

1. Provide 4 in. high concrete foundation pad. Construct in accordance with Section 03 30 00.
2. Level and anchor unit to equipment pad.

B. Wall Mounting of Transfer Switches: Mount on wall as indicated.

C. Identify components in accordance with Section 26 05 53.

3.02 WIRING TO REMOTE COMPONENTS

A. Match type and number of cables and conductors to control and communications requirements of transfer switches used. Increase raceway sizes at no additional cost to OWNER if necessary to accommodate required wiring.

3.03 CONNECTIONS

A. Tighten factory-made connections and field connections, including connectors and terminals, screws and bolts, according to equipment manufacturer's published torque tightening values.

B. When manufacturer's torquing requirements are not indicated, tighten connectors and terminals to comply with tightening torques specified in UL 486A-486B.

3.04 GROUNDING

A. Make equipment grounding connections for transfer switch units as indicated and as required by NEC.

3.05 FIELD QUALITY CONTROL

A. Manufacturer's Field Services:

1. Supplier's or manufacturer's technician for equipment specified herein shall be present at job site for minimum man-days indicated, travel time excluded, for service during plant construction, plant startup, and training of OWNER'S personnel for plant operation. Include minimum of:

a. 1 man-days for Instructional Services.

2. Supplier or manufacturer shall direct services to specific system and equipment operation, maintenance, field tests, and troubleshooting. See Section 01 60 10.

B. Preliminary Tests: Perform electrical tests as recommended by manufacturer and as follows.

1. Measure phase-to-phase and phase-to-ground insulation resistance levels with insulation resistance tester, including external annunciator and control circuits. Use test voltages and procedure recommended by manufacturer. Meet manufacturer's specified minimum resistance.
2. Check for electrical continuity of circuits and for short circuits.

C. Field Tests: Give 7-day advance notice of tests and perform tests in presence of OWNER and ENGINEER.

D. Coordinate tests with tests of generator plant and run them concurrently.

E. Tests: As recommended by manufacturer and as follows.

1. Contact Resistance Test: Measure resistance of power contacts for ATSs. Resolve values in excess of 500 micro-ohms and differences between adjacent poles exceeding 50%.
2. Operational Tests: Demonstrate interlock, sequence, and operational function for each switch at least 3 times.

    a. Simulate power failures of normal source to ATSs and of emergency source with normal source available.
    b. Simulate low phase-to-ground voltage for each phase of normal source of ATS'S.
    c. Verify time-delay settings and pick-up and drop-out voltages.

F. Test Failures: Correct deficiencies identified by tests and prepare for retest. Verify equipment meets specified requirements.

G. Reports: Maintain written record of observations and tests. Report defective materials and workmanship, and retest corrected items. Record adjustable relay settings and measured insulation and contact resistances and time delays. Attach label or tag to each tested component indicating satisfactory completion of tests.

* * * END OF SECTION * * *

SECTION 26 71 73
ELECTRIC SERVICE

PART 1 GENERAL

1.01 SUMMARY

A. Electric Utility Charges:

1. Electric Utility charges for extension of distribution system to point of service termination and meters will be paid by OWNER.

1.02 DEFINITIONS

A. Electric Utility: Mid American Electric. Contact: Jacob Olthoff, 319-512-6873, jacob.olthoff@midamerican.com

1.03 QUALITY ASSURANCE

A. Regulatory Requirements:

1. National Fire Protection Association (NFPA):

a. NFPA No. 70-93 - National Electrical Code (NEC).

PART 2 PRODUCTS

2.01 ELECTRIC SERVICE

A. Electric Service Characteristics:

1. As indicated on Drawings and provided by Electric Utility.
2. Cattle Congress Lift Station to use existing 480/27 service, rerouted to new service entrance rated disconnect switch located on building exterior.

PART 3 EXECUTION

3.01 PREPARATION

A. Confirmation of Electric Service:

1. Consult with Electric Utility to verify service information specified and shown on Drawings.
2. Include deviations required by Electric Utility from contract documents to comply with Electric Utility standards and requirements.

B. Metering:

1. Consult with Electric Utility regarding service entrance requirements and metering equipment.
2. Install metering equipment and empty conduit for metering conductors to meet standards and requirements of Electric Utility.

C. Application for Electric Service.

1. Obtain required forms from Electric Utility.
2. Assist OWNER in completion of forms and deliver completed forms to Electric Utility.
3. Coordinate schedule for installation of electric service with Electric Utility.

* * * END OF SECTION * * *

SECTION 40 09 23.14
FLOW METER (MAGNETIC)

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Magnetic flow meters.
2. Converters.
3. Interconnecting cable.

1.02 SYSTEM DESCRIPTION

A. Design Requirements:

1. Comply with Schedule 1 to Section 40 09 23.14.
2. Ratio of flow velocity to reference voltage signals generated identical for each meter size. Meter shall be compatible with secondary readout instrument without circuit modifications.
3. Changes in density, viscosity, temperature, pressure or conductivity within limits of flow meter shall not affect accuracy. Maintain accuracy for field repairs performed by supplier's service technician during warranty period.
4. Design is based on minimum average velocity of 3 ft/sec through meter. Meters requiring greater velocities to meet specified accuracy and proper performance are not acceptable.
5. Flowmeter system accuracy shall be ±0.5% of actual flow rate from 3 to 30 ft/sec and ±1% from 1 to 3 ft/sec. Repeatability shall be ±0.1% and response time programmable from 1 sec to 100 sec.
6. Sensor will be located in a Class ID2 rated area. Display will be in unclassified area.

1.03 SUBMITTALS

A. Product Data:

1. Catalog cuts and manufacturer's specification for each meter and converter.
2. Standard wiring diagrams.

B. Shop Drawings:

1. Drawing showing location of meter in pipe system.
2. Wiring diagram between meter and converter.

C. Operation and Maintenance (O&M) Data:

1. Hydraulic calibration results including printout of actual calibration data giving indicated vs. actual flows at minimum of 1 ft/sec flow rate for each meter. List test results by serial number of meter.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Endress+Hauser Promag 50.

B. Or equal.

2.02 FLOW METER PRIMARY ELEMENT

A. Low frequency, electromagnetic induction type: Produce dc pulse signal directly proportional and linear to liquid flow rate.

B. Power from signal converter.

C. Flow meter liner, electrode materials, and electrode type shall comply with materials listed on Schedule 1.

D. Use stainless steel or Hastelloy C grounding rings or grounding gaskets on each end of magnetic flow meter to provide ground path and prevent interference with flow signal on non-metallic or lined pipe. Do not provide grounding probes.

E. Sensing head interchangeable with meter body without performing flow recalibration.

F. High impedance device of not less than 10^{12} ohms to minimize span shift due to electrode coating.

G. Explosion proof sensor certified by Factory Mutual Research for Class I, Division I or Division II as specified or shown, Groups C and D when sensor is located in hazardous area.

2.03 SIGNAL CONVERTER

A. Remote mounted, microprocessor controlled.

1. Operate on 120 vac, 60 Hz power.
2. Provide pulsed dc voltage to magnet coils of magnetic flow meter to establish magnetic field.
3. Convert flow signal from magnetic flow meter to analog and digital output signals, for bidirectional flow.

B. Span shall be continuously adjustable between 1 and 33 ft/sec. Adjustment shall be by keypad.

C. Display flow rate scaled in field selectable engineering units, as shown in Schedule 1. Display shall have 2 rows of 16 alpha numeric characters. Top row shall indicate instantaneous flow.

D. Converter interchangeable with magnetic flow meter element and require no additional flow calibration.

E. Isolated 4-20 mAdc analog current output into 0 to 500 ohm load and 24 vdc scaled, software adjustable pulse output.

F. Cast Aluminum NEMA 6X enclosure.

G. Noise reduction feature to stabilize flow reading.

H. Automatic empty pipe detection.

I. Suitable for -40° F to 150° F ambient temperature.

2.04 CABLE

A. Provide sufficient length of manufacturers standard signal cable to connect meter primary element and converter.

B. Use single conduit run between converter and meter.

2.05 TAGGING

A. Provide identification tags and markers with ENGINEER'S equipment name and tag number.

PART 3 EXECUTION

3.01 INSTALLATION

A. Meter shall be provided by Prefabricated Building Manufacturer but installed in field by Contractor. Install in accordance with manufacturer's written instructions and approved submittals.

B. Locate meter as recommended by manufacturer with respect to other piping components to ensure meter will meet specified accuracy.

3.02 FIELD QUALITY CONTROL

A. Manufacturer's Field Services:

1. Supplier's or manufacturer's technician for equipment specified herein shall be present at job site or classroom designated by OWNER for mandays indicated, travel time excluded, for assistance during plant construction, plant startup, equipment calibration, and training of OWNER'S personnel for plant operation. Include minimum of:

   a. 1/2 man-day for Installation Services.
   b. 1/2 man-day for Instructional Services.

2. Supplier or manufacturer shall direct services to system and equipment operation, maintenance, and troubleshooting and system-related areas other than process design and philosophy.

B. Field calibrate under operating conditions.

SCHEDULE 1 TO SECTION 40 09 23.14
MAGNETIC FLOW METER SCHEDULE

Tag No.	Description	Process Media	Min Flow	Calibrated Range	Size (in.)	Materials of Construction
FE/FIT-PD	Cattle Congress Lift Station Flowmeter	RRW	100 gpm	100 – 2,000 gpm	10”	2,5,11,12,14

Electrode Type	Liner Material	Electrode Material	Flange Material	Flange Rating
1. Plain (Flush)	4. Teflon	8. Zirconium	12. Carbon Steel	14. ANSI 150
2. Bullet Nose	5. Polyurethane	9. Tantalum	13. 304 Stainless Steel	15. ANSI 300
3. Remov. Under Press.	6. Neoprene	10. Hastelloy.”C”		
	7. Hard Rubber	11. 316 Stainless Steel		

* * * END OF SECTION * * *

SECTION 40 23 13.01

PROCESS VALVES AND APPURTENANCES

PART 1 - GENERAL

1.01 DESCRIPTION:

A. Provide and process valves and appurtenances as indicated and in compliance with Contract Documents.

1. Provide sizes and capacities as indicated or specified.

1.02 REFERENCES:

A. American Society of Mechanical Engineers (ASME):

1. B16.1: Standard for Cast Iron Pipe Flanges and Flanged Fittings, 125 lb.

2. B16.4: Cast-Iron Threaded Fittings, Class 125 and 250.

B. ASTM International (ASTM):

1. A126: Standard Specification for Gray Iron Castings for Valves, Flanges and Pipe Fittings.

2. A351: Standard Specification for Castings, Austenitic, for Pressure-Containing Parts.

3. A536: Standard Specification for Ductile Iron Castings.

1.03 SUBMITTALS:

A. Submit the following in accordance with Section 01 33 00:

1. Data, regarding valve characteristics and performance including Cv.

2. Shop drawing data for accessory items.

3. Manufacturer's literature as needed to supplement certified data.

4. Operating and maintenance instructions and parts lists.

5. Listing of reference installations as specified with contact names and telephone numbers.

6. Valve shop test results.

7. Qualifications of field service technician.

8. Shop and Field inspections reports.

9. List of recommended spare parts other than those specified.

10. Recommendations for short and long term storage.

11. Special tools.

12. Shop and field testing procedures and equipment to be used.

13. Number of service technician days provided and per diem field service rate.

14. Manufacturer’s product data and specifications for shop painting.

15. Provide a layout drawing, plan and section showing orientation of plug, gate, check, ball valves and actuators and nearest obstructions for each valve.

16. Manufacturer's product data and specifications for shop painting.

17. Provide a listing of the materials recommended for each service specified and indicated. Provide documentation showing compatibility with process fluid and service specified and indicated.

18. The latest ISO 9001 series certification or quality system plan.

19. Material Certification:

    a. Provide certification from the equipment manufacturer that the materials of construction specified are recommended and suitable for the service conditions specified and indicated. If materials other than those specified are proposed based on incompatibility with the service conditions, provide technical data and certification that the proposed materials are recommended and suitable for the service conditions specified and indicated including an installation list of a minimum of five (5) installations in operation for a minimum of five (5) years. Provide proposed materials at no additional cost to the Owner.

    b. Where materials are not specified, provide technical data and certification that the proposed materials are recommended and suitable for the service conditions specified and indicated.

B. A copy of this specification section with addenda and all referenced specification sections with addenda, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations and clarifications from the specified requirements.

1. If deviations and clarifications from the specifications are indicated, therefore requested by the Contractor, provide a detailed written justification for each deviation and clarification.

2. Failure to include a copy of the marked-up specification sections and or the detailed justifications for any requested deviation or clarification will result in submittal return without review until marked up specification and justification are resubmitted with the entire package.

1.04 SPARE PARTS:

A. Comply with requirements specified in Section 01 60 10.

1.05 QUALITY ASSURANCE:

A. Provide enclosures for the area classifications specified and indicated.

B. Contractor responsible for verifying outside diameter of pipe to be tapped.

C. Manufacturer of valve shall have a minimum of five (5) operating installations with pumps of the size specified and in the same service as specified operating for not less than five (5) years.

D. If equipment proposed is heavier, taller, different laying length or requires more operating space than specified and indicated; provide all structural, architectural, mechanical, electrical and plumbing revisions at no additional cost to the Owner.

1. If equipment is heavier than specified, the Contractor shall provide all hoisting equipment sized to maintain the minimum safety factor between the specified maximum equipment weight and the lifting capacity of the hoisting equipment indicated and specified.

1.06 DELIVERY, STORAGE AND HANDLING:

A. Comply with the requirements specified in Section 01 60 10 and as specified.

PART 2 - MATERIALS

2.01 KNIFE GATE VALVES:

A. Manufacturers:

a. DeZurik

(1) 12-inch Bi-Directional Cast Stainless Steel Knife Gate Valve (KGC-BD)

B. General:

1. Provide all valves fully bi-directional.

2. Provide valve of wafer face to face design in accordance with MSS SP-81 or MSS SP 135.

3. Provide full flat faced or RF flanges with ANSI 150 flange threaded bolt hole pattern.

C. Pressure Ratings:

1. Valves Body shell and seat pressure rating: conforming to MSS-SP 81 or MSS SP 135 as required by the valve's relevant design standard.

a. ANSI Class 150

D. Materials:

1. Body:

a. Submerged, corrosive and/or interior of wet wells or tanks: Type 316 stainless steel

2. Gate: Type 316 stainless steel.

3. Stem: Type 304 stainless steel.

4. Operator Stand:

a. Submerged, corrosive and/or interior of wet wells or tanks: Type 316 stainless steel

b. Non-Submerged and/or non-corrosive: Carbon Steel, epoxy coated

5. Seals: Viton or AFLAS

6. Scrapers: Phenolic

E. Valves Design:

1. Provide the top gate transverse seals fully enclosed and re-packable with the valve in service under full rated pressure and without the removal of a packing gland or follower.

2. Provide valves 4-in (100 mm) and larger with dual transverse seals. Single transverse seals are not acceptable.

3. Valves with stuffing box packing gland or follower are not acceptable.

4. Provide the transverse seals capable of resealing by means of injection of packing material into the seal chamber through external ports located at a minimum of eight (8) locations for 4-in (100 mm) and larger to ensure even pressure and packing material distribution.

5. Provide dual scraper blades to protect the transverse seals.

    a. Provide the scraper blades for a live load scraping action as the gate moves up and down.

6. Provide both faces and both edges of the gate with a precision ground finish.

7. Provide the leading edge of the gate straight or not inscribing more than a 60 degree included angle.

8. Provide the gate guided for the full length of the stroke and supported to withstand full rated shutoff pressure in either direction.

9. Provide full round bore to match standard pipe I.D, reduced port valves are not acceptable.

10. Provide a resilient seat in the bottom port area of the valve flush with the port area. Valves with a cavity in which flow media can collect are not acceptable.

11. Provide the valves with a resilient body seat, sealing around the edge, not the face of the gate, and replaceable and mechanically retained without the use of adhesives.

12. Provide valves 4-in (100 mm) and larger with secondary body seal for redundant atmospheric sealing.

13. Provide valves with a secondary metal seat to provide gate support and to withstand the full rated pressure in either direction.

14. Provide stem nut with valve position indication and provide Xylan coated stem to eliminate the need for lubrication.

15. Leakage Rate:

    a. Provide valves with zero leakage at the full rated pressure differential in both directions.

    b. Shutoff to be tighter than ANSI class VI specification.

    c. Provide all valves with a closed lockout device.

F. Operators:

1. Manual:

a. Provide operator that does not require than 40 pounds (18 kg) rim force.

(1) Gearing: Steel with enclosed cases.

(a) Provide spur or bevel gearing as required by valve application and orientation.

b. Chainwheels: Provide where required as specified herein.

2. Where indicated provide Type 316 stainless steel stem extension to operating floor elevation as indicated and provide the bevel gear operator with a fabricated steel floorstand and handwheel.

G. Shop Testing:

1. Hydrostatically test each valve body, with water, to 1.50 times the maximum actual working pressure as defined by the valve's relevant design standard and hold for a minimum of 2 minutes.

a. No visible leakage allowed.

2. Hydrostatically test each valve seat, with water, to 1.10 times the maximum actual working pressure as defined by the valves relevant design standard and hold for a minimum of 2 minutes.

3. Bi-Directional Valves: Test the valve in each direction with the required pressure on one side of the gate and atmospheric pressure on the other and the reverse.

a. Shutoff: ANSI class VI specification or better.

4. Provide full cycling and stroking of each valve.

a. Test for a minimum of three (3) cycles.

5. Provide 30 days' notice to the **Engineer** prior to the start of shop testing. The **Engineer** has the right to witness any or all of the testing.

2.02 SWING CHECK VALVES – 3-INCH (75 MM) AND LARGER:

A. Valves 3-inch (75 mm) and larger:

1. Manufacturers:

a. DeZurik

(1) 12-inch APCO CVS 250A

2. Working pressure:

Size	Pressure
3 to 12-inch (75 to 300 mm)	175 psi (1225 kPa)

3. Valve Body:

   a. ASTM A536 ductile iron with integral flanges, faced and drilled per ANSI B16.5 Class 150.

   b. Provide full waterway type body with a net flow area not less than the nominal inlet pipe size when swung open a maximum of 25 degrees. When closed, the valve shall seat drop tight.

   c. Provide a replaceable Type 316 stainless steel body seat.

4. Valve Disc:

   a. ASTM A536 ductile iron. Provide disc faced with a renewable resilient seat ring of a material suitable for the service specified and indicated. Provide Type 304 stainless follower ring and hardware.

5. Disc Arm:

   a. Ductile iron or steel, suspended from and keyed to an austenitic stainless steel shaft located entirely above the waterway and supported at each end by bronze bushings.

   b. Provide shaft to rotate freely without the need for external lubrication.

   c. Provide the shaft sealed where it passes through the body by a stuffing box and adjustable packing. O-ring type shaft seals are not acceptable.

   d. Provide valves with an outside lever and adjustable counterweight to initiate valve closure. Provide final closure dampened by means of a single, side-mounted bronze air-cushion assembly directly mounted to the valve body on machined pads.

   e. Provide an adjustable amount of cushioning without the need for pre-charged air chambers. Commercial air cylinders which pivot and/or are attached with fabricated brackets are not acceptable.

6. Provide an adjustable limit switch to indicate when the valve is closed. Provide one normally open and one normally closed contact. Enclosure: NEMA 6P for all non-hazardous area and NEMA 7 for hazardous areas.

7. Provide an adjustable dashpot or snubber, to control speed of valve closure.

2.03 COMBINATION (AIR RELEASE/VACUUM) VALVES – WASTEWATER

A. Manufacturers:

1. Val-Matic.

a. 2-inch 802A WW Single Body Combination Valve

B. Valves: Fully automatic float operated valves designed to release air from the piping system while the system is in operation and under pressure, and allow air to re-enter the piping system on pump shutdown or if a negative pressure occurs.

C. Single Body Valves

1. Single body valves sizes 4 in (100mm) and smaller shall have full sized NPT inlets and outlets equal to the nominal valve with a 2 in (50 mm) Inlet on a 1 in (25 mm) valves. The body shall have 2 in NPT cleanout and 1 in NPT drain connection on the side of the casting.

D. Provide valves with at least two (2) additional NPT connections for the addition of Air Release Valve, gauges, testing, and draining.

E. Provide valve body with a through flow area equal to the nominal valve size.

F. Anti Slam Device:

1. Provide for valves 6-inch (150 mm) and larger.

2. Flanged globe pattern spring operated device with a center guided disc and seat assembly.

3. Provide the disc with threaded ports to provide adjustment of flow rate.

4. Provide the device mounted on the valve inlet.

5. Seat and Disc: ASTM A351 Grade CF8M Stainless Steel.

G. Provide vacuum check on valve outlet to prevent air from re-entering the system during negative pressure conditions.

H. Materials:

1. Valve Body, Cover and Baffle:

a. ASTM A126 Class B Cast Iron for Class 125 valves.

b. ASTM A351 Grade CF8M stainless steel.

2. Floats, Guide Shafts and Bushings: Type 316 stainless steel.

3. Seats: Buna-N.

4. Hardware: Type 316 stainless steel.

PART 3 – EXECUTION

PLEASE NOTE THAT SPECIFICATION ARE FOR PROCUREMENT ONLY. NO EXECUTION SECTION IS INCLUDED

SECTION 40 90 10
GENERAL PROVISIONS FOR INSTRUMENTATION AND CONTROLS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. General requirements for package and non-package Instrumentation and Control Systems unless otherwise specified in other sections.

1.02 DEFINITIONS

A. Selector Switch: When used under panel component description refers to maintained contact type switches. Loss and return of control power to circuit does not change control mode of requirements in switch position.

B. Push-button: When used under panel component description refers to momentary contact type switches which, unless specified otherwise, shall require electrical interlock. Loss of control power shall, unless specified otherwise, result in loss of electrical interlock and stoppage of previous mode of operations.

1.03 SYSTEM DESCRIPTION

A. Design Requirements:

1. Provide run/fail, alarm, and equipment status functions.
2. Unless otherwise specified, "run" signals shall be derived from motor starter normally open auxiliary contacts.
3. Unless otherwise specified, discrete input and output signals shall conform to:

    a. Isolated unpowered (dry) contact closures.
    b. Power contact from panel receiving signal or device receiving signal.

4. Unless otherwise specified, input and output analog signals shall conform to:

    a. 4-20 mAdc.
    b. For 2-wire transmitter, provide isolated type and power with 24 or 48 vdc at panel or device receiving signal.
    c. Where isolation is required to interface with particular equipment furnished, provide necessary I/I converters.

5. For PLC based systems manual control devices, in panel or field, shall be independent from PLC to provide maintenance and redundancy function.
6. Panels, panel devices, and field devices shall meet or exceed NEMA requirements as follows.

    a. NEMA 4X: Wet locations or outdoors.

        1) Instrumentation and control panels shall be 316 stainless steel.
        2) Instruments and device enclosures shall be 316 stainless steel, fiberglass, or ABS plastic.

    b. NEMA 7: Class I, Division 1 or 2 areas.
    c. NEMA 12: Other areas.

7. Design Life: Design control system for min. 10 yr life at following temperatures:

    a. Permit continuous operation with panel external ambient temperatures of up to +40°C (+104°F).
    b. Outdoor Panels: Permit operation with panel external ambient temperatures of down to -29°C (-20°F).
    c. Indoor Panels: Permit operation with panel external ambient temperatures of down to +8°C (+40°F).

8. When motor controller disconnecting means is off, deenergize associated equipment devices powered from panel.
9. Electrical wiring and controls shall conform to Division 16.

B. Identify equipment on panel or screens with indication below:

1. Green Light On: Equipment running.
2. Red Light On: Equipment failure when called to run, but not running due to power failure, overload, breaker, disconnect, or remote switch call for equipment to stop.

    a. Provide parallel "required" contact wired to panel for items such as pumps and valves.
    b. Provide necessary relay logic and adjustable timers to sense discrepancy between "required" and "running" and activate respective "Run" and "Fail" light from these signals. Provide horn when specified.

3. Amber Light On: Indicate equipment status such as valve open or closed.
4. White Light On: Equipment off.

C. Alarm Sequence:

1. Manual Reset Sequence: Alarm condition shall illuminate corresponding visual alarm point. Depressing push-button shall turn off light. Subsequent alarm condition shall repeat above sequence. If alarm condition ceases, steady visual alarm shall not go out until reset push-button depressed. Momentary alarms shall lock-in until reset. Depressing test push-buttons for alarm functions shall turn on visual alarm points simultaneously or use press to test lights.

1.04 SUBMITTALS

A. General:

1. Submit following information tabulated in booklet form for each piece of equipment or system furnished under this section.
2. Table of Contents of Submittals: Include for each booklet when more than 1 item of equipment is included in submittal:

    a. ENGINEER'S instrument tag number.
    b. Instrument manufacturer's model number.
    c. Related piping, electrical, and dimension drawings.

B. Product Data:

1. Construction materials.
2. Ranges.
3. Output/Input signals.
4. Accessories.
5. Mounting location.

6. ENGINEER'S tag number on manufacturer's specifications sheets.
7. Interconnect reference for associated field and panel instruments.
8. Component specification sheets.

C. Shop Drawings:

1. Panel fabrication and dimension drawings, nameplate legends, ENGINEER'S tag numbers, and wiring and piping schematic drawings. Project specific drawings are required for each panel, typical are not acceptable.
2. Equipment dimension drawings.
3. Equipment terminal and piping connections.
4. Loop-by-loop system electrical schematic showing terminal-to-terminal interconnections between related panel and field instruments.
5. Front of panel layout.
6. PLC I/O module connection diagram for PLC based systems.
7. Ladder/logic system electrical schematic showing wiring of each component, including ranges and set points. Wiring and ladder diagram shall have reference numbers on every line for cross referencing. Each device on ladder shall be cross-referenced with line number as to wherever it is located.
8. Terminal to terminal interconnection drawings showing wiring for panel to panel/MCC and panel to field equipment.

D. Miscellaneous:

1. Certificate of UL or nationally recognized testing laboratory (NRTL) inspection and approval for each completely assembled panel prior to shipment to Project.
2. Include ENGINEER'S tag number when available on each submittal document or page wherever specific component appears.
3. Extra materials list.

E. Operation and Maintenance (O&M) Data:

1. Include O&M data for each panel and field device specified in Division 13 and Division 16:

a. PLC ladder logic software (electronic and printed) including tags, comments, operational database values and passwords or pass codes.
b. Configured software on electronic media to install program on spare PLC processors and programmable controller.
c. Bill of materials.
d. Instruction Manual: Includes detailed operating sequence descriptions.
e. Maintenance Manual: Instructions for maintaining equipment to include calibrating, cleaning, and trouble shooting.
f. Front and rear panel layout drawings.
g. Name plate data.

2. Submit package:

a. Equipment provided under Section 23 09 23.

F. Submit in accordance with Section 01 33 00.

1.05 QUALITY ASSURANCE

A. Standardization:

1. Drawings and Specifications are intended to provide overall system functions. Provide equipment necessary to provide complete and operable system.

2. CONTRACTOR is responsible for costs resulting from deviations from Contract Documents.

B. Items provided under sections referenced to this section shall be listed or labeled by UL or other Nationally Recognized Testing Laboratory (NRTL).

1. Term "NRTL" shall be as defined in OSHA Regulation 1910.7.
2. Terms "listed" and "labeled" shall be as defined in National Electrical Code, Article 100.

C. Regulatory Requirements:

1. National Electrical Code (NEC): Components and installation shall comply with National Fire Protection Association (NFPA) 70.

PART 2 PRODUCTS

2.01 EQUIPMENT MARKERS

A. Furnish equipment markers with ENGINEER'S equipment name and tag number.

2.02 SOURCE QUALITY CONTROL

A. Perform UL inspection and certification for each completely assembled panel before shipment to Project site.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install equipment in locations indicated on Drawings and in accordance with manufacturer's written instructions and approved submittals.

3.02 EQUIPMENT MARKERS

A. Fasten to equipment to be visible.

* * * END OF SECTION * * *

SECTION 40 95 13
INSTRUMENT AND CONTROL PANEL CONSTRUCTION

PART 1 GENERAL

1.01 SUMMARY

A. Comply with Section 40 90 10.

1.02 SUBMITTALS

A. Shop Drawings:

1. Wiring and wiring identification.
2. Terminal identification.

B. Submit in accordance with Section 01 33 00.

1.03 MAINTENANCE

A. Extra Materials:

1. 5 fuses or 10%, whichever is greater, for each type of fuse.
2. 30% spare unwired terminals; to be shown on panel drawings.
3. 5 lamps or 10%, whichever is greater, for each type of lamp.
4. One intrinsically safe relay and intrinsically safe barrier for each type.
5. One control relay for each type.
6. One lightning and surge protection module for each type.
7. Spare PLC I/O points wired to terminal blocks.

B. Panel Space:

1. Include 10 % contiguous usable rear of panel area for future components.

PART 2 PRODUCTS

2.01 CONTROL PANELS

A. Factory-fabricate, install instruments, plumb and wire.

B. Make external connections by way of numbered terminal blocks.

C. Separate electrical components from pneumatic components by metal barriers.

D. Conform to ISA standards.

E. Construct panels to external dimensions as specified, required, or shown. Component arrangement and wiring shall be consistent for like panels.

F. Fabrication:

1. Minimum Metal Thickness: 14 ga.

a. Construct panels so no seams or bolt heads visible when viewed from front.

b. Panel cutouts for instruments and other devices, such as lights and switches, shall be cut, punched or drilled, and smoothly finished with rounded edges.

2. Wherever practical, enclosures shall be manufacturer's standard product.
3. Size to adequately dissipate heat generated by equipment mounted in or on panel.
4. Equip panels mounted outside buildings with thermostatically controlled space heaters capable of maintaining internal temperature of 10°C, ±2°C, with 20 mph wind at ambient temperature of -30°C. Heaters shall operate on 120 vac, 60 Hz power.
5. Install rear of panel devices on subpanel.

G. Doors:

1. Provide front doors except on graphic sections and where otherwise specified.
2. Full height, fully gasketed access doors.
3. Provide with 3-point padlock locking latches.
4. Provide full length, continuous, piano type stainless steel hinges and pins.

H. Service Outlets:

1. Provide 20 amp, 120 v service outlet circuit fused at 5 amps within back-of-panel area. Fuse separate from control power.

I. Temperature Control:

1. For NEMA 1 and 12 Applications:

a. Provide louvers or forced ventilation as required to limit internal temperature build-up. Internal panel temperature shall not exceed lowest or highest temperature rating of internal components.
b. Mount stamped sheet metal louvers on top and bottom in rear of panels.
c. For panels mounted with backs directly adjacent to wall, mount louvers on sides.
d. Provide separately fused forced ventilation fans, when required, with washable or replaceable filters. Fan motors shall operate on 120 v, 60 Hz power.

2. For NEMA 4 and 4X Applications:

a. Provide thermostatically controlled heat exchanger and circulation fans as required to limit internal temperature buildup within sealed enclosure. Internal panel temperature shall not exceed lowest or highest temperature rating of internal components.
b. Heat exchanger shall be of air to air heat pipe type:

1) Manufacturer: Noren Products Inc.
2) Components located outside of control center enclosure shall be suitable for outdoor installation.
3) Fans shall be waterproof and installed in an anodized aluminum enclosure.

c. Install heat exchanger so that NEMA rating of enclosure is not compromised.
d. For outdoor application sunshields may be used to limit internal panel temperature.

J. Fusing:

1. Maximum Fuse Size: 5 amp.
2. Group instruments after separate fusing with maximum of 10 instruments/fuse.
3. Fuse power supplies individually.
4. Where 5 amp capacity is exceeded by load requirements, provide additional fuses.
5. For field devices powered by panel, provide separate fuse for each output.

K. Wiring Terminals:

1. Mount and wire panel instruments and components to terminal blocks within panel so installation shall require only setting panel in place and making connections to field wiring and utilities.
2. Provide separately mounted terminal blocks in panel for connection of field wiring to panel.
3. Label with respective loop number as designated on Panel Ladder Logic Drawings or Loop Diagrams.

L. Intrinsically Safe Components:

1. Provide intrinsically safe shunt barriers and relays as necessary when field components are located in Class I Division 1 or Division 2 hazardous class field locations.

M. Lightning and Surge Protection:

1. Provide on instrumentation and control signals whose source or destination is outside building.
2. Provide on phone lines and copper data network connections located outside building.
3. Provide on 120 vac power feeds.

N. Wiring Identification:

1. Label panel wiring at each end of conductor with wire number as designated on Panel Ladder Logic Drawings or Loop Diagrams.
2. Labels shall be heat shrinkable vinyl sleeve with permanent embossed letters. Emboss label characters on single sleeve. Heat shrink sleeves on conductors at terminal ends.
3. Conductors Color Codes:

    a. 120 vac power wiring, line (phase "A"): Black.
    b. 120 vac power wiring, neutral/common: White.
    c. 120 vac power wiring, ground: Green.
    d. 120 vac control wiring, internal power source: Red.
    e. 120 vac control wiring, external power source: Yellow.
    f. 24 vdc control wiring, internal or external power source: Light Blue.
    g. 4-20 mAdc signal wiring, positive lead: White or Red.
    h. 4-20 mAdc signal wiring, negative lead: Black.
    i. Data highway cable, signal leads: Manufacturer's standard.

O. Panel Drawing Data Pocket:

1. Mount inside without penetrating panel.
2. Size for holding wiring diagrams.
3. Construct from thermal plastic or metal.
4. Include wiring diagrams.

P. Three Phase and Motor Control Panel:

1. Through door main disconnect or circuit breaker.
2. Control transformer with primary and secondary fuses or circuit breakers.

2.02 ADDITIONAL REQUIREMENTS FOR FREE-STANDING PANEL CONSTRUCTION

A. Fabrication:

1. Fabricate each panel from sheet steel with 1 piece, 10 ga steel front and 12 ga steel sides, back, and top.

2. Provide steel angle stiffeners on back of panel face to prevent panel deflection under instrument loading or operation.
3. Provide internal structural steel framework for instrument support and panel bracing. Internal framework shall permit lifting of panel without racking or distortion.
4. Provide removable lifting rings designed to facilitate rigging and lifting of panel during installation. Provide plugs to fill lifting ring holes after installation to complete and lifting rings have been removed.
5. Where 2 or more sections of panel are mounted adjacent to one another, bolt together with front faces parallel.

B. Doors:

1. Rear access doors shall extend no further than 24 in. beyond panel when opened to 90° position.
2. For panels with no front doors or rear access, provide 36 in. deep panel with side access doors on each side.

C. Lights:

1. Provide separately fused and switched back-of-panel lights (100 watt incandescent or equivalent cold start fluorescent or LED).
2. Provide one light for every 4 ft or less of panel width.
3. Mount inside and in top of back-of-panel area.

D. Service Outlets:

1. Space evenly along back of panel.

a. Panels 4 ft or less: 1 outlet.
b. Panels greater than 4 ft: 2 outlets.
c. Panels greater than 8 ft: 3 outlets.
d. Panels greater than 12 ft: 4 outlets.

E. Instrument Location:

1. Locate instruments designated for back of panel mounting to allow for maintenance and adjustment.
2. Front of panel instrument mounting height shall not exceed 6 ft 6 in., minimum height shall be 4 ft-0 in.

2.03 PANEL FINISH

A. Remove mill scale, rust, grease, and oil. Fill imperfections and sand smooth.

B. Paint interior and exterior with one coat of epoxy metal primer and 2 finish coats of 2 component type epoxy enamel.

1. Paint edges of cutouts before installation of instruments and devices.

C. Dry film thickness shall not be less than 3.0 mils.

D. Color: Manufacturer's standard gray for exterior and white for interior.

2.04 NAMEPLATES

A. Provide nameplates for I&C panels and each front-of-panel instrument and device with designations as shown on Drawings and as listed in Specifications.

B. Panel Designation: Engraved with ENGINEER'S panel tag number and description with 1/2 in. high characters.

C. Application/Function Nameplate: Locate 3/16 in. characters above or near panel mounted instrument or device consisting of descriptive phrase using nomenclature as listed in Specifications (when available).

D. Laminated white plastic inscribed with black characters.

E. Tag Number: Include ENGINEER'S tag number as shown on P&ID's and in Specifications on each nameplate.

F. Provide aluminum decal with black 3/16 in. characters identifying tag number or device designation. Locate decal on instrument or device or above instrument or device on panel.

G. Secure front-of-panel and front-of-instrument nameplate with drive screws or self-tapping fasteners.

2.05 SOURCE QUALITY CONTROL

A. Test wiring and plumbing prior to shipment.

1. Test internal wiring and components to ensure panel is operational prior to shipment.
2. When panels are interwired, interconnect panels at factory and test functionality of system.
3. Simulate field component and instrument inputs at panel terminals. Test panel outputs with suitable test instruments.
4. Pressure test internal piping system and components for leaks and repair before shipping.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install panels in locations indicated on Drawings and in accordance with manufacturer's written instructions and approved submittals.

B. Paint: Touch up defects in panel finish after installation.

* * * END OF SECTION * * *

SECTION 40 95 14
PANEL AND FIELD DEVICES

PART 1 GENERAL

1.01 SUMMARY

A. Comply with Section 40 90 10.

PART 2 PRODUCTS

2.01 PUSH-BUTTON/SELECTOR SWITCH CONTROL UNITS AND PILOT LIGHTS

A. Manufacturers:

1. Square D.
2. Cutler-Hammer.
3. Allen Bradley.
4. Or equal.

B. Construction:

1. Heavy duty.
2. Oil tight, watertight.
3. Base mounting.
4. Flush panel mounting.
5. Size to mount in 30.5 mm opening without adapter. Smaller units are not acceptable.

C. Pushbuttons:

1. Flush head unless specified elsewhere.
2. Contact Blocks:

a. Double break silver contacts.
b. ac Ratings: 7,200 va make, 720 va break.
c. Single pole, double throw or double pole, single throw.
d. Up to 6 tandem blocks.

3. Momentary contact unless specified elsewhere.
4. Non-illuminated.
5. Padlock attachments where required.
6. Legend plates as required for type of operation or as specified elsewhere.

D. Pilot Lights:

1. Transformer type.
2. Bayonet, 6 to 8 v bulb.
3. Colored lenses as specified elsewhere.
4. Interchangeable lenses.
5. Transformer rated for 120 v, 60 Hz.
6. Push to test.
7. Legend plates as required for type of operation or specified elsewhere.

E. Nameplates:

1. I&C Panel: Section 13442.

2.02 MOTOR STARTER CONTROL RELAYS

A. Manufacturers:

1. Allen-Bradley Series 700 “Ice Cube”.

B. Construction:

1. Industrial type.
2. 300 v rated.
3. ac operation.
4. Pressure wire connectors.

C. Operating Data:

1. Pickup Time: 11 ms maximum.
2. Dropout Time: 6 ms maximum.

D. Coil:

1. Molded construction.
2. 120 vac, 60 Hz.
3. Continuous rated.
4. 155 va inrush, maximum.
5. 22 va sealed, maximum.
6. Suppress coil transients to 300 v or less.

E. Contacts:

1. Double break.
2. Silver alloy.
3. Convertible.
4. Color coded to indicate status.
5. Pilot duty.
6. 60 amp make, 6 amp break, (120 v inducting).

F. Track mounting capability.

G. Accessories:

1. Add-on pole attachment.

   a. 4 NO and 4 NC contacts.
   b. Add-on to 0 to 4-pole relay.

2. Latch attachment.

2.03 GENERAL PURPOSE CONTROL RELAYS

A. Manufacturers:

1. Potter and Brumfield, KU Series.
2. Struthers Dunn.
3. Or equal.

B. Operating Data:

1. Pickup Time: 13 ms maximum.
2. Dropout Time: 10 ms maximum.
3. Operating Temperature: -45°C to 70°C.

C. ac Coil:

1. 120 or 240 vac.
2. Continuous rated.
3. 3.5 va inrush.
4. 1.2 va sealed.
5. 50 to 60 Hz.
6. Minimum Dropout Voltage: 10% of coil rated voltage.

D. dc Coil:

1. 24 or 120 vdc.
2. Continuous rated.
3. Minimum Coil Resistance:

a. 24 vdc: 450 ohm.
b. 100 vdc: 9,000 ohm.

E. Contacts:

1. Silver cadmium oxide.
2. Gold flashed fine silver, gold diffused for 1 amp or less resistive loads.
3. 4 Form C.
4. 120 vac.
5. 10 amp make, 15 amp break, (inductive).

F. Rated at 10 million operations.

G. Plug-in sockets.

H. Enclosed and protected by polycarbonate cover.

I. Provide relay retaining clips.

2.04 TIMERS

A. Interval/Duration Timer (Rear of Panel):

1. Manufacturers:

a. Potter and Brumfield.
b. Danaher (Eagle Signal).
c. Or equal.

2. Mounting: Plug-in with dust-tight cover.
3. Type: Integrated circuit.
4. Timing Range: 0.5 sec to 99 min. Field selectable.
5. Contacts: DPDT contacts rated 10 amp.
6. Power: 120 vac, 60 Hz.

B. On-Off Delay Timer (Rear of Panel):

1. Manufacturers:

a. Potter and Brumfield, CN1 series.
b. Danaher (Eagle Signal), DG 100 miniflex series.
c. Or equal.

2. Mounting: Plug-in with dust-tight cover.
3. Type: Integrated circuit.
4. Range: 0.1 sec to 9.990 hr. Field selectable.
5. Contacts: DPDT contacts rated 10 amp.
5. Set Points: 288 per 24 hrs.
6. Power: 120 vac, 60 Hz.

2.05 FLOAT SWITCHES

A. Manufacturers:

1. Consolidated 9GEF.
2. Anchor Scientific GP.
3. Or equal.

B. Float: 316 stainless steel.

C. Provide sufficient length of nitrile PVC jacketed cable.

D. For Class I, Divisions 1 or 2, hazardous areas, provide intrinsically safe relays in corresponding control panel.

E. Mounting Hardware: 316 stainless steel.

F. Switch: Non-Mercury tilt type switch with minimum rating of 10 million cycles.

2.06 TERMINAL BLOCKS FOR CONTROL WIRING

A. Manufacturers:

1. Phoenix Contact. UK-5N.
2. Allen Bradley, Bulletin 1492.

B. General:

1. 600 v rating.
2. Marker labels on each terminal.
3. Clip-mount on DIN rails.
4. Insulating end caps to support each terminal block assembly.
5. Touchsafe terminal block and accessories.
6. Connection: Captive screw and pressure plate. Connection shall not cause deformation of wire.

7. Contact material and surface: Nickel or tin plated copper alloy. Do not use ferrous metals.

C. Switched Knife Disconnect (when specified):

1. Non-fused.
2. Single-pull, single throw (SPST).
3. Hinged disconnect lever.

D. Fused Indicating (when specified):

1. LED blown fuse indicating light.
2. Hinged disconnect lever.
3. Size fuse for load.
4. 15 amp capacity fuse holder.

2.07 TAGGING

A. Provide Type 316 stainless steel tag on field-mounted units and permanently affix tag to unit.

B. Engrave with process application as listed in Specifications.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install in accordance with manufacturer's written instructions, applicable requirements of NEC, NECA "Standard of Installation," and recognized industry practices.

B. Control Relays:

1. Provide control relays for general purpose logic circuits.
2. Provide motor starter control relays when load exceeds rating of general purpose control relays.

* * * END OF SECTION * * *

SECTION 40 95 35
CELLULAR TELEPHONE MODEM

PART 1 GENERAL

1.01 SUMMARY

A. Comply with Section 40 90 10.

1.02 SYSTEM DESCRIPTION

A. Design Requirements:

1. Cellular modem shall interface to main plant control system defined alarms via cellular telephone system.
2. Cellular modem transmission shall be controlled by PLC in Section 40 95 13.
3. Data shall be transmitted on change of state in Alarms or pump starting or every 15 seconds.
4. Cellular modem for Cattle Congress pump station.
5. Cellular modem supported by City of Waterloo wireless network provider US Cellular.

PART 2 PRODUCTS

2.01 SUPPLIERS

A. LEC, Incorporated, 110 Excell Drive, Pearl, MS 39208 800-439-8535.

B. No substitutes.

2.02 Cellular Telephone Modem Equipment

A. Red Lion Cellular Router

a. SN6901-AM single port router
b. SN6921-AM 5 port router

B. Cellular Paddle Antennas (two required per router)

a. TG.30.8113

C. Device Activation through City of Waterloo Cellular contact and LEC Inc,

D. Transmit/receive using GSM.

E. Power: 24 vdc from PLC enclosure.

F. Provide antenna and cable, location where US Cellular phone calls can be consistently be made from. Cable length with antenna is 3ft obtain longer from supplier if outside antennas are required.

G. Provide lighting-surge protection if required for outdoor antennas.

H. Mount Cellular Routed in PLC enclosure.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install in accordance with manufacturer's written instructions and approved submittals.

B. Wire and test each device to be suitable for operation.

* * * END OF SECTION * * *

SECTION 43 13 29
SUBMERSIBLE SEWAGE PUMPING STATION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Submersible pumps, valves, and piping.
2. Pre-cast concrete bypass manhole.
3. Control system and panel to interface with AFDs.

1.02 SYSTEM DESCRIPTION

A. Provide motor designed for continuous duty and non-overloading throughout design curve.

B. Performance Criteria:

1. Provide pump and motor with characteristics as listed in Schedule 1 of Section 43 13 29.

C. Design Criteria:

1. Design pump to automatically connect to discharge piping when lowered into place on discharge connection.
2. Pump shall be easily removable for inspection or service, requiring no bolts, nuts, or other fastenings to be removed for this purpose and no need for personnel to enter pump well.
3. Fit pump with stainless steel chain of adequate strength and length to permit raising pump for inspection and removal.
4. Pump, with appurtenances and cable, shall be capable of continuous submergence under water without loss of watertight integrity of depth of 65 ft.
5. Precast concrete manhole structure shall be designed to resist buoyancy forces with a factor of safety of 1.10. Groundwater shall be assumed to be at-grade.
6. Structure top slab shall be designed to support a live load of 300 psf plus the jib crane and its specified live loads. Coordinate with precast manufacturer and jib crane supplier.

1.03 SUBMITTALS

A. Test Results:

1. Submit written report stating pump tests complete and performance data with each pump at time of shipment.

B. Miscellaneous:

1. Warranty.

C. Operating and Maintenance (O&M) Data:

D. Submit in accordance with Section 01 33 00.

E. Shop Drawings:

1. Technical data for wet well and cover indicating materials of construction.
2. Drawings of wet well and cover.
3. Product data, catalog cuts and drawing of access cover.

4. Certification that manhole has been designed in accordance with the requirements specified in Paragraph 1.02.A. Certification shall be stamped by Professional engineer registered in the State of Iowa.

1.04 QUALITY ASSURANCE

A. Items provided under this section shall be listed or labeled by UL or other Nationally Recognized Testing Laboratory (NRTL).

1. Term “NRTL” shall be as defined in OSHA Regulation 1910.7.
2. Terms “listed” and “labeled” shall be as defined in National Electrical Code (NEC), Article 100.

B. Regulatory Requirements:

1. National Electrical Code (NEC): Components and installation shall comply with National Fire Protection Association (NFPA) 70.

C. Contractor shall be responsible to verify access hatch size with pumping equipment manufacturer.

1.05 OPERATIONAL REQUIREMENTS AND WARRANTY

A. Pump:

1. The contractor shall supply and install 2 submersible sewage pumps with discharge connections, discharge pipes, guide bars, cable holder lifting chains.

2. The submersible pumps shall have a semi open multi vane self-cleaning impeller designed to transport wastewater with fibrous materials and municipal sludge with up to 8% DS.

3. The impeller shall be wear resistant and made of high chromium cast iron with at least 24% chrome against sand and grit which is expected to enter the pump. Impellers that have surface hardening (by thermal, coating, etc.) will not be allowed.

4. Each pump shall be capable to lift 1,740 US gpm at a total dynamic head of 85 feet.

5. The hydraulic efficiency in this duty point shall be not less than 69.0% and approved according to HI 11.6:2012 Grade 2B.

6. The pumps shall be provided with 60 months (5 years) warranty against defects in materials and or workmanship. The warranty shall cover the entire pump, not individual components. Upon warranty occurrence, the manufacturer's authorized service center shall remove the pump, repair, reinstall and provide start up on the repaired pump. A detailed failure analysis shall be submitted to the Owner for their records summarizing corrective action taken.

7. The manufacturer shall guarantee clog-free operation for a period of 24 months from the date of start-up of the pumps by the local authorized factory representative. A certificate shall be provided to the Owner on the day of start up with the local contact information and effective date. Should the impeller clog with typical solids and/or modern trash debris normally found in domestic wastewater during this period, an authorized representative shall, either travel to the jobsite, remove the pump, clear the obstruction, and reinstall the pump at no cost or reimburse the Owner for reasonable cost to provide this service. A written report shall be provided to the Owner detailing the service call with pictures for verification purposes.

8. Warrant pump against defects in workmanship and materials for 5 yr period under normal use, operation, and service.

9. Replace mechanical seal, impeller, pump housing, wear ring, and ball bearings which become defective through normal use and wear on progressive schedule of cost for 5 yrs.

B. Access Hatch:

1. Warrant access hatch against defects in material or workmanship for 5 years.

C. Warranty shall be in published form.

PART 2 PRODUCTS

2.01 PUMP

A. Manufacturers:

1. Flygt NP 3202 HT 3~ 460.

B. General:

1. Construct major parts, such as stator casing, oil casing, sliding bracket, volute, and impeller of gray iron.
2. Protect cast surfaces coming into contact with wastewater by 6 mil epoxy polyamide coating.
3. Use stainless steel exposed bolts and nuts.
4. Provide replaceable wear ring.

C. Provide pump with mechanical rotating shaft seal system running in oil reservoir having separate, constantly hydro-dynamically lubricated lapped seal faces.

1. Lower seal unit between pump and oil chamber shall contain 1 stationary and 1 positively driven rotating tungsten-carbide ring.
2. Upper seal unit between oil sump and motor housing shall contain one stationary tungsten-carbide ring and one positively driven rotating carbon ring.
3. Each interface shall be held in contact by its own spring system supplemented by external liquid pressures.
4. Seals shall not require maintenance or adjustment but shall be easily inspected and replaceable.

D. Machine and fit with nitrille O-rings where watertight sealing required. Machine and fill so sealing accomplished by automatic compression in 2 planes and O-ring contact made on 4 surfaces, without requirement of specific torque limits to affect this. Rectangle cross-sectioned gaskets requiring specific torque limits to achieve compression shall not be considered adequate, or equal.

E. Tolerances of parts shall allow replacement of any part without additional machining to ensure sealing. Do not use secondary sealing compounds, greases or other devices.

F. Bracket:

1. Provide sliding guide bracket as integral part of pumping unit.
2. Provide pump casing with machined connecting flange to connect with cast iron discharge connection, bolted to floor of manhole and designed to receive pump connecting flange without need of any bolts or nuts.
3. Construct slide bracket and matching base flange of materials assuring non-sizing for corrosive environment.

G. Fit pump with 304 or 316 stainless steel chain of adequate strength and length to permit raising pump for inspection and removal.

H. The hydraulics of the pump shall be equipped with a semi open multi vane impeller designed to transport wastewater and municipal sludge up to 8% DS**.**

I. The impeller blades shall be self-cleaning upon each rotation as they pass across a sharp relief groove in the Insert ring and shall keep the impeller blades clear of debris. The clearance between the insert ring and the impeller leading edges shall be adjustable.

J. The impeller shall be wear-resistant and made of high chromium cast iron with at least 24% chrome against sand and grit which is expected to enter the pump station with the sewage or the storm water. Impellers that have surface hardening (by thermal, coating, etc.) will not be allowed.

K. The impeller shall be mounted on the motor shaft. Couplings shall not be accepted.

2.02 PUMP MOTOR

A. Manufacturers standard UL listed or labeled definite purpose motor.

B. House pump motor in oil or air-filled watertight casing.

C. Cable:

1. Design entry water seal to preclude specific torque requirements to ensure watertight and submersible seal. Do not use epoxies, silicones or other secondary sealing systems.
2. Separate cable entry junction box and motor by stator lead sealing gland or terminal board which isolates motor interior from foreign materials gaining access through pump top.
3. Provide cable suitable for submersible pump applications and indicated by code or legend permanently embossed on cable.
4. Size cable to conform to NEC and pump motor requirements.
5. Fit pump cable end with shrink fit rubber boot.
6. Provide continuous from motor to junction box without splices.

D. Provide integral thermal sensors to monitor stator temperatures on unit with water jacket. Provide 1 for each phase in motor. Integral thermal sensors are not required on unit without water jacket.

E. Provide seal failure sensors for each pump.

F. The pump motor shall be induction type with a squirrel cage rotor, shell type design, housed in an air filled, watertight chamber. It shall be permanently submersible according standard IEC 60034 and protection class IP 68.

G. The motor shall be provided with an integral motor cooling system. A stainless steel cooling jacket shall encircle the stator housing, providing for dissipation of motor heat regardless of the type of pump installation. An impeller, integral to the cooling system and driven by the pump shaft, shall provide the necessary circulation of the cooling liquid through the jacket. The cooling liquid shall pass about the stator housing in the closed loop system in turbulent flow providing for superior heat transfer. The cooling system shall have one fill port and one drain port integral to the cooling jacket.

H. The pump shall be capable of operating in a continuous condition in a liquid with a

temperature up to 104°F even when the motor is not submerged.

I. The motor shall be capable of no less than 30 evenly spaced starts per hour and be able to operate throughout the entire pump performance curve from shut-off through run-out.

J. The stator windings shall be insulated with moisture resistant Class H insulation rated for 356°F.

K. Sealing of the pumping unit to the discharge connection shall be accomplished by a machined metal to metal watertight contact. Sealing of the discharge interface with a diaphragm, O-ring or profile gasket will not be acceptable.

L. It shall be possible to lift and lower the pumps on parallel guide bars and connect them to wet well mounted discharge connection. There shall be no need for personal to enter the wet well when removing or reinstalling the pumps.

M. The pump housing shall be prepared for the assembling of a sump mixing valve. The discharge flange of the pump housing shall be 6 inch.

N. The junction chamber containing the terminal board shall be hermetically sealed from the motor by an elastomeric compression seal. Connection between the cable conductors and stator leads shall be made with threaded compression type binding posts permanently affixed to a terminal board. The motor and the pump shall be produced by the same manufacturer.

O. The motor shall be protected by 3 thermal switches embedded in the stator set to open at 284°F (140°C) and one leakage sensor floating type located in a leakage chamber below the main bearing. The sensor and the switches shall be connected to the control panel which shall stop the motor and send an alarm when the sensors are activated.

P. The pump shall be Explosion approved according to FM CLASS 1. DIV 1 "C" & "D"

Q. The cable entry shall consist of dual cylindrical elastomer sleeves, flanked by washers, all having a close tolerance fit against the cable and the cable entry. Epoxies, silicones, or other secondary sealing systems shall not be considered acceptable.

R. The pump shaft shall rotate on two bearings. Motor bearings shall be permanently grease lubricated and have a nominal L10 lifetime of 50.000 hours. The upper bearing shall be a single deep groove ball bearing. The lower bearing shall be a two-row angular contact bearing to compensate for axial thrust and radial forces. Single row lower bearings are not acceptable.

S. Each pump shall be provided with a positively driven dual, tandem mechanical shaft seal system consisting of two seal sets, each having an independent spring. The lower primary seal, located between the pump and seal chamber, shall contain one stationary and one positively driven rotating corrosion and abrasion resistant tungsten-carbide ring. The upper secondary seal, located between the seal chamber and the seal inspection chamber shall be a leakage-free seal. The upper seal shall contain one stationary and one positively driven rotating corrosion and abrasion resistant tungsten-carbide seal ring. The rotating seal ring shall have small back-swept grooves laser inscribed upon its face to act as a pump as it rotates, returning any fluid that should enter the dry motor chamber back into the lubricant chamber. All seal rings

shall be individual solid sintered rings. Each seal interface shall be held in place by its own spring system. The seals shall not depend upon direction of rotation for sealing. Mounting of the lower seal on the impeller hub is not acceptable. Shaft seals without positively driven rotating members or conventional double mechanical seals containing either a common single or double spring acting between the upper and lower seal faces are not acceptable. The seal springs shall be isolated from the pumped media to prevent materials from packing around them, limiting their performance. Any leakage passing the sealing shall not pass the bearings. Before it reaches the bearings the liquid shall create an alarm via the floating leakage sensor.

T. Each pump shall be provided with a lubricant chamber for the shaft sealing system. The lubricant chamber shall be designed to prevent overfilling and to provide lubricant expansion capacity. The drain and inspection plug, with positive anti-leak seal shall be easily accessible from the outside. The seal system shall not rely upon the pumped media for lubrication. Seal lubricant shall be non-hazardous.

U. Where a seal cavity is present in the seal chamber, the area about the exterior of the lower mechanical seal in the cast iron housing shall have cast in an integral concentric spiral groove. This groove shall protect the seals by causing abrasive particulate entering the seal cavity to be forced out away from the seal due to centrifugal action.

V. The Materials of construction shall be as follows:

1. Pump housing: ASTM A-48, Class 35B
2. Impeller and insert ring: A 532 ALLOY III A (25% Chrome)
3. Cooling jacket: Stainless steel AISI 316
4. Stator housing: ASTM A-48, Class 35B
5. Shaft: ASTM A479 S43100-T.
6. Shaft seal: Pump side: - Corrosion resistant Tungsten carbide WCCR
7. Shaft seal Motor side: - Corrosion resistant Tungsten carbide WCCR

2.03 PLUG VALVE

A. Manufacturers:

1. DeZurik.
2. Homestead.
3. Or equal.

B. Non-lubricated, eccentric type of semi-steel construction with resilient faced plugs, suitable for use with wastewater.

C. Mechanical Joint and Push-on Ends: AWWA C111/A21.11.

D. Flanged Ends: AWWA C517.

E. Port Areas: Minimum 80% of full pipe area.

F. Bodies: ASTM A126, Class B cast iron in accordance with AWWA C507, Section 5.1 and AWWA C504, Section 5.4.

G. Exposed Nuts, Bolts, Springs, and Washers: Zinc-plated or nickel content.

H. Furnish valves with corrosion-resistant seats in accordance with AWWA C507, Section 7, Paragraph 7.2 and AWWA C504, Section 8.3.

I. Furnish with replaceable sleeve type bearings in upper and lower journals.

1. Bearings: In accordance with AWWA C507, Section 8, Paragraphs 8.1, 8.3, and 8.5 and AWWA C504, Section 9.
2. Valve Shaft Seals: In accordance with AWWA C507, Section 10 and AWWA C504, Section 10.

J. Plug valve pressure ratings as established by hydrostatic tests as specified by ASME B16.1.

1. 175 psi for valves through 12 in.
2. Capable of providing drip-tight shutoff up to full valve rating with pressure in either direction.

K. Direction of rotation to open shall be to left (counterclockwise). Cast on valve body or operator word “OPEN” and arrow indicating direction to open.

L. Plug Valves with Valve Boxes: Provide plug valves with valve boxes and covers as shown on Drawings.

1. 3-piece assembly.
2. 5-1/4 in. diameter.
3. Box and cover shall be cast iron and in accordance with ASTM A48/A48M, Class B.
4. Provide with extended stem. Stopping 12 in. below valve box cover. Furnish 4 ft long tee wrench for operating valves.

2.04 SWING CHECK VALVE

A. Manufactures:

1. G. A. Industries, Inc., Figure 250-D
2. Or equal.

B. Valve Body:

1. Heavy cast iron body with non-corrosive cushion chamber and non-corrosive shaft for attachment of weight and lever.

C. Cushion Chamber:

1. Attached externally to side of valve body.
2. Construct with piston operating in chamber effectively permitting valve to be operated without hammering action.
3. Air cushion.
4. Arrange cushion chamber so closing speed adjustable to meet service requirements.

D. Disc and Seat Ring Assembly:

1. Cast iron disc suspended from non-corrosive shaft passing through stuffing box and connects to cushion chamber on outside of valve.
2. Renewable bronze seat ring held in valve body by threaded joint.
3. Assembly shall prevent return of fluid through valve when inlet pressure decreases below delivery pressure without hammer or shock.

2.06 AIR RELEASE VALVE

A. Comply with Section 40 23 13.01.

2.07 PIPING

A. Pump Discharge Line: Class 52, ductile iron pipe. Flanged joints interior, re-stained mechanical joints exterior.

2.08 ALUMINUM ACCESS HATCH

A. Manufacturers:

1. Bilco Type J or JD.
2. Halliday Series W1S or W2S.
3. Or equal.

B. Prefabricated Drainage Channel Type.

1. Material: Aluminum.
2. Frame: 1/4 in. thick extruded aluminum with strap anchors around exterior perimeter.
3. Provide 1-1/2 in. drainage coupling.

C. Doors:

1. Door Leaves: 1/4 in. diamond pattern plate with reinforcing on underside to withstand live load of 300 lbs/sq ft with maximum deflection of 1/150 of span.
2. Equip doors with stainless steel hinges bolted to underside and pivot on tension bars that counterbalance door for easy operation.
3. Doors shall open to 90° and lock in position.
4. Equip doors with hold-open arm with positive locking device with conveniently positioned release handle for easy and controlled closing.
5. Provide snap-lock mounted on bottom of leaf with removable topside handle and socket recessed in cover.
6. Hardware shall be stainless steel.

D. Factory Finish: Mill finish on aluminum surfaces with coal tar epoxy coating applied to surfaces in contact with concrete.

E. Dimensions:

1. Wet Well Access Hatch: Confirmed by pump manufacturer, for installing and removing pumps and trash basket vertically without obstructions.
2. Valve Vault Access Hatch: Confirmed by pump manufacturer, for installing and removing valves with clearance. (hatch lined up with stairs)

2.09 BYPASS MANHOLE

A. Construct bypass manhole and lid of reinforced concrete per SUDAS 6010:

1. Concrete Strength: Minimum 5,000 psi at 28 days.
2. Reinforcing Steel: ASTM A82/A82M, ASTM A496/496M, or ASTM A615/A615M GR. 60.
3. Minimum Concrete Cover for Reinforcing Steel: 1 in.
4. Lap Reinforcement at Splices: Minimum of 2 cross wires for wire mesh.
5. Minimum Concrete Thickness: 6 in. for walls and 8 in. for floors and ceilings.
6. Joints shall have bell and spigot connections in conformance with ASTM C478.

B. Cast each piece of station shall from 1 piece mold. Do not use connecting form ties, which may result in corrosion or leakage points.

C. Base and round manhole to rectangular box transition shall be single pour section.

D. Cast 6 in. painted steel vent pipe with bird screen into manhole cover.

E. Supply necessary bitumastic joint sealant.

F. Provide watertight flexible joints, on inlet and discharge lines.

1. Design joints to absorb vibration and accept normal setting.
2. Construct rubber gasket element of poly-isoprene or natural rubber to requirements of ASTM C923.

G. Label manhole as confined space.

H. Joint precast sections of sanitary sewer manholes with rubber gaskets or preformed flexible plastic gaskets.

1. Flexible Plastic Gaskets:

a. Manufacturers: Ram-Nek, manufactured by K. T. Snyder Company, Inc.; Kent Seal, manufactured by Hamilton-Kent, Inc., or equal.
b. Comply with physical requirements for Type B gaskets in AASHTO M198.

2. Rubber Gaskets: ASTM C443.

2.10 CONTROLS

A. Description:

1. Duplex panel.
2. PLC with Allen-Bradley touch screen interface.
3. SCADA upgrade capable (system functions and trending accessible via remote communications).
4. Built and labeled by UL 508 panel manufacturer.
5. Interface to VFDs and generator automatic transfer switch.
6. 120vac input power.
7. Wires individually numbered with unique number at both ends.
8. Flow monitoring capabilities.

B. Design Data:

1. Incoming service: 120 VAC, 60 hertz, 1 Ph, 2 wire.

C. Sequence of Operation:

1. Primary System:

a. Control logic handled by PLC.
b. Non-submersible sensor primary level device.
c. Controller shall simultaneously display and allow adjustment of 6 adjustable level set points in both bar graph and numerical values with 0.01 ft resolution.
d. System shall not allow setpoint selections which can cause pump station malfunction (i.e. Lead start above High Level, Lead Stop below Low Level, and Lead start below Lead Stop).
e. Low Level alarm function as redundant Stop Pumps

f. Pump alternation operator-selectable for either automatic or manual. In automatic mode, alternation shall occur at pumps off or on adjustable time basis, operator selectable.
g. Control system shall automatically place failed or disabled pump in lag position.
h. Failure of PLC or level sensor shall enable secondary system.

2. Secondary System:

a. Control logic by relays external to PLC.
b. Four (4) float switches act as level sensing devices.
c. Float switches isolated by intrinsically safe relays.
d. High Level float switch cause pumps to stagger on.
e. Low Level float switch shuts pumps off.
f. Secondary system shall be capable of controlling pumps when PLC is completely disabled.

D. Enclosure:

1. 14 ga type 304 Stainless steel NEMA 12.
2. 12 ga steel, formed, removable interior sub-panel.
3. Door shall have stainless steel piano type door hinge, stainless steel 3-point latching system and stainless steel padlock provision.
4. Hold open device on door.
5. Operating devices mounted on door.
6. 18 in. stainless steel legs or length as required for installation.
7. No evidence of holes, weld marks or burn marks.

E. Equipment and Devices:

1. Non-Contact Radar Level Reader: - VEGA C23 Level Sensor direct to PLC analog input card

a. Constructed with PVDF wetted parts.
b. Include stainless steel mounting assembly to permit removal from well for periodic checking and cleaning.

2. Float Switches:

a. Construct of Teflon coated, 316 stainless steel housing encapsulated in epoxy.
b. Provide 40 ft of cable.
c. Mount with stainless steel hardware on 3/16 in. stainless steel cable having 8 lb vinyl coated mushroom anchor for ballast.
d. Protect with intrinsically safe relays.

3. Motor Circuit Protection is provided by overcurrent protective devices within the main distribution panel and VFDs.

4. Motor control is provided by VFDs. Refer to Section 26 09 23.21.

5. Rear Panel Devices:

a. Transformer for 24 VAC voltages.
b. Two (2) single toggle-operated thermal magnetic breakers for controls; 1 for pumps, alarms, and control power and 1 for other panel devices.
c. Lightning arrestor complying with ANSI C62.2-1981.
d. Intrinsically safe barriers/relays for level sensor and floats.
e. Status-indicating relays for Over-Temp each pump, Seal Fail each pump, Power Monitor Overload Tripped each pump, High Level and Low Level floats.

6. Front Door Devices:

    a. Heavy Duty oil-tight, NEMA 4X rated Hand-Off-Auto selector switches. HOA switches override automatic mode control.
    b. Heavy duty oil-tight, NEMA 4X rated transformer-type indicator lights using LED-cluster type lamps.
    c. Indicator lights for Pump 1, 2 and 3, Standby Float Enable.
    d. Pump 1, Pump 2 and Pump 3 lights flash when pump is called, steady on when pump run is verified.
    e. Ground fault protected 115 Volt convenience receptacles.
    f. Operator interface to PLC operations.
    g. Push button to silence alarm.

7. PLC Software and Screen Devices

    a. Pump ETM'S with 00000.00 hrs indication.
    b. Pump lockout selectors.
    c. Demand charge avoidance feature which prevents starting of lag pump after power is restored as long as lead pump outflow exceeds station inflow.
    d. Positive run verification feature which activates alarm if pump is called and fails to reach operator-set minimum operating amps and station flow rate after operator-set time delay.
    e. Excessive restart feature activates alarm when pump exceeds operator-set maximum starts per hour and places pump in lag position.
    f. Level sensor broken wire alarm enables secondary (Standby Float) system.
    g. Seal moisture alarm indication for each pump.
    h. Over-temp alarm indication for each pump.
    i. Overload tripped alarm indication for each pump.
    j. Control power failed alarm indication with time failed and time restored display.
    k. Power monitor trip alarm indication.
    l. Alarm memory feature retains annunciation of alarms until reset or acknowledged by operator.
    m. User-adjustable time delay on lag pump start.

8. System Controller:

    a. Manufacturers:

        1) Allen Bradley model CompactLogix 5380.

    b. Operational to 0° F, with storage to -40° F.
    c. SCADA upgrade capability via RS-232 port using standard communications protocols.
    d. Future capability for control via remote access.

9. Flow Monitoring: See Section 40 09 23.14

    a. Provide equipment needed for flow measurement.
    b. Flow measurement by extrapolation of inflow from previous pump-off period alone is not acceptable.

F. Operator Interface:

1. General:

    a. Graphic touch screen device minimum 7 in. diagonal in size with 640 x 480 pixel resolution.

b. Data operational characteristics accessed visually and manipulated through use of diagrams, graphs, and English text.
c. Change of operational characteristics accomplished through touch screen.
d. User numerical values adjustable via touch screen using increment up and down arrows.

2. Access Screens Selections:

a. Menu: Activates screen that enables operator to bring up list of available screens. Access in no more than 2 steps.
b. Main: Activates screen that enables operator to view general station statistics. Type of information available includes; pump status (called/run/off/problem/lockout) (each pump), pump run time (each pump), Level bar graph and digital indicator (00.00 ft), station inflow (GPM) bar graph and digital, station outflow (GPM) bar graph and digital, and alarm indication.
c. Level Set-up: Activates screen that enables operator to view information on wet well level. Type of information available shall include; actual wet well level, high/low level alarms, level control set point, maximum and minimum level set points, all pump stop level. Setpoints displayed and adjustable simultaneously by individual bar graphs as well as digital displays (00.00 ft). Screen shall notify operator that Lead Stop is also Low Level reset.
d. Pump run at minimum speed time set point at minimum level before pump shuts off.
e. Pump Information: Activates screen that enables operator to view pump information. Type of information available shall display of actual wet well level, pump amps indicator, station outflow indicator indicating “Percent Share of All-Pumps Run Time Last 24 Hrs”. Information and controls for each pump individually shall be simultaneously accessible. Operator shall be able to toggle between active 2 pumps and be able to force on or lock out respective pump.
f. Pump Alarms: Activates screen that enables operator to view pump alarms. Status of up to 8 alarm conditions for each pump simultaneously displayed and able to be acknowledged and reset via touch-screen. Available alarms shall include (for each pump) VFD Fail, Overload Tripped, Seal Moisture Detection, Over-temp, Excessive Restarts, and Run Verify. Display shall provide dynamically activated alarm status text and graphical highlighting to describe status of alarm condition, acknowledgment level, and appropriate operator actions by plain text messages.
g. Trends: Activates screen that enables operator to view selected data maintained by unit for last 24 hrs in 1 hr increments on multiple (selectable) bar graphs. Simultaneous display of multiple graphs is required to enable comparison of multiple events and trends. Available data shall include Pump 1 Starts, Pump 2 Starts, Pump 1 Amps, Pump 2 Amps, Station Inflow, and user defined Auxiliary Input (4-20 mA).
h. General Alarms: Activates screen that enables operator to view station alarms. Status of up to 9 alarm conditions shall simultaneously be displayed and able to be acknowledged and reset via touch-screen. Available alarms shall include High Level, Low Level, Power Monitor, Standby Float Enable, 2 pump Run and Level Sensor Broken Wire. Display shall provide dynamically activated alarm status text and graphical highlighting to describe status of alarm condition, acknowledgment level, and recommended actions by plain text messages. This screen shall also indicate time of Power Fail and time of Power Restored automatically.
i. Hourly Data: Activates screen that enables operator to view in close detail selected data maintained by unit for last 24 hrs in 1 hr increments on bar graph. This screen shall give both graphic and numeric value for particular hour of selected event and must simultaneously highlight hourly data value, corresponding time of day, and 24 hr trend graph with graphical indicator highlighting trend data-point corresponding to displayed time of day. Operator must be able to scan time-of-day on same screen to step through all hourly values. Available data shall include Pump 1 Starts, Pump 2 Starts, Pump 1 Amps, Pump 2 Amps, Station Outflow, and user defined Auxiliary Input (4-20 mA). Bar graphs shall use “best fit” procedure to show best possible detail.

j. Run Verification: Activates screen that enables operator to view and set parameters used to verify "positive run" condition. This screen shall, by operator selection, indicate data for each individual pump: Pump Status (Off/Called/Run/Problem/Lock Out), Pump Actual Amps, Minimum Amps, Seconds Delay Before Run Fail and Actual Wet Well Level. Operator adjustable parameters shall include Seconds Delay Before Run Fail and Minimum Amps and/or Station Flow Rate For Run Verification.

k. Alarm Log: Activates screen that enables operator to view historical station alarms. This screen shall be full-text alarm log capable of displaying at least 50 most recent alarms with date and time alarm activated, time acknowledged, time cleared, and plain text description of corresponding alarms. Operator shall have scrolling and paging functions available.

l. Pump Alternation: Activates screen that enables operator to view and set parameters used in pump alternation. Operator shall have capability to select AUTO/1-2/2-1 alternation modes. Screen shall indicate when pump is placed in lag mode due to alarm or problem. If AUTO is chosen operator shall have ability to select alternation at pump stop or every x hours; where x is adjustable between 1-24 hrs. Operator shall also have ability to automatically place pump in lag position if it exceeds more than y starts per hr, where y is adjustable between 1-20 starts.

m. System Test: Activates screen which enables operator to test level-activated pump and alarm controls via simulating wet well level. Level setpoints shall be simultaneously displayed on screen. Visual indication of action shall be provided as level reaches each setpoint. This screen shall display, simultaneously, actual and simulated levels, pump indicators, comprehensive alarm indicator, pump amps, and station outflow (digital and bar graph).

G. Cellular System

1. Provide following status or alarms:

a. High wetwell level signal.
b. Low wetwell level signal.
c. High-high wetwell level signal.
d. Low-low wetwell level signal
e. Common alarm signal.
f. Loss of power alarm signal.
g. Generator Run signal.
h. Generator Fail signal.
i. ATS Normal Power signal.
j ATS Emergency Power signal.
k. Pump Run signal (2).
l. Pump Fail signal (2).
m. Pump Seal Fail signal (2).
n. Totalized Flow Value.
o. Backup control active signal.

2.11 HOIST

A. Pump Hoist

1. Crane Part: # 5PT20-E2
    a. Commander 2000 Davit Crane
    b. Red Powder Coat Finish (standard)
2. Base Part: # 5BP20
    a. Pedestal Base
    b. Red Powder Coat Finish (standard)
3. Winch: 4WP2-K red enamel electric winch – 115/1/60 VAC w/6 ft pendant control
    a. Line Speed: 8-ft per minute
4. (3) Wire Rope Part # WS25-60NS

a. 1/4 in x 60 ft 304 stainless steel wire rope with SS swivel hook and swaged ball fitting

B. Trash Basket Hoist
   1. Crane Part: # 5PT20-E4
      a. Commander 2000 Davit Crane
      b. Red Powder Coat Finish (standard)
   2. Base Part: # 5BP20
      a. Pedestal Base
      b. Red Powder Coat Finish (standard)
   3. Winch: 4777-K red enamel electric winch – 115/1/60 VAC w/6 ft pendant control
      a. Line Speed: 13-ft per minute
   4. (1) Wire Rope Part # WS25-60NS
      a. 1/4 in x 60 ft 304 stainless steel wire rope with SS swivel hook and swaged ball fitting

2.12 SOURCE QUALITY CONTROL

A. Testing:

1. Pump manufacturer shall perform following inspections and tests on each pump before shipment from factory.

   a. Check impeller, motor rating, and electrical connections for compliance to Specifications.
   b. Motor and cable insulation test for moisture content or insulation defects.
   c. Prior to submergence, run pump dry to establish correct rotation and mechanical integrity.
   d. Run pump for 30 min submerged, minimum of 6 ft under water.
   e. After operational test (paragraph d), repeat insulation test (paragraph b).
   f. Conduct certified performance test.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install in accordance with manufacturer's written instructions and approved submittals.

B. Provide flanged joints in interior of pump station.

C. Discharge Piping:

1. Where discharge piping passes through wall of structure, provide hole of sufficient size to allow passage of joint flange but not larger than necessary.
2. After discharge piping is in final position and securely supported, seal watertight annular space with expanding grout.

3.02 PUMP STATION

A. Mount upper guide holder above pump:

1. Lower guide holder shall be integral with discharge connection. Guide bars shall be Schedule 40 stainless steel, 3 in. diameter (minimum).
2. Attach slide assembly with yoke to each pump and slide freely between guide rails.
3. Arrange so minimum force of 3 times pump discharge pressure exerted between stationary base elbow and pump discharge to provide positive seal without bolting or fastening.

4. Provide lever action for each breakaway when raising pump.
5. Protect surface by coating resistant to wastewater.
6. Exposed bolts and nuts of stainless steel.
7. Provide automatic connection between pump flange and discharge elbow flange without tilting, rotating or other action.

B. Install 8 in. stainless steel pipe vent with stainless steel insect screen opening located adjacent to equipment pedestal.

C. Floats and radar level reader shall be supported with stainless steel cable with 10 lbs anchor weight supported from wet well access cover frame from stainless steel eyebolt.

D. Precast reinforced concrete risers and tops shall be subject to rejection on account of failure to conform to any specification requirements. In addition, individual sections of risers and tops may be rejected because of any of the following reasons:

1. Fractures or cracks passing through shell, except for single end crack not exceeding depth of joint.
2. Defects indicating imperfect proportioning, mixing and molding.
3. Surface defects indicating honeycombed or open texture.
4. Damaged ends where such damage would prevent making satisfactory joint.
5. Infiltration into structure exceeding 0.0758 gal/vert ft/hr.
6. Internal dia. of section varying more than 1% from nominal dia.
7. Any continuous crack having surface width of 0.01 in. or more and extending for length of 12 in. or more, regardless of position.

3.03 FIELD QUALITY CONTROL

A. Manufacturer's Field Services:

1. Supplier's or manufacturer's representative for equipment specified herein shall be present at job site or classroom designated by OWNER for mandays indicated, travel time excluded, for assistance during construction, startup, and training of OWNER'S personnel for operation. Include minimum of:

a. 1 manday for Installation Services.
b. 1 manday for Instructional Services.
c. 1 manday for Post Startup Services.

2. Factory representative shall be on-site to witness station installation and provide on-site technical assistance in accordance with Section 01 60 10.

B. Control System Testing:

1. Reports: Notify ENGINEER in writing indicating defective materials and workmanship and unsatisfactory test results. Include records of repairs and adjustments made.
2. On completing installation of system, perform following tests.

a. Test insulation resistance of conducting parts of motor control components; and of connecting supply, feeder, and control circuits. For devices containing solid-state components, use test equipment and methods recommended by manufacturer.
b. Make continuity tests of circuits.
c. Review updating of final system configuration and parameters where they supplement or differ from those indicated in original Contract Documents.
d. Review manufacturer's written instructions for installation and testing of motor control devices.

3. Visual and Mechanical Inspection: Include following inspections and related work.

   a. Motor Control Device Ratings and Settings: Verify ratings and settings as installed are appropriate for final loads and final system arrangement and parameters. Recommend final protective device ratings and settings where differences found. Use accepted revised ratings or settings to make final system adjustments.
   b. Inspect for defects and physical damage and nameplate compliance with Drawings.
   c. Exercise and perform operational tests of mechanical components and other operable devices in accordance with manufacturer's written instructions.
   d. Check tightness of electrical connections of devices with calibrated torque wrench. Use manufacturer's recommended torque values.
   e. Clean devices using manufacturer's approved methods and materials.
   f. Verify proper fuse types and ratings in fusible devices.

4. Electrical Tests: Perform following in accordance with manufacturer's written instructions.

   a. Insulation resistance test of motor control devices conducting parts to extent permitted by manufacturer's written instructions. Insulation resistance less than 100 megohms not acceptable.
   b. Make adjustments for final settings of adjustable trip devices.
   c. Test auxiliary protective features such as loss of phase, phase unbalance, and under voltage to verify operation.
   d. Check for improper voltages at terminals in controllers having external control wiring when controller disconnect opened. Voltage over or under 10% unacceptable.

5. Correct deficiencies and retest motor control devices. Verify by system tests that specified requirements are met.

C. Retesting:

1. Correct deficiencies identified by tests and completely retest equipment.
2. Verify by system test that total system meets specification requirements.

3.04 ADJUSTING

A. Perform short-circuit analysis and coordination study. Set field-adjustable pick-up and time-sensitivity ranges accordingly.

3.05 CLEANING

A. Remove paint splatters and other spots, dirt, and debris. Touch up scratches and mars of finish to match original finish. Clean devices internally, using methods and materials recommended by manufacturer.

SCHEDULE 1 TO SECTION 43 13 29	
Pump Characteristics	
Manufacturer	Flygt
Model Number	NP 3202 HT 3~ 460
Number of Units	2
Impeller Type	Non-Clog
Materials Being Pumped	Raw Wastewater
Minimum Solids Size (in.)	3
Rated Speed (maximum rpm)	1,775 Constant
Discharge Size (in.)	6
Rated Total Dynamic Head (ft)	85
Rated Capacity (gpm)	1,740
Minimum Pump Efficiency	69.0%
Electric Motor Characteristics	
Horsepower	70
Nominal Speed (rpm)	1,775
Service Factor	1.10
General Type	Squirrel Cage
Enclosure Type	Submersible
NEMA Design	B
Insulation Class	H
Voltage	460
Phase/Cycle (hertz)	3/60
Minimum Efficiency at Full Load	92.5%

* * * END OF SECTION * * *

GENERAL SPECIFICATIONS FOR CONSTRUCTION

CITY OF WATERLOO, IOWA
Department of Engineering

SECTION A - Definitions of Terms
SECTION B - Scope of work
SECTION C - Control of Materials and Work
SECTION D - Procedure and Progress
SECTION E - Measurements and Payments
SECTION F - Legal Relations and Responsibility

SECTION A - DEFINITIONS OF TERMS

1. **CITY**. The City of Waterloo, Iowa, which is the Party of the First Part of the accompanying contract, acting through its authorized representative.

2. **COUNCIL**. The duly elected Council of the City of Waterloo, Iowa.

3. **ENGINEER**. The City Engineer of Waterloo, Iowa, or his authorized representative.

4. **INSPECTOR**. The authorized representative of the Engineer assigned to the detailed inspection of the work or materials therefor and to such other duties as may be delegated to him in these specifications.

5. **CONTRACTOR**. The Party of the Second Part in the accompanying contract for the improvement covered by these specifications, or his authorized representative.

6. **SUBCONTRACTOR**. Any person, firm, or corporation who has, with the approval of the Council, contracted with the Contractor to execute and perform in his stead all or any part of the contract.

7. **BIDDER**. Any individual, firm, or corporation submitting a proposal for all or a part of the work provided for in these specifications.

8. **PROPOSAL GUARANTEE**. The security designed in the Notice of Bidders or Proposal to be furnished by the bidder as a guarantee of good faith to enter into a contract and furnish an acceptable bond for the work contemplated if it be awarded him.

9. **SURETY**. The corporate body bound with and for the Contractor for the acceptable performance of the contract.

10. **PROPOSAL**. The written Proposal, submitted by the bidder in the prescribed manner and on the standard form, for the improvements covered by these specifications.

11. **SPECIFICATIONS**. The documents that set forth the manner in which the proposed work is to be accomplished which have been prepared by the Engineer and approved by the City Council, official copies of which are now on file with the City Clerk.

12. **SPECIAL PROVISIONS**. Clauses or memoranda not contained herein, applying to the contract of which these specifications are a part, which change or supplement these specifications.

13. **CONTRACT**. The agreement entered into between the City and the Contractor, setting forth the terms under which the work covered by the plans and specifications is to be performed. The contract includes all conditions, definitions, and instructions set forth in the official publications relating to

the work, the official contract and specifications, the Proposal, official plans, and all supplemental agreements entered into by the parties to the contract.

14. **NOTICE TO BIDDERS**. The notice called attention of bidders to the time and place for receiving bids, containing a brief description of the work, and briefly setting forth the requirements and conditions for submission of Proposals.

15. **INSTRUCTIONS TO BIDDERS**. The clauses setting forth in detail the information relative to the proposed work and requirements for the submission of Proposals.

16. **PLANS**. The plans for the improvement covered by the specifications and approved by the Council, official copies of which are on file with the City Clerk.

17. **CONTRACT BOND**. The bond executed by the Contractor and his surety in favor of the City of Waterloo, Iowa, guaranteeing the complete execution of the contract in accordance with the plans and specifications, the payment of all debts pertaining to the work, and maintenance of the work as provided by law or by the specifications.

18. **CONTRACT PERIOD**. The period from the specified date for beginning the work to the specified date of completion, both dates inclusive. The contract period may be extended by the Council, as provided in these specifications, in which event the contract period includes the new date of completion.

19. **OFFICIAL PUBLICATIONS**. The official publications are the formal resolutions and notices relative to the proposed improvement that are required by law to be published in a prescribed manner and that have actually been published in accordance with the statutes relating thereto. Attention is directed to the fact that these official publications are by statute vested with all of the force and effect of contract obligations.

20. **A.S.T.M.** Abbreviation for American Society for Testing Materials.

21. **WORK**. The term "Work" of the Contractor and Subcontractor includes labor or materials or both, equipment, transportation, or other facilities necessary to complete the contract.

22. **TIME**. All time limits stated in the contract documents are of the essence in the contract.

SECTION B - SCOPE OF WORK

1. **CORRELATION AND INTENT OF DOCUMENTS**. The Contract documents are complementary, and what is called for by anyone shall be as binding as if called for by all. The intention of the documents is to include all labor, materials, equipment, and transportation necessary for the proper execution of the work. Materials or work described in words which, so applied, have a well-known technical or trade meaning shall be held to refer to such recognized standard.

2. **DRAWINGS AND SPECIFICATIONS**. Unless otherwise provided in the contract documents, the engineer shall furnish to the Contractor, free of charge, all copies of drawings and specifications reasonably necessary for the execution of the work.

The Contractor shall keep one (1) copy of all drawings and specifications on the work available to the Engineer and to his representatives.

3. **CONTRACTOR'S UNDERSTANDING**. It is understood and agreed that the Contractor has, by careful examination, satisfied himself as to the nature, character and location of the work, the conformance to the ground, the character, quality, and quantity of the materials to be encountered, the character of the equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can, in any way, affect the work under this

contract. No verbal agreement or conversation with any officer, agent, or employee of the City, either before or after the execution of the Contract, shall affect or modify any of the terms or obligations herein contained.

4. **REPORTING ERRORS AND DISCREPANCIES**. If the Contractor, in the course of the work, finds any discrepancies between the plans and the physical conditions of the locality, or any errors of omission in plans or in the layout as given by said stakes and instructions, it shall be his duty to inform the Engineer immediately, in writing, and the Engineer shall promptly correct the same.

5. **ALTERATION OR CORRECTION OF PLANS**. The plans are made up from surveys that are presumably correct and represent the foreseen construction requirements. Any modification of the plans which may be required by the exigencies of the construction, or any corrections made necessary because of errors in the original surveys, will be made by the Engineer. Should corrections or modifications of the plans or specifications require a different quality or class of work than that upon which the unit prices in the Proposal are based, or if the modifications or corrections are required in parts of the work partially completed and such modifications result in an increased cost to the Contractor, the amount to be paid for work resulting from such changes shall be agreed upon in writing at the time the changes are ordered and before the work is begun by the Contractor. No allowance will be made for anticipated profits on work not performed.

6. **CHANGES IN THE WORK**. The City, without invalidating the contract, may order extra work or make changes by altering, adding to, or deducting from the work, the contract sum being adjusted by agreement or arbitration before such changed work is undertaken. All such work shall be executed under the conditions of the original contract, except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such change.

7. **INCREASED OR DECREASED QUANTITIES**. The right is reserved without impairing the contract, to order the performance of such work of a class not contemplated in the Proposal or to increase or decrease the quantities as may be considered necessary to complete fully and satisfactorily the work included in the contract. However, when the work is completed without change in the plans, and the measured quantity of any item of work varies by more than twenty percent (20%) from the estimated quantity specified in the contract, an adjustment in price may be made for such item of work by agreement between the Engineer and the Contractor, subject to the approval of the City Council. Party to the contract may request such an adjustment.

8. **LANDS AND RIGHT OF WAY.** The City shall provide the lands upon which the work under this contract is to be done, except that the Contractor shall provide land required for the erection of temporary construction facilities and storage of his material, together with the right of access to same.

9. **CITY WATER**. The Contractor shall be allowed to use City Water but before any water is used, he shall make application to the Waterloo Water Works for a temporary water connection from a fire hydrant or by some other connection method. Water usage will be charged at the rate for temporary water service. The rules, regulations, and water rates are available at the Waterloo Water Works offices at 325 Sycamore Street or their telephone number is 319-232-6280.

10. **RIGHTS OF VARIOUS INTERESTS**. Whenever work being done by the City's forces or by other Contractors is contiguous to work covered by this contract, the respective rights of the various interests involved shall be established by the Engineer to secure the completion of the various portions of the work in general harmony.

11. **CLOSING STREETS TO TRAFFIC**. The Engineer shall be the judge of how many streets or parts of streets it is necessary for the Contractor to close at any time and may refuse to permit the closing of additional streets until such of the work is finished and opened to traffic as he may direct.

12. **OBSTRUCTION OF STREETS**. The work is to be carried on in such manner as to obstruct the streets, highways, and alleys as little as possible. The Contractor shall carry on the different parts of the work so as to complete the whole, as nearly as practicable, at the same time. In doing the

work, the Contractor shall follow the directions of the Engineer as to the place or places where work shall be started or be carried on and the direction in which it shall be done.

13. **SHANTIES AND BUILDINGS**. Shanties or other buildings shall not be erected in or upon any street, highway, or alley without permission of the Engineer. If such permission be granted, it may be upon any reasonable terms prescribed by the person or body granting such permission.

14. **SANITARY CONVENIENCES**. The Contractor shall furnish the necessary sanitary conveniences, properly secluded, for the laborers on the work, and these shall be maintained in a manner that will be inoffensive to the public.

15. **CLEANING UP**. The Contractor shall, as directed by the Engineer, remove from the City's property and from all public and private property, at his own expense, all temporary structures, rubbish, and waste materials resulting from his operations before work can be considered completed. The Contractor shall also renew or replace all fences, sidewalks, or other property damaged or disturbed by his work.

16. **OMISSION OF PARTS OF GENERAL SPECIFICATIONS**. Parts of the General Specifications deemed not to apply to some particular work may be omitted by special reference in other parts of the contract documents.

SECTION C - CONTROL OF MATERIALS AND WORK

1. **SUPERVISION AND INSPECTION.** The Engineer shall have supervision of the construction provided for in this Contract and shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, manner of performance, rate of progress on the work, and all questions regarding the acceptable fulfillment of the terms of the Contract. Materials and construction work shall, always, be subject to the inspection of the Engineer or his representatives. The Contractor shall be held strictly to the true intent of these specifications as regards the quality of materials, workmanship, and the diligent prosecution of the work.

The Engineer and his representatives shall, always, have access to the work wherever it is in preparation of progress, and the Contractor shall provide proper facilities for such access and for inspection.

If the specifications, the Engineer's instructions, law ordinances, or any public authority require any work and/or materials to be especially tested or approved, the Contractor shall give the Engineer timely notice of readiness for inspection. If the inspection is to be made by authority other than the Engineer, the Contractor shall notify the engineer of the date fixed for inspection. Inspections by the Engineer will be promptly made and, where practicable, at the source of supply. If any work should be covered up without the approval or consent of the Engineer, it must, if required by the Engineer, be uncovered for examination at the Contractor's expense.

Re-examination of questioned work may be ordered by the Engineer, and, if so ordered, the work must be uncovered by the Contractor. If such work be found in accordance with the Contract, the City shall pay the cost of re-examination and replacement. If such work be found not in accordance with the Contract, the Contractor shall pay such cost unless he shall show that the defect in the work was caused by another Contractor, and, in that event, the City shall pay the cost.

2. **AUTHORITIES AND DUTIES OF INSPECTORS**. Inspectors may be stationed on the work to report to the Engineer as to the progress of the work and the manner in which it is being performed; also, to report whenever it appears that materials furnished and work performed by the Contractor fail to fulfill the requirements of the specifications and Contract, and to direct the attention of the Contractor to such failure or infringement; but such inspection shall not relieve the Contractor from any obligations to furnish acceptable materials or to provide completed construction that is satisfactory in every particular.

In case of any dispute arising between the Inspector and the Contractor as to materials furnished or the manner of performing the work, the Inspector shall have the authority to reject materials or suspend the work until the question at issue can be referred to and decided by the Engineer. Inspectors are not authorized to revoke, alter, enlarge, relax, or release any requirements of these specifications. The Inspector shall, in no case, act as foreman or perform other duties for the Contractor or interfere with the management of the work by the latter.

3. **STATUS OF THE ENGINEER**. The Engineer shall have general supervision and direction of the work. He has authority to stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract. He shall also have authority to reject any work and/or materials which do not conform to the specifications, to direct the application of forces to any portion of the work as, in his judgment, is required, and to order the force increased or diminished, and to decide questions which arise in the execution of the work.

4. **ENGINEER'S DECISIONS.** The Engineer shall, within a reasonable time, make decisions on all claims of the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the contract documents.

All such decisions of the Engineer shall be final except as to the element of time and financial consideration involved, which, if no agreement in regard thereto is reached, shall be subject to arbitration.

5. **STAKES AND INSTRUCTIONS**. The Contractor shall provide reasonable and necessary opportunities and facilities for setting stakes and making measurements. The Contractor shall not furnish stakes or men to set them. He shall not proceed until he has received from the Engineer such stakes and instructions as may be necessary to the progress of the work.

The Contractor shall carefully preserve benchmarks, reference points, and stakes, and in case of willful or careless destruction, he shall be charged with the resulting extra expense and shall be responsible for any mistakes that may be caused, by their loss or disturbance.

6. **SUPERINTENDENT.** The Contractor shall keep on his work during its progress a competent superintendent and any necessary assistants, all satisfactory to the Engineer. The Superintendent shall not be changed except with the consent of the Engineer unless the Superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ. The Superintendent shall represent the Contractor in his absence, and all directions given to him shall be as binding as if given to the Contractor. Important decisions shall be confirmed in writing to the Contractor. Other directions shall be so confirmed on written request in each case.

The Contractor shall give efficient supervision to the work using his best skill and attention. He shall carefully study and compare all drawings, specifications, and other instructions, and shall report at once to the Engineer any error, inconsistency, or omission which he may discover.

7. **REMOVAL OF UNAUTHORIZED WORK**. Work done without lines and grade being given, work done beyond lines shown on the plans or as given, except as herein provided, or any extra or additional work done without authority, will be considered as unauthorized and at the expense of the Contractor and will not be paid for under the provisions of the Contract. Work so done may be ordered removed and replaced at the Contractor's expense.

8. **REMOVAL OF DEFECTIVE MATERIALS OR WORK**. The Contractor shall promptly remove from the premises all materials condemned by the engineer as failing to conform to the Contract; whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute his own work in accordance with the contract and without expense to the City and shall bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.

If the Contractor does not remove such condemned work and materials within a reasonable time, fixed by written notice, the City may remove them and may store the material at the expense of the

Contractor. If the Contractor does not pay the expense of such removal within a reasonable time thereafter, the City may, upon ten (10) days' written notice, sell such materials at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs and expense that should have been borne by the Contractor; or, if the net proceeds of such sale are insufficient to pay the expenses of removal, the City may deduct the balance from any amounts due the Contractor.

9. **MATERIALS, EQUIPMENT, APPLIANCES AND FACILITIES**. Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary for the execution and completion of the work. Materials shall be of the quality specified for each part of the work.

Whenever, in construction of the work or in the manufacture of any article of appliance necessary for the construction or operation of the work, it is necessary to use any material that is not fully specified in these specifications, it shall be of good quality and shall meet with the approval of the Engineer.

Any appliance that is necessary for the construction or operation of the work and is commonly recognized as a part of the work, shall be furnished by the Contractor as part of the work, whether it is specifically called for in the plans and specifications, and such appliance shall be of good quality and standard make and shall meet with the approval of the Engineer.

10. **MATERIAL SAMPLES**. Before the contract is awarded, the bidder may be required to furnish a statement of the origin, composition, and manufacture of all materials proposed for use in the performance of the Contract, together with samples of the material. These samples will be considered as representative and typical of the material to be obtained from any source.

11. **CHARACTER OF WORKMEN AND EQUIPMENT**. The Contractor shall employ competent and efficient workmen for every kind of work. Any person employed on the work who shall refuse or neglect to obey the directions of the Engineer or Inspector, or who shall be deemed incompetent or disorderly, or who shall commit trespass upon public or private property in the vicinity of the work, shall be dismissed when the Engineer so orders, and shall not be re-employed unless express permission be given by the Engineer. The Contractor shall, always, enforce discipline and good order among his/her employees.

The methods, equipment, and appliances used on the work, and the labor employed, shall be such as will produce a satisfactory quality of work and shall be adequate to complete the contract within the specified time limit.

12. **HIRING CITY EMPLOYEES**. The Contractor shall not employ and hire any of the City's employees without the permission of the Engineer.

13. **LABOR.** Local labor shall be given preferences so far as practicable.

14. **THE CITY'S RIGHT TO DO WORK**. If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this Contract, the City of Waterloo, after three (3) days' written notice to the Contractor may, without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor, provided, however, that the Engineer shall approve both such action and the amount charged to the Contractor.

SECTION D - PROCEDURE AND PROGRESS

1. **ORDER OF COMPLETION - USE OF COMPLETED PORTIONS**. The Contractor shall complete any portion or portions of the work in such order or time as the Engineer may require. The City shall have the right to take possession of an use completed or partially completed portion of the work at any time, but such taking possession and use shall not be deemed an acceptance of work so taken or

used, or any part thereof. If such prior use increases the cost of or delays the work, the Contractor shall be entitled to such extra compensation or extension of time, or both, as the Engineer may determine.

2. **WEATHER**. During stormy or inclement weather, all work shall be suspended, except such as can be done in an acceptable manner. Permission to work during freezing, stormy, or inclement weather shall in no way be construed as a release of the Contractor's responsibility regarding the quality of the finished work at such time.

3. **SUNDAYS AND LEGAL HOLIDAYS**. Except for such work as may be required in the plans or to properly maintain or protect completed or partially completed construction or to maintain lights and barricades, no work will be permitted on Sundays or legal holidays without specific permission of the Engineer.

4. **DELAYS AND EXTENSION OF TIME.** If the Contractor is to be delayed in the completion of the work by an act of neglect of the City, or its employees; or by any other Contractor employed by the City; or by changes ordered in the work; or by strikes, lockouts, fire, unusual delays in transportation, unavoidable casualties, or any cause beyond the Contractor's control; or by delay authorized by the Engineer pending arbitration; or by any cause which the Engineer shall decide justifies the delay, then the time of completion shall be extended for such reasonable time as the Engineer may decide will compensate for such delay.

No such extension shall be made for delay occurring more than thirty (30) days before claim therefor is made in writing to the Engineer. In the case of a continuing cause of delay, only one claim is necessary.

This article does not exclude the recovery of damages for delay by either party under provisions in the contract documents.

5. **TEMPORARY SUSPENSION OF WORK**. The Engineer shall have authority to suspend the work, wholly or in part, for such period or periods of time as he may deem necessary, due to unsuitable weather or such other conditions as are considered unfavorable for the suitable prosecution of the work, or for such time as is necessary due to the failure to the Contractor to carry out orders given or to perform any or all provisions of the Contract.

6. **NOTICES - HOW SERVED**. Any notice to be given by the City to the Contractor under this contract shall be deemed to be served if the same be delivered to the man in charge of any office used by the Contractor or his foreman or agent at or near the work, or deposited in the post office, postpaid, addressed to the Contractor at his last known place of business.

7. **PROGRESS OF WORK**. The progress of the work shall be such that, at the expiration of one-fourth (1/4) of the contract period, one-eighth (1/8) of the work shall be completed; at the expiration of one-half (1/2) of the contract period, three-eighths (3/8) of the work shall be completed; at the expiration of three-fourths (3/4) of the contract period, the work shall be three-fourths (3/4) completed, and the whole work shall be completed at the expiration of the contract period.

If, at any time the above schedule is not being maintained, the Council may give written notice to the Contractor and his sureties that the specifications are not being complied with. Such notice shall state what action on the part of the Contractor is required to bring the work within the requirements of the specifications. If the Contractor fails, within ten (10) days, to proceed as directed in the said notice, then the Council shall have authority to annul this contract without process or action at law and take over the prosecution and completion of the work, as provided under the article covering City's right to terminate contract.

8. **CITY'S RIGHT TO TERMINATE CONTRACT**. If the Contractor should be adjudged a bankrupt; or if he should make a general assignment for the benefit of this creditor; or if a Receiver should be appointed on account of his insolvency; or if he should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough skilled workmen or proper

materials; or if he should fail to make prompt payment to Subcontractors or for materials or labor; or if he should persistently disregard laws, ordinances, or the instructions of the Engineer; or if he should otherwise be guilty of a substantial violation of any provision of the contract, then the City, upon the certificate of the Engineer that sufficient cause exists to justify such action, may, without prejudice to any other rights or remedy, and after giving the Contractor seven (7) days' written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools and appliances thereon and finish the work by whatever method he may deem expedient. In such cases, the Contractor shall not be entitled to receive any further payment until the work is finished.

If the unpaid balance of the contract price shall exceed the expenses of finishing the work, including compensation for additional managerial and administration services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the City. The expense incurred by the City as herein provided and the damage incurred through the Contractor's default shall be certified by the Engineer.

9. **REMOVAL OF EQUIPMENT**. In the case of annulment of this contract before completion, from any cause whatsoever, the Contractor, if notified to do so by the City; shall promptly remove any part or all of his equipment and supplies from the property of the City, failing which, the City shall have the right to remove such equipment and supplies at the expense of the Contractor.

SECTION E - MEASUREMENTS AND PAYMENT

1. **STANDARD OF MEASUREMENT**. All work completed under the contract shall be measured by the Engineer according to the United States standard measures.

2. **SCOPE OF PAYMENTS**. The Engineer's measurements of quantities shall be the basis for final payment for the work performed under this Contract unless specified otherwise in the plans. After the work is completed, the Engineer will make measurements and computations of the number of units of each of the various items of work completed, and the Contractor will be paid for the actual amount of work performed at the rates specified in his Proposal. Before final settlement is made, the Council may require the Contractor to submit a list of all persons furnishing labor or materials, with evidence that such persons have been paid in full. Payment shall be made in the manner set forth in official publications and Council Proceedings relative thereto.

3. **PAYMENT FOR EXTRA WORK**. Such extra work as may have been ordered by the Engineer and performed by the Contractor shall be compensated for as provided herein. If work is to be done or materials are to be furnished by the Contractor which cannot properly be classified under unit prices included in the Proposal, the Contractor shall be paid therefor the actual reasonable cost of the labor and materials entering permanently in such work, plus fifteen percent (15%) of the cost thereof. In computing the labor cost on such extra work, the following items shall be included:

(a) Actual payroll expenditures for labor at the current rate therefor, and cost of materials.

(b) Pay of foreman and timekeepers for actual time required on the extra work.

(c) Liability insurance, prorated, for the extra work.

Labor cost items on extra work shall be furnished in duplicate by the Contractor to the Inspector daily. The Inspector shall check the items, and if he finds them to be correct, he shall so certify on the statement of cost, returning one copy to the Contractor and filing one copy with the Engineer.

The Engineer shall determine the cost of materials entering into extra work from the materials and receipted freight bills for the same.

For any special machine, power tools, or equipment, including fuel and lubricants, but not including small hand tools, which may be deemed necessary or desirable to use, the Contractor shall be

allowed a reasonable rental thereon, to be agreed upon in writing by the Engineer before such work is begun, and to which sum no percentage is to be added.

The item of cost shall not include repairs or replacement of equipment or overhead expenses of any character. The fifteen percent (15%) allowed is considered to cover the use of hand tools and all overhead expenses except liability insurance.

In no case will a claim for extra compensation be allowed unless the work upon which the claim is based has been ordered in writing, except as provided hereinafter.

4. **CLAIMS FOR EXTRA COST**. If the Contractor claims that any instructions, by drawings or otherwise, involved extra cost under this contract, he shall give the Engineer written notice thereof within ten (10) days after completion of the work.

No such claim shall be valid unless so made.

5. **CLAIMS FOR EXTRA COMPENSATION**. If the Contractor deems that extra compensation is due him for work and/or materials that he considered is not clearly covered in the items for which he submitted unit prices in his bid and that were not ordered in writing by the Engineer as an extra s heretofore provided, the Contractor shall notify the Engineer, in writing, of his intention to make claim for extra compensation for work and/or material before starting construction. If such written notification is not given or the Engineer is not afforded proper facilities by the Contractor for keeping strict account of actual cost as defined herein, then the Contractor hereby agrees to waive the claim for extra compensation. Such notice to the engineer and the fact that the Engineer has kept account of cost as aforesaid, shall not in any way be construed as proving the validity of the claim, which must be passed upon by the Council. If the Council finds the claim to be just, it shall be allowed and paid for as extra work as provided herein.

6. **COMPLETION REPORT AND OBJECTIONS THERETO**. Within ten (10) days after the full completion of the work to be done under this contract, the Engineer shall make a written statement of all the work done by the Contractor hereunder, stating the quantity of each item as found by him and including a statement of all credits for extra work and all credits or debits for changes, alterations, omissions, and defects, and shall forthwith deliver a copy of such statement to the Contractor. The Contractor shall compare such statement with his own records and shall then, in writing, either approve such statement or point out any claimed errors or omissions. If any of such claims are found correct, the Engineer shall, within ten (10) days, prepare a new statement, a copy of which shall in like manner be delivered unto the Contractor. The Engineer will not file a formal completion report with the City until the Contractor has approved the same.

If the figures of the Engineer and the Contractor cannot be reconciled, or there is a difference of opinion regarding some item or items, then such difference of opinion shall be submitted to arbitration as hereinafter provided, and the decision of the arbitrator or arbitrators shall be final, and the Engineer shall, within a period of five (5) days, file his completion report.

Before action by the City Council upon such completion report, the Contractor shall also file a written statement of any claims he may have against the City, other than those shown by such completion report, growing out of this contract or the work done hereunder. The City shall retain ten percent (10%) of the amount due the Contractor on the completion report for a period of thirty (30) days. If no claims are filed against the Contractor within thirty (30) days, the final ten percent (10%) shall then be paid to the Contractor.

7. **WAIVER**. By the execution of this contract, the Contractor agrees that any objections he may have to the statement of the amount of work done hereunder included by the Engineer in this completion report, and any claims of the Contractor against the City growing out of this contract and the work done hereunder which are not stated in writing in the manner and within the time provided in Article 6, Section E hereof, shall be waived, and no such claim shall thereafter be asserted against the City.

SECTION F - LEGAL RELATIONS AND RESPONSIBILITIES

1. **LAWS RELATING TO WORK**. The Contractor is presumed to be familiar with all laws, ordinances, and regulations which may, in any manner, affect those engaged or employed upon the work or the materials or equipment used in or upon the work, and shall conduct the work so as not to conflict with such laws, ordinances, and regulations.

2. **PROTECTION OF WORK AND PROPERTY**. The Contractor for any part of the improvement shall be held responsible for the care of materials and of partially completed and completed work until final acceptance of the same by the Council. He will be required to make good at his own expense any damage which the work may sustain from any cause prior to the filing of the engineer's certificate of completion. He shall take all risk from floods and casualties of every description and make no charge for delay due to such cause. He may, however, be allowed a reasonable extension of time on account of such delays. He shall correct or make good at his own expense all damages to adjacent property due to the acts or negligence of his employees of the prosecution of his work, and save the City harmless therefor.

The Contractor shall be held liable and responsible for all damages done to water, sewer, drain, or other underground pipes and structures, and to sidewalks and private property.

3. **RESPONSIBILITY FOR ACCIDENTS**. The Contractor shall assume full responsibility for all damages sustained by persons or property due to the carrying on of his work until final acceptance thereof, or until released by the Engineer in writing.

4. **LIABILITY INSURANCE**. The Contractor shall carry liability insurance which shall save the City harmless and protect the public and any person from injury sustained by the reason of the prosecution of the work or the handling or storing of materials therefor and said Contractor shall also carry liability insurance which shall meet the requirements of the Iowa Worker's Compensation Law.

Before work shall be started on this contract, the Contractor shall furnish the City Clerk with proper affidavit or affidavits executed by representatives of duly qualified insurance companies, evidencing that said insurance company or companies have issued liability insurance policies, effective during the life of the contract, or for a period of a least ten (10) days following the filing of written notice of cancellation, protecting the public and any person from injuries or damages sustained by reason of carrying on the work involved in the Contract. The affidavit shall specifically evidence the following forms of insurance protection:

(a) Public liability insurance covering all operations performed by persons directly employed by the Contractor.

(b) Public liability insurance covering all operations performed by any Subcontractor to whom a portion of the work may have been assigned.

(c) Public liability insurance covering all work upon the project performed by any independent Contractor working under the direction of either the principal Contractor or a Subcontractor.

(d) Motor vehicle bodily injury liability insurance and property damage liability insurance on all motor vehicles employed on the work, whether owned by the Contractor or by other persons, firms, or corporations.

(e) The minimum protection shall be as follows:

Comprehensive General Liability Insurance	
General Aggregate Limit	$ 5,000,000.00
Products—Completed Operations Aggregate Limit	$ 5,000,000.00
Each Occurrence Limit	$ 5,000,000.00
Comprehensive Automobile Liability Insurance	$ 1,000,000.00

The Contractor shall have the City of Waterloo, Iowa, named as an "Additional Named Insured". A certificate, or a policy if requested, shall be filed with the Owner.

All certificates and/or policies of insurance furnished by the Contractor to be filed with the City Clerk shall include the name and address of the agency issuing the same. It shall also be required that the City Clerk be notified by registered mail of the cancellation or expiration of the above insurance.

5. **BARRICADES AND SIGNS**. The Contractor shall, at his own expense and without further or other order, provide, erect, and maintain, at all times during the progress and suspension of the work and until completion and final acceptance thereof, suitable and requisite barricades, signs, or other adequate protection, as required by the latest edition of the "Iowa Manual on Uniform Traffic Control Devices for Streets and Highways" and shall provide, keep, and maintain such barricades, signs, etc., as may be required or as may be ordered by the City Engineer, to insure the safety of the public as well as those engaged on the work. All barricading plans shall be approved by the City Engineer.

6. **ROYALTIES AND PATENTS**. The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the City harmless from loss on account thereof, except that the City shall be responsible for all such loss when a particular process or the product of a particular manufacturer is specified.

7. **PERMITS AND REGULATIONS**. Permits and licenses of a temporary nature for the prosecution of the work shall be secured and paid for by the Contractor. Permits, license, and easements for permanent changes in existing facilities shall be secured and paid for by the City.

8. **CLAIMS FOR DAMAGES**. Any claim for damages arising under this Contract shall be made in writing to the party liable within a reasonable time of the first observance of such damage and no later than the time of final payment, except as expressly stipulated otherwise in the case of faulty work or materials and shall be adjusted by agreement or arbitration.

The Contractor shall be held for the payment of all just claims against him arising out of the prosecution of this contract, and his bond will not be released until such claims are paid for dismissed.

9. **ASSIGNMENT OF CONTRACT**. The Contractor shall not sell or assign the contract or sublet any portion of the work provided for therein without the written consent of the City Council.

10. **SUBCONTRACTORS**. The Contractor shall, as soon as practicable after the signature of the contract, notify the Engineer in writing of the names of the Subcontractors proposed for the work and shall not employ any that the Engineer may, within a reasonable time, object to as incompetent or unfit.

The Contractor agrees that he is as fully responsible to the City for the acts and omission of his Subcontractors and of persons either directly or indirectly employed by them as he is for the acts and omissions of persons directly employed by him.

Nothing contained in the contract documents shall create any contractual relation between any Subcontractor and the City.

11. **ARBITRATION**. All questions subject to arbitration under this Contract shall be submitted to arbitration at the choice of either party to the dispute.

The Contractor shall not cause a delay of the work during any arbitration proceedings, except by agreement with the Engineer.

The demand for arbitration shall be filed in writing with the Engineer, in the case of an appeal from his decision, within ten (10) days of its receipt, and in any other case, within a reasonable time after cause thereof, and in no case later than the time of final payment, except as otherwise expressly stipulated in the contract. If the Engineer fails to decide within a reasonable time, an appeal to arbitration may be taken as if his decision had been rendered against the part appealing.

No one shall be nominated or act as an arbitrator who is in any way financially interested in the contract or in the business affairs of either the City or the Contractor.

The general procedure shall conform to the laws of the State of Iowa. Unless otherwise provided by such laws, the parties may agree upon one arbitrator; otherwise, there shall be three--one named in writing by each party to this contract to the other party, and the third chosen by these two arbitrators, or, if they fail to select a third within ten (10) days, then he shall be chosen by the Comptroller of the State of Iowa. Should either party refuse or neglect to supply the arbitrators with any papers or information demanded in writing, the arbitrators are empowered by both parties to proceed ex parte.

If there be one arbitrator, his decision shall be binding; if three, the decision of any two shall be binding. Such decision shall be a condition precedent to any right of legal action, and, wherever permitted by law, it may be filed in Court to carry it into effect.

The arbitrators, if they deem that the case demands it, are authorized to award to the party whose contention is sustained such sums as they shall deem proper for the time, expense, and trouble incident to the appeal, and, if the appeal was taken without reasonable cause, damages for delay, the arbitrators shall fix their own compensation unless otherwise provided by agreement, and shall assess the costs and charges of the arbitration upon either or both parties.

The award of the arbitrators must be in writing, and it shall not be open to objections on account of the form of proceeding or the award, unless otherwise provided by the laws of Iowa.

In the event of such laws providing on any matter covered by this article otherwise than as hereinbefore specified, the method of procedure throughout and the legal effect of the award shall be wholly in accordance with the laws of the State of Iowa, it being intended hereby to lay down a principle of action to be followed, leaving its local application to be adopted to the legal requirements of the place in which the work is to be done.

12. **PERFORMANCE AND PAYMENT BONDS**. The Contractor shall, at the time of execution and delivery of this contract and before the taking effect of same, furnish and deliver to the City written bonds of indemnity to the amount required by law in form and substance, and with surety thereon satisfactory and acceptable to the City, to ensure the faithful performance and payment by the Contractor of all the covenants and agreements on the part of the Contractor contained in this contract. These bonds shall remain in force and effect for the full amount of the Contract.

13. **PERSONAL LIABILITY OF PUBLIC OFFICIALS**. In carrying out any of the provisions of the Contract or in exercising any power or authority granted him thereby, there shall be no liability upon the Engineer or his authorized assistants, either personally or as an official of the City, it being understood that in such matters he acts as the agent and representative of the City.

14. **JURISDICTION**. Any action in Court against the Contractor or sureties on his bond because of damages to property or individuals by said Contractor or his workmen, or because of the violation of any provisions of the specifications, or on account of the failure of said Contractor to comply fully with these provisions, shall be brought in the District Court of the State of Iowa in and for Black Hawk County.

15. **TERMINATION OF RESPONSIBILITY**. The Contract shall be considered as completed and the Contractor released from further obligations except as to the requirements of his bond, after the work has been completed and finally accepted and final estimates have been allowed and the completion report of the engineer has been filed and approved by the Council.

16. **CITY'S LEGAL RIGHTS**. The City shall not be precluded by any measurements, estimate, or certificate made, either before or after the completion and acceptance of the work and payment therefor, from showing the true amount and character of the work performed and materials furnished by the Contractor, or from showing that any such measurement, estimate, or certificate is untrue or incorrectly made, or the work or materials do not, in fact, conform to the Contract.

The City shall not be precluded, notwithstanding any such measurements, estimate, or certificate and payment in accordance therewith, from recovering from the Contractor and his surety such damages as it may sustain by reason of his failure to comply with the terms of the Contract. Neither the acceptance by the City or any of its representatives, nor any payment for or acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by the City, shall operate as a waiver on any portion of the contract or of any power herein reserved, or any right to damages herein provided. A waiver of any breach of the contract shall not be held to be a waiver of any other or subsequent breach.

* * * END OF SECTION * * *

THIS PAGE LEFT BLANK INTENTIONALLY

SUPPLEMENTAL GENERAL SPECIFICATIONS FOR CONSTRUCTION

1. SUBCONTRACTS

The contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to require compliance by each subcontractor with the applicable provisions of the contract for the improvements embraced in this contract.

2. REVIEW BY THE CITY OF WATERLOO

The City of Waterloo, its authorized representatives and agents, shall at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this contract, provided, however, that all instructions and approval with respect to the work will be given to the contractor only by the City of Waterloo through its authorized representative or agents.

3. INSPECTION

a. The contractor shall furnish promptly all materials reasonably necessary for any tests, which may be required. All tests by the City of Waterloo will be performed in such manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the Technical Specifications.

b. Inspection of materials and appurtenances to be incorporated in the improvements embraced in this contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the Technical Specifications, shall be final, except as regards (1) latent defects, (2) departures from specific requirements of the contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the project site.

4. WARRANTY OF TITLE

No material, supplies, or equipment to be installed or furnished under this contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease-purchase, or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the City of Waterloo free from any claims, liens, or charges. Neither the contractor nor any person, firm, or corporation furnishing any material or labor for any work covered by this contract shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the contractor for their protection or any rights under any law permitting such persons to look to funds due the contractor in the hands of the City of Waterloo. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

THIS PAGE LEFT BLANK INTENTIONALLY

FORM OF CONTRACT

CONTRACT FOR THE CONSTRUCTION OF

FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION

CITY OF WATERLOO, IOWA

CONTRACT NO. 1075

This contract made and entered into this _____ day of _____, 20__, by and between the City of Waterloo, Iowa, a Municipal Corporation, (hereinafter referred to as City), and _____, (hereinafter referred to as Contractor), WITNESSETH:

PAR. 1 Contractor agrees to build and construct the **FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION, CONTRACT NO. 1075** and furnish all necessary tools, equipment, materials, and labor necessary to do all the work called for in the plans and specifications in a workmanship like manner and for the prices set forth in Contractor's proposal, which was accepted by the City, and which is understood and agreed to be a part of this contract.

PAR. 2 It is understood and agreed that the resolution adopted by the City Council ordering the construction of the improvement, the Notice to Contractors as published, the Instruction to Bidders, the Form of Proposal, the Construction and Maintenance Bonds, the Council Proceedings relating to this matter, and the Plans and Specifications shall all be considered as forming a part of the contract the same as though they were each set out in said contract.

PAR. 3 The Contractor agrees to furnish at its own cost and expense, all necessary materials and labor for said work and to construct said improvements in a thorough, substantial, and workmanlike manner, and in strict accordance with the requirements of this contract, and of the plans and specifications made a part hereof by reference, and to the satisfaction and approval of the City and its engineer.

PAR. 4 The Contractor agrees to perform said work and install said improvements on the terms set out in bid or proposal to the City which has been accepted by the City and which is by reference made a part of this contract.

PAR. 5 The Contractor agrees to commence said work within ten (10) working days after receipt of "Notice to Proceed" and complete it on or before _____, unless an extension of time is granted in writing by the Council of the City.

PAR. 6 Should the Contractor fail to complete said improvements in strict accordance with the terms and conditions of this contract, or the plans and specifications therefor promptly by the date herein specified, the City may pay such additional sums as it may be required to pay by reason of the failure of said contractor and deduct any and all such sums from any amount then due the Contractor.

PAR. 7 The Contractor agrees to comply with and obey all ordinances of the City of Waterloo, Iowa, relating to the obstruction of streets and alleys, keeping open passage ways for water, traffic, and protecting any excavations in any street or alley, and maintaining proper and sufficient barricades with lights and signals during all hours of darkness, to see that the backfilling is properly done, and agrees to keep the City whole and defend any and all suits that may be brought against the City by reason of any injuries that may be sustained by any person or property allegedly caused by the Contractor, or his agents, while work is done pursuant to this agreement.

PAR. 8 The Contractor agrees that in the event a law suit is brought against the City for damages allegedly sustained by reason of any act, omission or negligence of the Contractor or its agents, or on account of any injuries allegedly sustained by reason of any obstruction, hole, depression or barrier placed or dug by the defendant or its agents, in the doing of the work

herein contracted for, that it will defend said suit and save the City harmless therein, and in case judgment is rendered against the City, the Contractor agrees to pay the same promptly. The Contractor agrees to carry public liability insurance in a solvent company in a sufficient amount to protect the City and those who use the streets of the City.

PAR. 9 The City shall have the right to appoint one or more construction reviewers who shall review the progress of the work in detail; also, to make any test or any material to be used in such work. No material shall be used in any work until the same has first been approved by the construction reviewer. Such construction reviewer shall have full authority to pass judgment upon all materials and upon the manner of doing the work, and their judgment on rejecting any materials, substance, or manner of work shall be final unless it is revoked or modified by the City Engineer.

PAR. 10 Any material, which has been rejected by the construction reviewer, shall be at once removed from the line of work and shall not be again taken thereon or placed with the material proposed to be used without the written consent of the City Engineer.

PAR. 11 The Contractor shall maintain no cause of action against the City on account of delays and prosecution of work, but if said work is delayed by the City, the Contractor shall have such extra time for completion of the job as was lost by reason of the delay caused by the City.

PAR. 12 The Contractor agrees to pay punctually all just claims of labor, material, men, or subcontractors who shall perform labor or furnish materials entering into this improvement. It is agreed that the City need not pay the Contractor until all such claims are paid by the Contractor. It is agreed that the City shall not be liable for said labor, material, or men under this contract.

PAR. 13 The Contractor agrees to furnish the City, simultaneously with this contract, a bond on a form to be provided by the City in the amount provided by law as stated in the Notice to Bidders, which shall be for the benefit of the City, and any and all persons injured by the breach of any of the terms of this contract. Said bond shall be filed with the City Clerk and shall be subject to the approval of the City Council and is by reference made a part of this contract.

PAR. 14 The Contractor agrees that should it abandon work under this contract or cease the prosecution thereof for a period of thirty (30) consecutive days without reasonable cause, and should it fail to proceed with said work within ten (10) days after a notice to continue or carry it on has been mailed to it at the address given herein by the City, or after such notice has been served on it, then the City may proceed to complete said work, using any material, tools, or machinery found along said line of work, doing the work either by contract or as it may elect, and the Contractor and the sureties on its bond shall be liable to the City for the costs and expenses so paid out. Said costs shall be retained by the City from any compensation due, or to become due the Contractor, and may be recovered by the City in an action upon Contractor's bond.

PAR. 15 In consideration of the full compliance on the part of the Contractor with all the provisions, stipulations, and conditions hereof, or contained in the various instruments made a part of this contract by reference, and upon completion and acceptance of said work, the City agrees to pay to the Contractor, in the manner set out in the Notice to Contractors, the amount of money due the Contractor for work performed and accepted, at the unit prices set out in the Contractor's proposal, which has been accepted by the City.

PAR. 16 The total amount of the contract, based on the Engineer's estimates of quantities and the Contractor's unit bid prices, and for which 100% surety bond is required is _____.

PAR. 17 After the completion of said work, the Contractor agrees to remove all debris and clean up said streets, and to save the City harmless from any damage allegedly resulting from a failure to clean up and remove the debris or put the street back in a proper condition for travel.

PAR. 18 This contract is not divisible, but in the event of a conflict between this contract and the various instruments incorporated by reference, this contract shall govern.

PAR. 19 Before the Contractor shall be entitled to receive final payment for work done under this contract, it shall execute and file a bond in the penal sum of not less than 100% of the total amount of the contract, same to be known as "Maintenance Bond," and which bond must be approved by the City Council, and which bond is in addition to the bond given by the Contractor to guarantee the completion of the work.

PAR. 20 The Contractor shall maintain all work done hereunder in good order for the period of two (2) years from and after the date it is accepted by the Council of the City of Waterloo, Iowa. Said maintenance shall be made without expense to the City or the abutting property. In the event of the failure or default of the Contractor to remedy any or all defects appearing in said work within a period of two (2) years from the date of its acceptance by said Council, and after having been given ten (10) days' notice so to do by registered letter deposited in the United States Post Office in said town, addressed to said contractor at the address herein given, then the City may proceed to remedy such defects. The costs and expenses thereof to be recovered from the Contractor and the sureties on its maintenance bond by an action brought in any court of competent jurisdiction.

PAR. 21 The Contractor shall give notice to said City by registered letter directed to the Mayor or City Clerk/Auditor thereof not more than four (4) and not less than three (3) months prior to the expiration of the term during which the Contractor is required to maintain said improvements, in good repair by the terms of its Contract. The liability of the Contractor and of the sureties on its bond for maintenance of the said improvements shall continue until three (3) months after such notice has been given to the City, and, in any event, until two (2) years after the acceptance of the work.

CITY OF WATERLOO, IOWA

_____
Mayor

_____
City Clerk

_____
Contractor

BY: _____

Title: _____

Approved by the City Council of the City of Waterloo, Iowa, this _____ day of _____, 20__.

ATTEST: _____, City Clerk
Waterloo, Iowa

THIS PAGE LEFT BLANK INTENTIONALLY

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____ of _____ _____ (the "Principal"), and _____ of _____ _____ (the "Surety"), are held and firmly bound unto the City of Waterloo, Iowa (the "Obligee"), in the penal sum of _____ Dollars ($_____), lawful money of the United States, for the payment of said sum in connection with a contract (the "Contract") dated on or about _____ for the purpose of _____ _____. The Contract is incorporated herein by reference as though fully set forth herein.

Whenever the Principal shall be and is declared by the Obligee to be in default under the Contract, with the Obligee having performed its obligations in the Contract, then the Surety, acknowledging that time is of the essence, may promptly remedy the default, or shall promptly undertake to:

1. Complete the Contract in accordance with its terms and conditions; or

2. Obtain one or more bids for completing the Contract in accordance with its terms and conditions, and upon determination by the Surety of the lowest responsible bidder, or negotiated proposal, or, if the Obligee elects, upon determination by the Obligee and the Surety jointly of the lowest responsible bidder, or negotiated proposal, arrange for a contract between such party and the Obligee. The Surety will make available as work progresses sufficient funds to pay the cost of completion less the balance of the Contract price. The cost of completion includes responsibilities of the Principal for correction of defective work and completion of the Contract, the Obligee's legal and design professional costs resulting directly from the Principal's default, and liquidated damages or actual damages if no liquidated damages are specified in the Contract. The term "balance of the Contract price" means the total amount payable by the Obligee to the Principal under the Contract and any amendments thereto, less the amount properly paid by the Obligee to the Principal; or

3. Determine the amount for which it is liable to the Obligee and pay the Obligee that amount as soon as practicable.

In the event this bond is enforced, Principal and Surety agree to indemnify Obligee and hold Obligee harmless from and against any and all costs of enforcement, including but not limited to reasonable attorneys' fees and expenses.

Every Surety on this bond shall be deemed and held, any contract to the contrary notwithstanding, to consent to each and all of the following matters, without notice:

1. To any extension of time to the Contract in which to perform the Contract.

2. To any change in the plans, specifications, or Contract when such change does not involve an increase of more than twenty percent (20%) of the total Contract price, and shall then be released only as to such excess increase.

3. That no provision of this bond or of any other contract shall be valid which limits to less than one (1) year from the time of the acceptance of the work the right to sue on this bond for defect in workmanship or material not discovered or known to the Obligee at the time such work was accepted.

If the Principal performs the Contract, then this bond shall be null and void; otherwise it shall remain in full force and effect. In no event shall the Surety's total obligation exceed the penal amount of this bond.

Terms used herein shall include, as appropriate, the singular or plural number, or the masculine, feminine or neuter gender.

IN WITNESS WHEREOF, the undersigned Principal and Surety have executed this Performance Bond as of _____.

PRINCIPAL	SURETY
_____	_____
Name	Name
By: _____	By: _____
Title: _____	Title: _____
	[attach Power of Attorney]

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR is Partnership, all partners should execute BOND.

If this project includes Federal Funds, the following applies to the payment bond.
IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

_____
(Name of Contractor)

_____
(Address of Contractor)

a _____

_____, hereinafter called Principal,
(Corporation, Partnership or Individual)

and, _____
(Name of Surety)

_____
(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

_____
(Name of Owner)

_____
(Address of Owner)

hereinafter called OWNER, in the penal sum of _____

Dollars ($_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the_____ day of _____, 20__, a copy of which is hereto attached and made a part hereof for the construction of:

FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION

CITY CONTRACT NO. 1075

WATERLOO, IOWA

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS HEREOF, this instrument is executed in _____ (number) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20__.

ATTEST:

_____
Principal

_____
(Principal) Secretary

(SEAL) By _____(s)

_____
(Address)

_____

_____

_____
Witness as to Principal

_____
(Address)

_____ _____
Surety

ATTEST: By _____
Attorney-in-Fact

_____ _____
Witness as to Surety (Address)

_____
(Address)

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR is Partnership, all partners should execute BOND.

If this project includes Federal Funds, the following applies to the payment bond:
IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

APPENDIX

APPENDIX
TABLE OF CONTENTS

1. Change Order Form
2. Davis-Bacon Wage Rates and Forms
   - A. Davis-Bacon Wage Rates
   - B. Form WH-347 Payroll and Certification
   - C. Form SF-1444 Request for Authorization of Additional Classification and Rate
   - D. Form WH-321 Notice Poster
3. Geotechnical Engineering Report

CHANGE ORDER NO. _____

Owner City of Waterloo Date _____

Project FY 2023 CATTLE CONGRESS SANITARY SEWER LIFT STATION RECONSTRUCTION

Owner's Contract No. City Contract No. 1075 Contractor _____

Date of Contract Start _____ $ _____

You are directed to make the following changes in the Contract Documents. Description:

Reason for Change Order:

CONTRACT PRICE		CONTRACT TIMES (Calendar Days)	To substantial completion	To final completion
Original:	$_____	Original Completion Date:	_____	_____
Previous CO's (ADD/DEDUCT):	$_____	Previous CO's (ADD/DEDUCT):	_____	_____
This CO (ADD/DEDUCT):	$_____	This CO (ADD/DEDUCT):	_____	_____
Contract Price with all approved Change Orders:	$_____	REVISED:	_____	_____
		Revised Completion Date:	_____	_____

It is agreed by the Contractor that this Change Order includes any and all costs associated with or resulting from the change(s) ordered herein, including all impact, delays, and acceleration costs. Other than the dollar amount and time allowance listed above, there shall be no further time or dollar compensation as a result of this Change Order.

THIS DOCUMENT SHALL BECOME AN AMENDMENT TO THE CONTRACT AND ALL STIPULATIONS AND COVENANTS OF THE CONTRACT SHALL APPLY HERETO.

APPROVED:

By: _____ _____
OWNER (Authorized Signature) Date

ACCEPTED:

By: _____ _____
CONTRACTOR (Authorized Signature) Date

AECOM, Inc.
/
Project Number / Change Order No.

DAVIS-BACON WAGE RATE DETERMINATION

"General Decision Number: IA20260003 05/18/2026

State: Iowa

Construction Types: Heavy

Counties: Iowa Counties of
Adair, Adams, Allamakee, Appanoose,
Audubon, Benton, Black Hawk, Boone,
Bremer, Buchanan, Buena Vista, Butler,
Calhoun, Carroll, Cass, Cedar, Cerro
Gordo, Cherokee, Chickasaw, Clarke,
Clay, Clayton, Clinton, Crawford,
Dallas, Davis, Decatur, Delaware, Des
Moines, Dickinson, Dubuque, Emmet,
Fayette, Floyd, Franklin, Fremont,
Greene, Grundy, Guthrie, Hamilton,
Hancock, Hardin, Harrison, Henry,
Howard, Humboldt, Ida, Iowa, Jackson,
Jasper, Jefferson, Johnson, Jones,
Keokuk, Kossuth, Lee, Linn, Louisa,
Lucas, Lyon, Madison, Mahaska, Marion,
Marshall, Mills, Mitchell, Monona,
Monroe, Montgomery, Muscatine, O'Brien,
Osceola, Page, Palo Alto, Plymouth,
Pocahontas, Polk, Pottawattamie,
Poweshiek, Ringgold, Sac, Scott, Shelby,
Sioux, Story, Tama, Taylor, Union, Van
Buren, Wapello, Warren, Washington,
Wayne, Webster, Winnebago, Winneshiek,
Woodbury, Worth and Wright

Except Scott County Sewer and Water Treatment Plants Only

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026

SUIA2002-004 12/01/2005

	Rates	Fringes
TRUCK DRIVERS (WATERLOO/CEDAR FALLS)	$ 24.21	10.50
TRUCK DRIVERS (SIOUX CITY)	$ 23.28	10.50
TRUCK DRIVERS (POLK COUNTY)	$ 25.68	10.50
TRUCK DRIVERS (MUSCATINE COUNTY)	$ 24.59	10.50
TRUCK DRIVERS (LINN COUNTY)	$ 27.10	10.50
TRUCK DRIVERS (IOWA CITY)	$ 26.34	10.50
TRUCK DRIVERS (FORT MADISON)	$ 24.59	10.50
TRUCK DRIVERS (DUBUQUE COUNTY (CITY OF DUBUQUE))	$ 24.06	10.50
TRUCK DRIVERS (COUNCIL BLUFFS)	$ 25.68	10.50
TRUCK DRIVERS (CLINTON, DUBUQUE, JOHNSON, LOUISA, MUSCATINE, DES MOINES, CEDAR AND LEE COUNTIES, EXCEPT ANY OF THE PREVIOUSLY NAMED CITIES)	$ 22.76	10.50
TRUCK DRIVERS (CLINTON COUNTY, CITY OF CLINTON)	$ 25.03	10.50
TRUCK DRIVERS (BURLINGTON AND KEOKUK)	$ 24.59	10.50
TRUCK DRIVERS (ALL OF THE STATE OF IOWA, EXCEPT FOR THE NAMED CITIES AND COUNTIES LISTED BELOW:)	$ 21.66	10.50
POWER EQUIPMENT OPERATOR: CLASS C- Waterboy, flagman, flagger/traffic control, watchman. ALL OF THE STATE OF IOWA, EXCEPT FOR THE NAMED CITIES AND COUNTIES LISTED BELOW	$ 31.65	14.55
POWER EQUIPMENT OPERATOR: CLASS B- Tree climber,		

form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3""""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (CLINTON, LOUISA, MUSCATINE, DES MOINES, CEDAR AND LEE COUNTIES, EXCEPT ANY OF THE PREVIOUSLY NAMED CITIES).....$ 31.85 31.85

POWER EQUIPMENT OPERATOR: CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3""""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (BURLINGTON AND KEOKUK)..$ 31.85 31.85

POWER EQUIPMENT OPERATOR: CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3""""),

compressors (under 400 CFM), general laborer,
rodman, hot asphalt labor, carpenter tender,
concrete finisher tender. ALL OF THE STATE OF
IOWA, EXCEPT FOR THE NAMED CITIES AND COUNTIES
LISTED BELOW:.....$ 34.03 14.55
POWER EQUIPMENT OPERATOR: CLASS B- Tree climber,
form setter, potmen (not mechanical), depth grade
checker, and cutting torches on demolition work,
trencher operator (walk behind), safety boat
operators, power buggyman, concrete and paving
sawmen, form line and expansion joint assembler,
bottomman, caulker-jointer and painter (striper),
timber and chair-sawman, mechanical stresser or
strechman on post-tension or pre-stressed concrete
on or off job, form tamper, air-gas and electric
tool opertors-vibrators-
Barcohammer-Pavec-tampers-electric drills-hammers
and jackhammers, tree groundman, chair tenders-tool
room men and checkers, concrete processing material
and monitors, stringman on paving work, broom
operator (not self propelled), fence erectors,
handling and placing of metal mesh, dowel bars,
reinforcing baars and chairs, dumpmen and spotters,
carring reinforcing rods, corrugated culvert pipe,
stake chaser, seeding or mulching and planting of
trees shrubs and flowers, water pumps (under 3"""),
compressors (under 400 CFM), general laborer,
rodman, hot asphalt labor, carpenter tender,
concrete finisher tender. (MUSCATINE COUNTY).....$ 31.85 31.85
POWER EQUIPMENT OPERATOR: CLASS B- Tree climber,
form setter, potmen (not mechanical), depth grade
checker, and cutting torches on demolition work,
trencher operator (walk behind), safety boat
operators, power buggyman, concrete and paving
sawmen, form line and expansion joint assembler,
bottomman, caulker-jointer and painter (striper),
timber and chair-sawman, mechanical stresser or
strechman on post-tension or pre-stressed concrete
on or off job, form tamper, air-gas and electric
tool opertors-vibrators-
Barcohammer-Pavec-tampers-electric drills-hammers
and jackhammers, tree groundman, chair tenders-tool
room men and checkers, concrete processing material
and monitors, stringman on paving work, broom
operator (not self propelled), fence erectors,
handling and placing of metal mesh, dowel bars,
reinforcing baars and chairs, dumpmen and spotters,
carring reinforcing rods, corrugated culvert pipe,
stake chaser, seeding or mulching and planting of
trees shrubs and flowers, water pumps (under 3"""),
compressors (under 400 CFM), general laborer,
rodman, hot asphalt labor, carpenter tender,
concrete finisher tender. (FORT MADISON).....$ 31.85 31.85
POWER EQUIPMENT OPERATOR: CLASS B- Tree climber,
form setter, potmen (not mechanical), depth grade
checker, and cutting torches on demolition work,
trencher operator (walk behind), safety boat
operators, power buggyman, concrete and paving
sawmen, form line and expansion joint assembler,
bottomman, caulker-jointer and painter (striper),
timber and chair-sawman, mechanical stresser or
strechman on post-tension or pre-stressed concrete
on or off job, form tamper, air-gas and electric
tool opertors-vibrators-
Barcohammer-Pavec-tampers-electric drills-hammers
and jackhammers, tree groundman, chair tenders-tool
room men and checkers, concrete processing material
and monitors, stringman on paving work, broom
operator (not self propelled), fence erectors,
handling and placing of metal mesh, dowel bars,

reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (CLINTON COUNTY, CITY OF CLINTON).....$ 31.85 31.85

POWER EQUIPMENT OPERATOR: CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (BURLINGTON AND KEOKUK).....$ 34.50 31.85

POWER EQUIPMENT OPERATOR: CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (FORT MADISON).....$ 34.50 31.85

POWER EQUIPMENT OPERATOR: CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (CLINTON COUNTY, CITY OF CLINTON).....$ 34.50 31.85

POWER EQUIPMENT OPERATOR: CLASS A- Asphalt laydown machine, Asphalt Plant Operator, Asphalt heater-planer unit, Backhoe, Bulldozer, Central Mix Plant, Concrete Pump, Crawler Tractor Pulling Scraper, Dredge Engineer, Dredge Leverman, Front-end Loader (over 2 yds), Group Equipment Greaser (unsupervised), Horizontal boring machine, Master Mechanic, Milling Machine, Motor Patrol, Porland Concrete Paver, Power Shovel, Crane & Dragline, Pushcat, Scraper (10 yards & over or finish), Self-propelled Elevation Grader or Similar Machine, Sideboom Tractor, Subgrader (or equivalent), Tow Push Boat or Work Boat, Trenching Machine (Cleveland 80 or similar capacity). (CLINTON, LOUISA, MUSCATINE, DES MOINES, CEDAR AND LEE COUNTIES, EXCEPT ANY OF THE PREVIOUSLY NAMED CITIES).....$ 34.50 31.85

POWER EQUIPMENT OPERATOR: CLASS A- Asphalt laydown machine, Asphalt Plant Operator, Asphalt heater-planer unit, Backhoe, Bulldozer, Central Mix Plant, Concrete Pump, Crawler Tractor Pulling Scraper, Dredge Engineer, Dredge Leverman, Front-end Loader (over 2 yds), Group Equipment Greaser (unsupervised), Horizontal boring machine, Master Mechanic, Milling Machine, Motor Patrol, Porland Concrete Paver, Power Shovel, Crane & Dragline, Pushcat, Scraper (10 yards & over or finish), Self-propelled Elevation Grader or Similar Machine, Sideboom Tractor, Subgrader (or

equivalent), Tow Push Boat or Work Boat, Trenching Machine (Cleveland 80 or similar capacity). ALL OF THE STATE OF IOWA, EXCEPT FOR THE NAMED CITIES AND COUNTIES LISTED BELOW:.....$ 35.73 14.55

POWER EQUIPMENT OPERATOR: CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (MUSCATINE COUNTY).....$ 34.50 31.85

POWER EQUIPMENT OPERATOR: (WATER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (WATERLOO/CEDAR FALLS).....$ 31.91 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (SIOUX CITY).....$ 31.91 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (LINN COUNTY).....$ 31.91 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (IOWA CITY).....$ 31.65 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (DUBUQUE COUNTY (INCLUDING CITY OF DUBUQUE) AND JOHNSON COUNTY).....$ 31.65 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (COUNCIL BLUFFS).....$ 31.65 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (DUBUQUE COUNTY (INCLUDING CITY OF DUBUQUE) AND JOHNSON COUNTY).....$ 34.03 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-

Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (SIOUX CITY).....$ 34.03 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (IOWA CITY).....$ 34.03 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (COUNCIL BLUFFS).....$ 34.03 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or

pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (WATERLOO/CEDAR FALLS).$ 34.03 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (LINN COUNTY).....$ 34.03 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (SIOUX CITY).....$ 35.73 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (LINN COUNTY).....$ 35.73 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators,

concrete saw operators, and skilled concrete laborers, deckhands. (IOWA CITY).....$ 35.73 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (COUNCIL BLUFFS).....$ 35.73 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (WATERLOO/CEDAR FALLS).....$ 35.73 14.55

POWER EQUIPMENT OPERATOR: (WATER) CLASS A- Asphalt laydown machine, Asphalt Plant Operator, Asphalt heater-planer unit, Backhoe, Bulldozer, Central Mix Plant, Concrete Pump, Crawler Tractor Pulling Scraper, Dredge Engineer, Dredge Leverman, Front-end Loader (over 2 yds), Group Equipment Greaser (unsupervised), Horizontal boring machine, Master Mechanic, Milling Machine, Motor Patrol, Porland Concrete Paver, Power Shovel, Crane & Dragline, Pushcat, Scraper (10 yards & over or finish), Self-propelled Elevation Grader or Similar Machine, Sideboom Tractor, Subgrader (or equivalent), Tow Push Boat or Work Boat, Trenching Machine (Cleveland 80 or similar capacity). (DUBUQUE COUNTY (INCLUDING CITY OF DUBUQUE) AND JOHNSON COUNTY).....$ 35.73 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (WATERLOO/CEDAR FALLS).....$ 31.91 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (SIOUX CITY).....$ 31.91 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (LINN COUNTY).....$ 31.91 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (IOWA CITY).....$ 31.91 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (COUNCIL BLUFFS).....$ 31.91 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (DUBUQUE COUNTY (INCLUDING CITY OF DUBUQUE) AND JOHNSON COUNTY).....$ 31.91 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS B-Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-

Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (LINN COUNTY).....$ 34.30 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (IOWA CITY).....$ 34.30 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (DUBUQUE COUNTY (INCLUDING CITY OF DUBUQUE) AND JOHNSON COUNTY).....$ 34.30 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical

stresser or strechman on post-tension or
pre-stressed concrete on or off job, form tamper,
air-gas and electric tool opertors-vibrators-
Barcohammer-Pavec-tampers-electric drills-hammers
and jackhammers, tree groundman, chair tenders-tool
room men and checkers, concrete processing material
and monitors, stringman on paving work, broom
operator (not self propelled), fence erectors,
handling and placing of metal mesh, dowel bars,
reinforcing baars and chairs, dumpmen and spotters,
carring reinforcing rods, corrugated culvert pipe,
stake chaser, seeding or mulching and planting of
trees shrubs and flowers, water pumps (under 3"""),
compressors (under 400 CFM), general laborer,
rodman, hot asphalt labor, carpenter tender,
concrete finisher tender. (COUNCIL BLUFFS).....$ 34.30 14.55
POWER EQUIPMENT OPERATOR: (SEWER) CLASS B- Tree
climber, form setter, potmen (not mechanical),
depth grade checker, and cutting torches on
demolition work, trencher operator (walk behind),
safety boat operators, power buggyman, concrete and
paving sawmen, form line and expansion joint
assembler, bottomman, caulker-jointer and painter
(striper), timber and chair-sawman, mechanical
stresser or strechman on post-tension or
pre-stressed concrete on or off job, form tamper,
air-gas and electric tool opertors-vibrators-
Barcohammer-Pavec-tampers-electric drills-hammers
and jackhammers, tree groundman, chair tenders-tool
room men and checkers, concrete processing material
and monitors, stringman on paving work, broom
operator (not self propelled), fence erectors,
handling and placing of metal mesh, dowel bars,
reinforcing baars and chairs, dumpmen and spotters,
carring reinforcing rods, corrugated culvert pipe,
stake chaser, seeding or mulching and planting of
trees shrubs and flowers, water pumps (under 3"""),
compressors (under 400 CFM), general laborer,
rodman, hot asphalt labor, carpenter tender,
concrete finisher tender.   (WATERLOO/CEDAR FALLS)..$ 34.30 14.55
POWER EQUIPMENT OPERATOR: (SEWER) CLASS B- Tree
climber, form setter, potmen (not mechanical),
depth grade checker, and cutting torches on
demolition work, trencher operator (walk behind),
safety boat operators, power buggyman, concrete and
paving sawmen, form line and expansion joint
assembler, bottomman, caulker-jointer and painter
(striper), timber and chair-sawman, mechanical
stresser or strechman on post-tension or
pre-stressed concrete on or off job, form tamper,
air-gas and electric tool opertors-vibrators-
Barcohammer-Pavec-tampers-electric drills-hammers
and jackhammers, tree groundman, chair tenders-tool
room men and checkers, concrete processing material
and monitors, stringman on paving work, broom
operator (not self propelled), fence erectors,
handling and placing of metal mesh, dowel bars,
reinforcing baars and chairs, dumpmen and spotters,
carring reinforcing rods, corrugated culvert pipe,
stake chaser, seeding or mulching and planting of
trees shrubs and flowers, water pumps (under 3"""),
compressors (under 400 CFM), general laborer,
rodman, hot asphalt labor, carpenter tender,
concrete finisher tender.   (SIOUX CITY).....$ 34.30 14.55
POWER EQUIPMENT OPERATOR: (SEWER) CLASS A-
Sandblaster, gunite nozzleman, diamond and core
drills powered by air, sewer utility man and laser
operator, all work performed by laborers working
from a bos'n chair, swinging stage, tagline or
block and tackle, drill operators of air tracks,

wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (SIOUX CITY).....$ 36.00 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (LINN COUNTY).....$ 36.00 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (IOWA CITY).....$ 36.00 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (COUNCIL BLUFFS).....$ 36.00 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS A- Asphalt laydown machine, Asphalt Plant Operator, Asphalt heater-planer unit, Backhoe, Bulldozer, Central Mix Plant, Concrete Pump, Crawler Tractor Pulling Scraper, Dredge Engineer, Dredge Leverman, Front-end Loader (over 2 yds), Group Equipment Greaser (unsupervised), Horizontal boring machine, Master Mechanic, Milling Machine, Motor Patrol, Porland Concrete Paver, Power Shovel, Crane & Dragline, Pushcat, Scraper (10 yards & over or finish), Self-propelled Elevation Grader or Similar Machine, Sideboom Tractor, Subgrader (or equivalent), Tow Push Boat or Work Boat, Trenching Machine (Cleveland 80 or similar capacity). (DUBUQUE COUNTY (INCLUDING CITY OF DUBUQUE) AND JOHNSON COUNTY).....$ 36.00 14.55

POWER EQUIPMENT OPERATOR: (SEWER) CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (WATERLOO/CEDAR FALLS).....$ 36.00 14.55

OPERATOR: POWER EQUIPMENT: (SEWER) CLASS A- Asphalt laydown machine, Asphalt Plant Operator, Asphalt heater-planer unit, Backhoe, Bulldozer, Central Mix Plant, Concrete Pump, Crawler Tractor Pulling Scraper, Dredge Engineer, Dredge Leverman,

Front-end Loader (over 2 yds), Group Equipment Greaser (unsupervised), Horizontal boring machine, Master Mechanic, Milling Machine, Motor Patrol, Porland Concrete Paver, Power Shovel, Crane & Dragline, Pushcat, Scraper (10 yards & over or finish), Self-propelled Elevation Grader or Similar Machine, Sideboom Tractor, Subgrader (or equivalent), Tow Push Boat or Work Boat, Trenching Machine (Cleveland 80 or similar capacity). (POLK, WARREN, DALLAS, STORY & JASPER COUNTIES).....$ 36.00 14.55

OPERATOR: POWER EQUIPMENT (WATER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (POLK, WARREN, DALLAS, STORY & JASPER COUNTIES).....$ 31.65 14.55

OPERATOR: POWER EQUIPMENT (WATER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom operator (not self propelled), fence erectors, handling and placing of metal mesh, dowel bars, reinforcing baars and chairs, dumpmen and spotters, carring reinforcing rods, corrugated culvert pipe, stake chaser, seeding or mulching and planting of trees shrubs and flowers, water pumps (under 3"""), compressors (under 400 CFM), general laborer, rodman, hot asphalt labor, carpenter tender, concrete finisher tender. (POLK, WARREN, DALLAS, STORY & JASPER COUNTIES).....$ 34.03 14.55

OPERATOR: POWER EQUIPMENT (WATER) CLASS A- Sandblaster, gunite nozzleman, diamond and core drills powered by air, sewer utility man and laser operator, all work performed by laborers working from a bos'n chair, swinging stage, tagline or block and tackle, drill operators of air tracks, wagon drills and similar drills, steel highway formsetter, stingman, powerman blaster, asphalt luteman and rakers, asphalt distributor operators, concrete saw operators, and skilled concrete laborers, deckhands. (POLK, WARREN, DALLAS, STORY & JASPER COUNTIES).....$ 35.73 14.55

OPERATOR: POWER EQUIPMENT (SEWER) CLASS C- Waterboy, flagman, flagger/traffic control, watchman. (POLK, WARREN, DALLAS, STORY & JASPER COUNTIES).....$ 31.91 14.55

OPERATOR: POWER EQUIPMENT (SEWER) CLASS B- Tree climber, form setter, potmen (not mechanical), depth grade checker, and cutting torches on demolition work, trencher operator (walk behind), safety boat operators, power buggyman, concrete and paving sawmen, form line and expansion joint assembler, bottomman, caulker-jointer and painter (striper), timber and chair-sawman, mechanical stresser or strechman on post-tension or pre-stressed concrete on or off job, form tamper, air-gas and electric tool opertors-vibrators-Barcohammer-Pavec-tampers-electric drills-hammers and jackhammers, tree groundman, chair tenders-tool room men and checkers, concrete processing material and monitors, stringman on paving work, broom

operator (not self propelled), fence erectors,
handling and placing of metal mesh, dowel bars,
reinforcing baars and chairs, dumpmen and spotters,
carring reinforcing rods, corrugated culvert pipe,
stake chaser, seeding or mulching and planting of
trees shrubs and flowers, water pumps (under 3"""),
compressors (under 400 CFM), general laborer,
rodman, hot asphalt labor, carpenter tender,
concrete finisher tender. (POLK, WARREN, DALLAS,
STORY & JASPER COUNTIES) SEWER.....$ 34.30 14.55
LABORERS (WATERLOO/CEDAR FALLS).....$ 26.89 9.38
LABORERS (SIOUX CITY).....$ 26.89 9.38
LABORERS (POLK COUNTY).....$ 30.77 9.38
LABORERS (MUSCATINE COUNTY (CITY OF MUSCATINE))....$ 30.35 9.38
LABORERS (LINN COUNTY).....$ 30.87 9.38
LABORERS (IOWA CITY).....$ 28.35 9.38
LABORERS (FORT MADISON).....$ 30.11 9.38
LABORERS (DUBUQUE COUNTY (CITY OF DUBUQUE))....$ 26.89 9.38
LABORERS (COUNCIL BLUFFS).....$ 26.89 9.38
LABORERS (CLINTON, DUUQUE, JOHNSON, LOUISA,
MUSCATINE, DES MOINES, CEDAR AND LEE COUNTIES,
EXCEPT ANY OF THE PREVIOUSLY NAMED CITIES).....$ 26.89 9.38
LABORERS (CLINTON COUNTY, CITY OF CLINTON).....$ 29.52 9.38
LABORERS (BURLINGTON AND KEOKUK).....$ 30.11 9.38
LABORERS (ALL OF THE STATE OF IOWA, EXCEPT FOR THE
NAMED CITIES AND COUNTIES LISTED BELOW:).....$ 25.14 9.38
IRONWORKER (WATERLOO/CEDAR FALLS).....$ 27.53 16.37
IRONWORKER (SIOUX CITY).....$ 18.57 16.37
IRONWORKER (POLK COUNTY).....$ 27.37 16.37
IRONWORKER (MUSCATINE COUNTY).....$ 35.04 16.37
IRONWORKER (LINN COUNTY).....$ 27.53 16.37
IRONWORKER (IOWA CITY).....$ 27.53 16.37
IRONWORKER (FORT MADISON).....$ 28.58 16.37
IRONWORKER (DUBUQUE COUNTY (CITY OF DUBUQUE)).....$ 27.53 16.37
IRONWORKER (COUNCIL BLUFFS).....$ 24.15 16.37
IRONWORKER (CLINTON, DUBUQUE, JOHNSON, LOUISA,
MUSCATINE, DES MOINES, CEDAR AND LEE COUNTIES,
EXCEPT ANY OF THE PREVIOUSLY NAMED CITIES).....$ 23.75 16.37
IRONWORKER (CLINTON COUNTY, CITY OF CLINTON).....$ 35.04 16.37
IRONWORKER (BURLINGTON AND KEOKUK).....$ 28.58 16.37
IRONWORKER (ALL OF THE STATE OF IOWA, EXCEPT FOR
THE NAMED CITIES OR COUNTIES LISTED BELOW:).....$ 23.75 16.37
CEMENT MASON (WATERLOO/CEDAR FALLS).....$ 31.68 11.05
CEMENT MASON (SIOUX CITY).....$ 34.17 11.05
CEMENT MASON (POLK COUNTY).....$ 36.89 11.05
CEMENT MASON (MUSCATINE COUNTY).....$ 36.89 11.05
CEMENT MASON (LINN COUNTY).....$ 36.89 11.05
CEMENT MASON (IOWA CITY).....$ 36.89 11.05
CEMENT MASON (FORT MADISON).....$ 35.45 11.05
CEMENT MASON (DUBUQUE COUNTY (CITY OF DUBUQUE)).....$ 36.98 11.05
CEMENT MASON (COUNCIL BLUFFS).....$ 33.55 11.05
CEMENT MASON (CLINTON, DUBUQUE, JOHNSON, LOUISA,
MUSCATINE, DES MOINES, CEDAR AND LEE COUNTIES,
EXCEPT ANY OF THE PREVIOUSLY NAMED CITIES).....$ 31.53 11.05
CEMENT MASON (CLINTON COUNTY, CITY OF CLINTON).....$ 36.89 11.05
CEMENT MASON (BURLINGTON AND KEOKUK).....$ 36.89 11.05
CEMENT MASON (ALL OF THE STATE OF IOWA, EXCEPT FOR
THE NAMED CITIES AND COUTIES LISTED BELOW:).....$ 27.40 11.05
CARPENTERS (WATERLOO/CEDAR FALLS).....$ 29.53 17.49
CARPENTERS (SIOUX CITY).....$ 33.33 13.68
CARPENTERS (POLK COUNTY).....$ 37.53 13.54
CARPENTERS (MUSCATINE COUNTY, CITY OF MUSCATINE)....$ 27.97 18.50
CARPENTERS (LINN COUNTY).....$ 33.58 17.49
CARPENTERS (IOWA CITY).....$ 29.53 17.49
CARPENTERS (FORT MADISON).....$ 29.53 17.49
CARPENTERS (DUBUQUE COUNTY (CITY OF DUBUQUE)).....$ 29.53 17.49
CARPENTERS (COUNCIL BLUFFS).....$ 33.33 13.68
CARPENTERS (CLINTON, DUBUQUE, JOHNSON, LOUISA,
MUSCATNE, DES MOINES, CEDAR AND LEE COUNTIES,
EXCEPT ANY OF THE PREVIOUSLY NAMED CITIES).....$ 25.45 15.49

CARPENTERS (CLINTON COUNTY, CITY OF CLINTON).....$ 29.53 17.49
CARPENTERS (BURLINGTON AND KEOKUK).....$ 29.53 17.49
CARPENTERS (ALL OF THE STATE OF IOWA, EXCEPT THE
NAMED CITIES AND COUNTIES LISTED BELOW:).....$ 27.26 13.68

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.
==========
Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than "SU", "UAVG", "SA", or "SC" denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated

rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The "SU" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

"SU" wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The "SA" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the "SA" identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests

for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

==========

END OF GENERAL DECISION

"

U.S. Department of Labor
Employment Standards Administration
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/esa/whd/forms/wh347instr.htm)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

U.S. Wage and Hour Division

Rev. Dec. 2008

OMB No.: 1215-0149
Expires: 12/31/2011

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☐	ADDRESS	
PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION / PROJECT OR CONTRACT NO.

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE — HOURS WORKED EACH DAY	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS — FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
			O											
			S											
			O											
			S											
			O											
			S											
			O											
			S											
			O											
			S											
			O											
			S											
			O											
			S											
			O											
			S											

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, ESA, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date _____

I, _____ _____
(Name of Signatory Party) (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

_____ on the
(Contractor or Subcontractor)

_____; that during the payroll period commencing on the
(Building or Work)

_____ day of _____, _____, and ending the _____ day of _____, _____,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

_____ from the full
(Contractor or Subcontractor)

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Start. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

_____

_____

_____

_____

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

Request For Authorization Of Additional Classification And Rate	Check Appropriate Box ☐ Service Contract ☐ Construction Contract	**OMB Control Number: 9000-0066** **Expiration Date: 5/31/2027**

Instructions: The Contractor shall complete items 3 through 16, keep a pending copy, and submit the request, in quadruplicate, to the Contracting Officer.

1. **To:** Administrator, Wage And Hour Division U.S. Department Of Labor Washington, DC 20210	2. **From:** (Reporting Office)
3. Contractor	4. Date Of Request

5. Contract Number	6. Date Bid Opened (Sealed Bidding)	7. Date Of Award	8. Date Contract Work Started	9. Date Option Exercised (If Applicable) (Service Contract Only)

10. Subcontractor (If Any)

11. Project And Description Of Work (Attach Additional Sheet If Needed)

12. Location (City, County, And State)

13. In Order To Complete The Work Provided For Under The Above Contract, It Is Necessary To Establish The Following Rate(s) For The Indicated Classification(s) Not Included In The Department Of Labor Determination

Number: Dated:

a. List In Order: Proposed Classification Title(s); Job Description(s); Duties; And Rationale For Proposed Classifications (Service contracts only)	b. Wage Rate(s)	c. Fringe Benefits Payments
(Use reverse or attach additional sheets, if necessary)		

14. Signature And Title Of Subcontractor Representative (If Any)	15. Signature And Title Of Prime Contractor Representative

16. Signature Of Employee Or Representative	Title	Check Appropriate Box - Referencing Block 13. ☐ Agree ☐ Disagree

To Be Completed By Contracting Officer (Check As Appropriate - See FAR 22.1019 (Service Contract Labor Standards) Or FAR 22.406-3 (Construction Wage Rate Requirements))

☐ The Interested Parties Agree And The Contracting Officer Recommends Approval By The Wage And Hour Division. Available Information And Recommendations Are Attached.

☐ The Interested Parties Cannot Agree On The Proposed Classification And Wage Rate. A Determination Of The Question By The Wage And Hour Division Is Therefore Requested. Available Information And Recommendations Are Attached.

(Send 3 copies to the Department of Labor)

Signature Of Contracting Officer Or Representative	Title And Commercial Telephone Number	Date Submitted

Paperwork Reduction Act Statement

This information collection meets the requirements of 44 U.S.C. § 3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 9000-0066. We estimate that it will take .5 hours to read the instructions, gather the facts, and answer the questions. Send only comments relating to our time estimate, including suggestions for reducing this burden, or any other aspects of this collection of information to: U.S. General Services Administration, Regulatory Secretariat Division (M1V1CB), 1800 F Street, NW, Washington, DC 20405.

EMPLOYEE RIGHTS
UNDER THE DAVIS-BACON ACT

FOR LABORERS AND MECHANICS EMPLOYED ON FEDERAL OR FEDERALLY ASSISTED CONSTRUCTION PROJECTS

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

PREVAILING WAGES — You must be paid not less than the wage rate listed in the Davis-Bacon Wage Decision posted with this Notice for the work you perform.

OVERTIME — You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 in a work week. There are few exceptions.

ENFORCEMENT — Contract payments can be withheld to ensure workers receive wages and overtime pay due, and liquidated damages may apply if overtime pay requirements are not met. Davis-Bacon contract clauses allow contract termination and debarment of contractors from future federal contracts for up to three years. A contractor who falsifies certified payroll records or induces wage kickbacks may be subject to civil or criminal prosecution, fines and/or imprisonment.

APPRENTICES — Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

PROPER PAY — If you do not receive proper pay, or require further information on the applicable wages, contact the Contracting Officer listed below:

or contact the U.S. Department of Labor's Wage and Hour Division.

For additional information:

1-866-4-USWAGE

(1-866-487-9243) TTY: 1-877-889-5627

U.S. Wage and Hour Division

WWW.WAGEHOUR.DOL.GOV

U.S. Department of Labor | Employment Standards Administration | Wage and Hour Division

GEOTECHNICAL REPORT

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT
Human Resources Department

MEETING DATE
June 15, 2026

AGENDA ITEM TITLE
Resolution approving a three percent salary increase for non-bargaining employees effective July 1, 2026.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS
1. 6-1-2026 Non Bargaining Wage increase
2. Copy of 7.1.2026 3% Non Bargaining Raises Updated 06.01.2026

CITY OF WATERLOO IOWA
Community of Opportunity

715 Mulberry St, Waterloo, IA 50703
Phone: (319) 291-4303
Fax: (319) 291-4569
CITYOFWATERLOOIOWA.COM

Human Resources Department

June 1, 2026

Mayor and City Council

I am writing in reference to the item on the City Council agenda that recommends a 3% across the board increase for non-bargaining employees. I am also referencing that the 3% salary increase will maintain the required 12% salary gap, per the employee handbook, for the Waterloo Fire Department Battalion Chiefs. I am also referencing that the Waterloo Police Department Captains receive a 3.75% increase to maintain the required 12% salary gap, per the employee handbook. Also, the Assistant Chief of Police will receive a 3.75% increase to maintain the salary gap to prevent compression. I have attached a chart that shows the proposed grade & step placement, as well as the hourly rate and annual salary for each non-bargaining employee.

The Finance Department has calculated an approximate cost of $403,882 for this increase with $299,882 of this amount coming from the general fund. The dollars to fund this increase were approved by the City Council for next year's budget.

Sincerely,

Lance Dunn

Lance Dunn

Employee Number	Employee Name	Department Description
10187	COMBS, SHEILA M	Airport
12622	KJERGAARD, STEVEN	Airport
12974	BIRETZ, AIMEE L	City Attorney
11913	PETERSEN, MARTIN M	City Attorney
11387	SPARKS, JENNIFER L	Building Department/Inspections
10181	BAKER, BRIAN	Building Department/Inspections
10363	ANDREWS, ELIZABETH	Cultural & Arts
10710	BURKLE, CAMILLE LYNN	Cultural & Arts
12739	DONATI, ERIN L	Cultural & Arts
12963	GLEISSNER, JIM A	Cultural & Arts
10379	HICKOK, ANGELA J	Cultural & Arts
10369	PAIGE, CHAWNE	Cultural & Arts
10820	REID, ANGELA J	Cultural & Arts
11881	SIMMONS, AMANDA R	Cultural & Arts
12704	TAYLOR, DARRELL R	Cultural & Arts
12573	WAGGONER-NORQUEST, JOANNA L	Cultural & Arts
10866	WELLHOUSE, AMANDA CAROLINE	Cultural & Arts
10945	WELSH, JASON RICHARD	Cultural & Arts
12299	WILSON, JOSHUA A	Cultural & Arts
11378	EVEN, LEANN M	City Clerk
11035	FELCHLE, KELLEY M	City Clerk
10994	HIGBY, NANCY A	City Clerk
12965	CARD, SUE	Community Development
11522	FORDYCE, ANGELA K	Community Development
12544	JORDAN, LONTAVIUS J	Community Development
12390	SHAVERS, STEPHANIE M	Community Development
12540	SOUTHALL, TRACEY A	Community Development
10035	CASTLE, WILLIAM W	Engineering/Road Use Tax
10038	KNUTSON, JAMIE	Engineering/Road Use Tax
11828	SCHINDEL, MATTHEW J	Engineering/Road Use Tax
10440	BECK, WILLIAM	Fire Department
10479	LEE, KEVIN	Fire Department
10477	LUCK, TROY L	Fire Department
10449	PETERSEN, BENJAMIN	Fire Department
10430	WELIVER, BROCK	Fire Department
12410	ZWANZIGER, KAYLA L	Fire Department
12632	WARD, DAWN R	Fire Department/Ambulance
11523	BAHR, KIMBERLY A	Finance
10009	GRAHAM, EMILY	Finance
12828	VISSER, MEAGAN G	Finance
12374	WOOD, BRIDGETT	Finance
11324	STRANGE, RICHARD MICHAEL	Central Garage
103959	DUNN, LANCE	Human Resources
10019	FISCHELS, NICOLE	Human Resources
12298	GEARHART, MELISSA	Human Resources

3786	WINSTON, KATE M	Human Resources
10411	JOHNSON, REBECCA	Human Rights
11791	KIRBY, RICHARD T	Housing/Ridgeway Towers
12888	BAKER, ANN L	Housing/Voucher
12785	HALL, LATOYA C	Housing/Voucher
11325	JACKSON, DANA LEE	Housing/Voucher
12246	MCGEE, JENNIFER L	Housing/Voucher
12872	MOORE, TATIANA M	Housing/Voucher
11978	MUHIC, SENADA	Housing/Voucher
12604	VEASLEY, LEKEISHA L	Housing/Voucher
12976	DEGERATU, ROBBIN Z	Library
10547	MILLER, BECKY K	Library
12711	NELSON, BETHANY D	Library
10566	PETERSEN, LORI A	Library
10545	ROUSSELOW, AMY L	Library
11815	RUTLEDGE, JILLIAN E	Library
10327	BOLGER, JAMES	Leisure Services/Parks
12941	CINNAMON, LOGAN M	Leisure Services/Parks
10352	DERIFIELD, TODD	Leisure Services/Parks
12186	GELLER, JACOB F	Leisure Services/Parks
12099	KAYSER, MORGANNE J	Leisure Services/Parks
10346	NICHOLS, TRAVIS	Leisure Services/Parks
101454	BOSS, BRIANNE	Leisure Services/SportsPlex
10266	DENNER, CRAIG	Leisure Services/SportsPlex
10281	ETRINGER, ROBERT J	Leisure Services/SportsPlex
10927	JACKSON, COURTNEY NOELLE	Leisure Services/SportsPlex
10809	RUTLEDGE, BRYAN ANDREW	Leisure Services/SportsPlex
10282	HILDMAN, ALEX	Leisure Services/Sports
10195	DOLAN, CHRISTOPHER	Leisure Services/Young Arena
10193	SCHAEFER, JACOB J	Leisure Services/Young Arena
11942	KRESS, AGNES M	Management Information Systems
10001	STOFFER, EDWARD	Management Information Systems
10027	WAGNER, BENJAMIN A	Management Information Systems
11106	YOUNGBLUT, CHRISTOPHER J	Management Information Systems
12995	FREIN, SHELLY A	Mayor
3622	DUNCAN, ROBERT	Police Department
3664	FARMER, AUGUSTIN W	Police Department
3631	FEAKER, JASON P	Police Department
3626	MCCLELLAND, AARON	Police Department
3761	WYBORNEY, KIMBERLY J	Police Department
10109	ANDERSON, NOEL C	Planning & Zoning
12824	LITTLE, ALYISSA K	Planning & Zoning
10110	SCHROEDER, ARIC	Planning & Zoning
11786	BENNETT, RANDY L	Street Department
10344	BOQUIST, MATT C	Street Department
12541	BRIMMER, YVONNE M	Street Department

10076	GREER, DANIEL	Street Department
12411	STEFFEN, SHEILA K	Street Department
103322	ELAHI, SAFIAH	Traffic Operations
12619	REITER, BARBARA L	Traffic Operations
11969	BRUNSON, SCOTT A	Waste Management/Sanitation
10015	ELLIS, ELLA	Waste Management/Sanitation
3774	CHASE, AMBER M	Waste Management/Sewer
12185	FISCHELS, DAMIAN	Waste Management/Sewer
10154	GAHERTY, JESSE	Waste Management/Sewer
10153	MANAHL, BRAD J	Waste Management/Sewer

Benefit Group Description	Job Title
Admin Group - Non-Exempt	29-009 - Airport Business Manager
Admin Group Director - Exempt	29-001 - Director of Aviation
Admin Group - Non-Exempt	06-002 - Legal Secretary
Admin Group Director - Exempt	06-003 - City Attorney
Admin Group - Non-Exempt	22-002 - Interim Building Official
Admin Group - Non-Exempt	22-003 - Interim Building Official
Admin Group - Non-Exempt	26-002 - Associate Curator Registrar
Admin Group - Exempt	26-021 - Event Coordinator
Admin Group - Non-Exempt	26-004 - Graphic Designer / Dig Arts Mgr
Admin Group - Non-Exempt	26-011 - Technician / Preparator
Admin Group - Non-Exempt	26-012 - Youth Pavilion Manager
Admin Group Director - Exempt	26-001 - Culture & Arts Director
Admin Group - Exempt	26-007 - Education Coordinator
Admin Group - Non-Exempt	26-005 - Development Marketing Manager
Admin Assistant Director- Exempt	26-006 - Curator Assistant Director
Admin Group - Non-Exempt	26-028 - Administrative Assistant
Admin Group - Non-Exempt	26-027 - Facilities Services Specialist
Admin Group - Non-Exempt	26-022 - Facilities Services Manager
Admin Group - Non-Exempt	26-023 - Facilities Services Specialist
Admin Assistant Director- Exempt	03-005 - Deputy City Clerk
Admin Group Director - Exempt	03-003 - City Clerk
Admin Assistant Director- Exempt	03-021 - Deputy City Clerk
Admin Group - Non-Exempt	32-005 - Program Support Specialist
Admin Group - Exempt	32-004 - Community Development Coord
Admin Group - Non-Exempt	32-012 - Rehabilitation Specialist
Admin Group - Exempt	32-003 - Neighborhood Services Coord
Admin Group - Non-Exempt	32-006 - HOUSING PROGRAM MANAGER
Admin Assistant Director- Exempt	07-002 - Assistant City Engineer
Admin Assistant Director- Exempt	07-001 - City Engineer
Admin Group - Exempt	07-022 - Principal Engineer
Admin Group Director - Exempt	12-077 - Chief of Fire Services
Admin Group Fire 24 Hr - Exempt	12-102 - Battalion Chief - 24hr
Admin Group Fire 24 Hr - Exempt	12-100 - Battalion Chief - 24hr
Admin Group Fire 24 Hr - Exempt	12-101 - Battalion Chief - 24hr
Admin Assistant Director- Exempt	12-133 - Battalion Chief Fire Marshal
Admin Group - Non-Exempt	12-104 - Administrative Secretary
Admin Group - Non-Exempt	12-108 - EMS Administrative Assistant
Admin Assistant Director- Exempt	03-020 - Assistant Finance Director
Admin Group - Exempt	03-007 - Financial Analyst
Admin Group - Exempt	03-006 - Financial Analyst
Admin Group Director - Exempt	03-004 - Director of Finance
Admin Assistant Director- Exempt	18-011 - Fleet Maintenance Director
Admin Group Director - Exempt	09-006 - Human Resources Director
Admin Group - Non-Exempt	09-003 - Human Resources Specialist
Admin Assistant Director- Exempt	09-001 - Asst. Human Resources Director

Admin Group - Non-Exempt	09-002 - Administrative Secretary
Admin Group - Exempt	27-002 - Human Rights Specialist
Admin Group - Non-Exempt	13-005 - Housing Authority Maintenance
Admin Group - Non-Exempt	13-001 - Bookkeeper
Admin Group - Non-Exempt	13-007 - Housing Coordinator
Admin Group - Non-Exempt	13-004 - WHA Inspector Supervisor
Admin Group - Non-Exempt	13-009 - Housing Coordinator
Admin Group - Non-Exempt	13-002 - Housing Coordinator
Admin Group - Exempt	13-011 - Compliance Supervisor
Admin Assistant Director- Exempt	13-003 - Housing Authority Director
Admin Group Director - Exempt	33-001 - Library Director
Admin Group Library - Exempt	33-049 - Public Services Manager
Admin Group Library - Exempt	33-035 - Business Office Manager
Admin Group Library - Exempt	33-037 - Youth and Teen Services Manager
Admin Group Library - Exempt	33-007 - Marketing & Volunteer Manager
Admin Assistant Director- Exempt	33-048 - TECHNICAL SYSTEMS & COLLECTION MANAGER
Admin Assistant Director- Exempt	37-002 - Asst Leisure Services Director
Admin Group - Exempt	37-012 - City Forester
Admin Group Director - Exempt	37-003 - Leisure Services Director
Admin Group - Non-Exempt	37-095 - Natural Resources Technician
Admin Group - Non-Exempt	37-001 - Office Coordinator/Bookkeeper
Admin Group - Exempt	37-019 - Facilities Manager
Admin Group - Non-Exempt	37-053 - Aquatics Mbr Services Spec
Admin Group - Non-Exempt	37-055 - Facilities Specialist
Admin Assistant Director- Exempt	37-056 - Recreation Services Manager
Admin Group - Non-Exempt	37-091 - Member Services/Mktg Specialist
Admin Group - Non-Exempt	37-054 - FITNESS SPECIALIST
Admin Group - Non-Exempt	37-006 - Recreational Specialist
Admin Group - Exempt	37-008 - Arena Manager
Admin Group - Non-Exempt	37-007 - Recreational Specialist
Admin Group - Non-Exempt	03-016 - Digital Media Production Asst
Admin Group - Exempt	03-011 - Cable TV Production Coordinator
Admin Group - Exempt	01-009 - GIS Coordinator
Admin Group Director - Exempt	01-004 - Director of Info Technology
Admin Group - Non-Exempt	01-003 - Executive Secretary
Admin Group Director - Exempt	11-002 - Chief of Police
Admin Group Police - Exempt	11-141 - Police Captain
Admin Group Police - Exempt	11-143 - Police Captain
Admin Group Police - Exempt	11-003 - Assistant Chief
Admin Group - Non-Exempt	11-138 - Administrative Secretary
Admin Group Director - Exempt	08-004 - Comm Planning & Dev Director
Admin Group - Non-Exempt	08-007 - Administrative Secretary
Admin Assistant Director- Exempt	08-001 - City Planner
Admin Group Director - Exempt	18-001 - Division Manager Public Works
Admin Assistant Director- Exempt	19-044 - Street Director
Admin Group - Non-Exempt	19-021 - Administrative Secretary

Admin Group - Exempt	19-004 - Street Director
Admin Assistant Director- Exempt	19-045 - Public Works Coordinator
Admin Assistant Director- Exempt	17-001 - Traffic Operations Director
Admin Group - Non-Exempt	17-009 - Administrative Secretary
Admin Assistant Director- Exempt	15-018 - Operations Supervisor - Sani
Admin Group - Non-Exempt	15-017 - Administrative Secretary
Admin Group - Non-Exempt	14-015 - Administrative Secretary
Admin Assistant Director- Exempt	14-054 - Safety Compliance Director
Admin Assistant Director- Exempt	14-053 - Collection Systems Proj Director
Admin Assistant Director- Exempt	14-003 - Asst Dir/Treatment Oper Sup

Grade	Step	Base Rate	3% Projected Rate	Base Annual
Admin 5	Admin 5 - G	$ 35.02	$ 36.07	$ 72,841.60
Admin 11	Admin 11 - J	$ 63.39	$ 65.29	$ 131,851.20
Admin 4	Admin 4 - B	$ 29.37	$ 30.25	$ 61,089.60
Admin 12	Admin 12 - G	$ 65.26	$ 67.22	$ 135,740.80
HOURLY	HOURLY	$ 37.41	$ 38.53	$ 77,812.80
HOURLY	HOURLY	$ 44.29	$ 45.62	$ 92,123.20
Admin 6	Admin 6 - A	$ 32.26	$ 33.23	$ 67,100.80
Admin 6	Admin 6 - A	$ 32.26	$ 33.23	$ 67,100.80
Admin 3	Admin 3 - A	$ 25.93	$ 26.71	$ 53,934.40
Admin 4	Admin 4 - A	$ 28.51	$ 29.37	$ 59,300.80
Admin 5	Admin 5 - A	$ 29.32	$ 30.20	$ 60,985.60
Admin 11	Admin 11 - B	$ 50.04	$ 51.54	$ 104,083.20
Admin 6	Admin 6 - A	$ 32.26	$ 33.23	$ 67,100.80
Admin 3	Admin 3 - A	$ 25.93	$ 26.71	$ 53,934.40
Admin 8	Admin 8 - A	$ 39.04	$ 40.21	$ 81,203.20
Admin 3	Admin 3 - A	$ 25.93	$ 26.71	$ 53,934.40
Admin 3	Admin 3 - A	$ 25.93	$ 26.71	$ 53,934.40
Admin 4	Admin 4 - A	$ 28.51	$ 29.37	$ 59,300.80
Admin 3	Admin 3 - A	$ 25.93	$ 26.71	$ 53,934.40
Admin 6	Admin 6 - D	$ 35.26	$ 36.32	$ 73,340.80
Admin 11	Admin 11 - J	$ 63.39	$ 65.29	$ 131,851.20
Admin 6	Admin 6 - B	$ 33.23	$ 34.23	$ 69,118.40
Admin 2	Admin 2 - D	$ 25.75	$ 26.52	$ 53,560.00
Admin 7	Admin 7 - C	$ 37.65	$ 38.78	$ 78,312.00
Admin 4	Admin 4 - A	$ 28.51	$ 29.37	$ 59,300.80
Admin 5	Admin 5 - A	$ 29.32	$ 30.20	$ 60,985.60
Admin 5	Admin 5 - A	$ 29.32	$ 30.20	$ 60,985.60
Admin 10	Admin 10 - H	$ 58.09	$ 59.83	$ 120,827.20
Admin 11	Admin 11 - I	$ 61.54	$ 63.39	$ 128,003.20
Admin 10	Admin 10 - F	$ 54.75	$ 56.39	$ 113,880.00
Admin 13	Admin 13 - H	$ 75.62	$ 77.89	$ 157,289.60
HOURLY	HOURLY	$ 44.11	$ 45.43	$ 121,567.16
HOURLY	HOURLY	$ 44.11	$ 45.43	$ 121,567.16
HOURLY	HOURLY	$ 44.11	$ 45.43	$ 121,567.16
HOURLY	HOURLY	$ 58.42	$ 60.17	$ 121,513.60
Admin 3	Admin 3 - D	$ 28.33	$ 29.18	$ 58,926.40
Admin 3	Admin 3 - D	$ 28.33	$ 29.18	$ 58,926.40
Admin 9	Admin 9 - F	$ 49.78	$ 51.27	$ 103,542.40
Admin 5	Admin 5 - I	$ 37.15	$ 38.26	$ 77,272.00
Admin 5	Admin 5 - B	$ 30.21	$ 31.12	$ 62,836.80
Admin 12	Admin 12 - G	$ 65.26	$ 67.22	$ 135,740.80
Admin 8	Admin 8 - D	$ 42.65	$ 43.93	$ 88,712.00
Admin 12	Admin 12 - B	$ 56.29	$ 57.98	$ 117,083.20
Admin 4	Admin 4 - G	$ 34.04	$ 35.06	$ 70,803.20
Admin 9	Admin 9 - B	$ 44.23	$ 45.56	$ 91,998.40

Admin 3	Admin 3 - E	$	29.17	$	30.05	$ 60,673.60
Admin 5	Admin 5 - D	$	32.04	$	33.00	$ 66,643.20
Admin 4	Admin 4 - A	$	28.51	$	29.37	$ 59,300.80
HOURLY	HOURLY	$	27.63	$	28.46	$ 57,470.40
Admin 4	Admin 4 - C	$	30.25	$	31.16	$ 62,920.00
Admin 5	Admin 5 - F	$	34.00	$	35.02	$ 70,720.00
Admin 4	Admin 4 - D	$	31.16	$	32.09	$ 64,812.80
Admin 4	Admin 4 - C	$	30.25	$	31.16	$ 62,920.00
Admin 6	Admin 6 - D	$	35.26	$	36.32	$ 73,340.80
Admin 8	Admin 8 - C	$	41.42	$	42.66	$ 86,153.60
Admin 12	Admin 12 - G	$	65.26	$	67.22	$ 135,740.80
Admin 9	Admin 9 - A	$	42.94	$	44.23	$ 89,315.20
Admin 6	Admin 6 - C	$	34.23	$	35.26	$ 71,198.40
Admin 7	Admin 7 - E	$	39.94	$	41.14	$ 83,075.20
Admin 8	Admin 8 - A	$	39.04	$	40.21	$ 81,203.20
Admin 9	Admin 9 - E	$	48.33	$	49.78	$ 100,526.40
Admin 11	Admin 11 - D	$	53.09	$	54.68	$ 110,427.20
Admin 9	Admin 9 - A	$	42.94	$	44.23	$ 89,315.20
Admin 12	Admin 12 - F	$	63.36	$	65.26	$ 131,788.80
Admin 5	Admin 5 - D	$	32.04	$	33.00	$ 66,643.20
Admin 4	Admin 4 - E	$	32.09	$	33.05	$ 66,747.20
Admin 9	Admin 9 - F	$	49.78	$	51.27	$ 103,542.40
Admin 6	Admin 6 - A	$	32.26	$	33.23	$ 67,100.80
Admin 6	Admin 6 - A	$	32.26	$	33.23	$ 67,100.80
Admin 9	Admin 9 - D	$	46.92	$	48.33	$ 97,593.60
Admin 6	Admin 6 - A	$	32.26	$	33.23	$ 67,100.80
Admin 6	Admin 6 - A	$	32.26	$	33.23	$ 67,100.80
Admin 6	Admin 6 - A	$	32.26	$	33.23	$ 67,100.80
Admin 9	Admin 9 - A	$	42.94	$	44.23	$ 89,315.20
Admin 6	Admin 6 - B	$	33.23	$	34.23	$ 69,118.40
Admin 3	Admin 3 - D	$	28.33	$	29.18	$ 58,926.40
Admin 4	Admin 4 - F	$	33.05	$	34.04	$ 68,744.00
Admin 6	Admin 6 - J	$	42.10	$	43.36	$ 87,568.00
Admin 12	Admin 12 - C	$	57.98	$	59.72	$ 120,598.40
Admin 5	Admin 5 - B	$	30.21	$	31.12	$ 62,836.80
HOURLY	HOURLY	$	81.94	$	85.01	$ 170,435.20
HOURLY	HOURLY	$	71.25	$	73.93	$ 148,200.00
HOURLY	HOURLY	$	71.25	$	73.93	$ 148,200.00
HOURLY	HOURLY	$	76.59	$	79.47	$ 159,307.20
Admin 3	Admin 3 - D	$	28.33	$	29.18	$ 58,926.40
Admin 12	Admin 12 - H	$	67.22	$	69.24	$ 139,817.60
Admin 3	Admin 3 - D	$	28.33	$	29.18	$ 58,926.40
Admin 7	Admin 7 - J	$	46.30	$	47.69	$ 96,304.00
Admin 12	Admin 12 - I	$	69.24	$	71.32	$ 144,019.20
Admin 8	Admin 8 - D	$	42.65	$	43.93	$ 88,712.00
Admin 3	Admin 3 - D	$	28.33	$	29.18	$ 58,926.40

Admin 8	Admin 8 - D	$	42.65	$	43.93	$ 88,712.00
Admin 8	Admin 8 - D	$	42.65	$	43.93	$ 88,712.00
Admin 9	Admin 9 - F	$	49.78	$	51.27	$ 103,542.40
Admin 3	Admin 3 - D	$	28.33	$	29.18	$ 58,926.40
Admin 8	Admin 8 - D	$	42.65	$	43.93	$ 88,712.00
Admin 3	Admin 3 - F	$	30.05	$	30.95	$ 62,504.00
Admin 3	Admin 3 - D	$	28.33	$	29.18	$ 58,926.40
Admin 9	Admin 9 - A	$	42.94	$	44.23	$ 89,315.20
Admin 11	Admin 11 - E	$	54.68	$	56.32	$ 113,734.40
Admin 11	Admin 11 - F	$	56.32	$	58.01	$ 117,145.60

3% Projected Annual	
$ 75,026.85	
$ 135,806.74	
$ 62,922.29	
$ 139,813.02	
$ 80,147.18	Interim
$ 94,886.90	Interim
$ 69,113.82	
$ 69,113.82	
$ 55,552.43	
$ 61,079.82	
$ 62,815.17	
$ 107,205.70	
$ 69,113.82	
$ 55,552.43	
$ 83,639.30	
$ 55,552.43	
$ 55,552.43	
$ 61,079.82	
$ 55,552.43	
$ 75,541.02	
$ 135,806.74	
$ 71,191.95	
$ 55,166.80	
$ 80,661.36	
$ 61,079.82	
$ 62,815.17	
$ 62,815.17	
$ 124,452.02	
$ 131,843.30	
$ 117,296.40	
$ 162,008.29	Employment contract guarantees 1.2x greater than highest BC
$ 125,214.17	Guaranteed 12% over Capt. Capt = $109,227 for FY27
$ 125,214.17	Guaranteed 12% over Capt
$ 125,214.17	Guaranteed 12% over Capt
$ 125,159.01	Guaranteed 12% over Capt
$ 60,694.19	
$ 60,694.19	
$ 106,648.67	
$ 79,590.16	
$ 64,721.90	
$ 139,813.02	
$ 91,373.36	
$ 120,595.70	
$ 72,927.30	
$ 94,758.35	

$	62,493.81	
$	68,642.50	
$	61,079.82	
$	59,194.51	
$	64,807.60	
$	72,841.60	
$	66,757.18	
$	64,807.60	
$	75,541.02	
$	88,738.21	
$	139,813.02	
$	91,994.66	
$	73,334.35	
$	85,567.46	
$	83,639.30	
$	103,542.19	
$	113,740.02	
$	91,994.66	
$	135,742.46	
$	68,642.50	
$	68,749.62	
$	106,648.67	
$	69,113.82	
$	69,113.82	
$	100,521.41	
$	69,113.82	
$	69,113.82	
$	69,113.82	
$	91,994.66	
$	71,191.95	
$	60,694.19	
$	70,806.32	
$	90,195.04	
$	124,216.35	
$	64,721.90	
$	176,831.00	15% over Captain
$	153,766.00	Guaranteed 12% over Highest Lt. Lt = 137,291 for FY27
$	153,766.00	Guaranteed 12% over Highest Lt. Lt = 137,291
$	165,300.00	7.5% over Captain
$	60,694.19	
$	144,012.13	
$	60,694.19	
$	99,193.12	
$	148,339.78	
$	91,373.36	
$	60,694.19	

$	91,373.36
$	91,373.36
$	106,648.67
$	60,694.19
$	91,373.36
$	64,379.12
$	60,694.19
$	91,994.66
$	117,146.43
$	120,659.97

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT
City Clerk Department

MEETING DATE
June 15, 2026

AGENDA ITEM TITLE
Motion to approve Application for Fireworks Display: July 3rd 2026 Celebration, Main Street Waterloo. Park Avenue Bridge, beginning at 9:45 p.m. with July 5th rain date.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS
None

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT
City Clerk Department

MEETING DATE
June 15, 2026

AGENDA ITEM TITLE
Motion to approve Application for Fireworks Display: July 5, 2026, Bamboo Ridge Campground, 4550 La Porte Road, beginning at 10:00 p.m. with July 6th rain date.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS
None

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT
Finance Department

MEETING DATE
June 15, 2026

AGENDA ITEM TITLE
Motion to accept and place on file the arbitrage results reflecting that a rebate earnings payment of $190,495.59 is due to the Internal Revenue Service for the General Obligation Bonds Series 2023A.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS
1. AROpinion5.31.26

May 31, 2026

Bridgett Wood
City of Waterloo
715 Mulberry Street
Waterloo, IA 50703

Dear Bridgett:

Enclosed is the arbitrage rebate report for the $6,000,000 General Obligation Bonds, Series 2023A. The report is through May 31, 2026, and shows positive rebate earnings of $190,495.59 and no yield reduction liability. **A payment must be made to the United States Treasury by July 30, 2026 in the amount of $190,495.59.**

You need to sign and date the attached IRS Form 8038-T, and send it along with the check to the IRS. Also, please send me a copy of the signed 8038-T for our records. **Make the checks payable to the "United States Treasury" and on the check include the issuer's name, address, EIN and "Form 8038-T".** The form and check must be mailed by July 30, 2026. **Do not** send along a copy of the rebate report – only send the check and the 8038-T to the IRS at the following address **via certified mail**:

Department of the Treasury
Internal Revenue Service Center
Ogden, UT 84201-0027

Please feel free to call me with any questions or comments.

Sincerely,

Fred Rieser

Enclosure

Form **8038-T**
(Rev. October 2021)
Department of the Treasury
Internal Revenue Service

Arbitrage Rebate, Yield Reduction and Penalty in Lieu of Arbitrage Rebate

▶ Under sections 143(g)(3) and 148(f) and section 103(c)(6)(D) of the Internal Revenue Code of 1954.
▶ Go to *www.irs.gov/Form8038T* for instructions and the latest information.

OMB No. 1545-0047

Part I Reporting Authority — Check box if **Amended Return** ▶ ☐

1 Issuer's name		2 Issuer's employer identification number (EIN)
City of Waterloo, State of Iowa		42-6005327
3 Number and street (or P.O. box no. if mail is not delivered to street address)	Room/suite	4 Report number (*For IRS Use Only*)
715 Mulberry Street		7
5 City, town, or post office, state, and ZIP code		6 Date of issue
Waterloo, Iowa 50703		6/1/2023
7 Name of issue		8 CUSIP number
$6,000,000 General Obligation Bonds, Series 2023A		941647 T66
9 Name and title of officer of the issuer or other person whom the IRS may call for more information		10 Telephone number of officer or other person
Kim Bahr, Assistant Finance Director		319-291-4323

11 Type of issue ▶ Transportation, Public Safety, Utilities, and Other — Issue price ▶ 11 — 6,394,780.25

Part II Arbitrage Rebate and Yield Reduction Payments — **Amount**

12	Computation date to which this payment relates (MM/DD/YYYY) 05/31/2026		
13	Arbitrage rebate payment (see instructions) ☐ check box if less than 100% of rebate amount . . .	13	190,495.59
14	Yield reduction payment (see instructions) ☐ check box if less than 100% of yield reduction amount	14	
15	Rebate payment from Qualified Zone Academy Bond (QZAB) defeasance escrow (see instructions) . .	15	

Part III Penalty in Lieu of Arbitrage Rebate

16	Number of months since date of issue: ☐ 6 mos ☐ 12 mos ☐ 18 mos ☐ 24 mos ☐ Other. No. of mos ▶		
17	Penalty in lieu of rebate	17	
18	Date of termination election (MM/DD/YYYY)		
19	Penalty upon termination	19	

Part IV Late Payments

20	Does failure to pay timely qualify for waiver of penalty? See instructions . . . Yes ☐ No ☐		
21	Penalty for failure to pay on time (see instructions)	21	
22	Interest on underpayment (see instructions)	22	

Part V Total Payment

23	**Total payment.** Add lines 13, 14, 15, 17, 19, 21, and 22. Enter total here	23	190,495.59

Part VI Miscellaneous

24	Unspent proceeds as of this computation date	24	0.00
25	Proceeds used to redeem bonds	25	0.00
26	Gross proceeds used for qualified administrative costs for guaranteed investment contracts (GICs) and defeasance escrows	26	0.00
27	Fees paid for a qualified guarantee	27	0.00

			Yes	No
28	Is the issue a variable rate issue?	28		✓
29	Did the issuer enter into a hedge? Name of provider / Term of hedge	29		✓
30	Were gross proceeds invested in a GIC? Name of provider / Term of GIC	30		✓
31	Were any gross proceeds invested beyond an available temporary period?	31		✓
32	Calculations for filing of this form prepared by: ☐ Issuer ☑ Preparer: Berens-Tate Consulting Group			

Signature and Consent

Under penalties of perjury, I declare that I have examined this return, and accompanying schedules and statements, and to the best of my knowledge and belief, they are true, correct, and complete. I further declare that I consent to the IRS's disclosure of the issuer's return information, as necessary to process this return, to the person that I have authorized above.

▶ _____ Signature of issuer's authorized representative — Date

▶ Bridgett Wood, Finance Director — Type or print name and title

Paid Preparer Use Only

Print/Type preparer's name: Frederick R Rieser IV	Preparer's signature	Date: 6/1/2026	Check ☐ if self-employed	PTIN: P01477022
Firm's name ▶ Berens-Tate Consulting Group			Firm's EIN ▶	47-0731211
Firm's address ▶ 11414 West Center Road, Suite 215, Omaha, NE 68144-4487			Phone no.	402-391-6188

For Paperwork Reduction Act Notice, see the separate instructions. Cat. No. 11545Y Form **8038-T** (Rev. 10-2021)

May 31, 2026

Bridgett Wood
City of Waterloo
715 Mulberry Street
Waterloo, IA 50703

RE: City of Waterloo
Black Hawk County, Iowa
$6,000,000 General Obligation Bonds
Series 2023A

Dear Ms. Wood:

The City of Waterloo ("City") has requested that we prepare certain computations related to the above bonds ("Bonds") from June 1, 2023, the issue date of the Bonds, through May 31, 2026, ("Computation Period"). The scope of our engagement consisted of preparing computations to determine the rebate amount for the Bonds for the Computation Period under Section 148(f) of the Internal Revenue Code (as amended, and Final Regulations promulgated thereunder) and this report is not to be used for any other purpose.

In order to prepare these computations, the City provided us with certain closing documents for the Bonds, bond proceeds and withdrawal detail, and investment information. The attached exhibits were prepared using the aforementioned information, as described in the Summary of Computational and Source Information.

In our opinion, the computations contained in the attached exhibits that were prepared using the information provided, are mathematically accurate. In the attached exhibits, the computations reflect for the Computation Period positive rebate earnings of $190,495.59 and no yield reduction liability. A payment of $190,495.59 must be made by July 30, 2026. No further computations are necessary as long as the Bond Fund is operated as described in the Tax Exemption Certificate and no additional gross proceeds arise. We have no obligation to update this report because of events occurring, or information coming to our attention, subsequent to the date of this report.

Very truly yours,

Berens-Tate Consulting Group

CITY OF WATERLOO

ARBITRAGE REBATE REPORT

TABLE OF CONTENTS

	EXHIBIT
Summary of Computational and Source Information	A
Arbitrage Rebate Report (Summary)	B
Future Value Report (Detail Calculation)	C
Notes to the Report	D

EXHIBIT A

CITY OF WATERLOO

SUMMARY OF COMPUTATIONAL AND SOURCE INFORMATION

COMPUTATIONAL INFORMATION

1. The issue date of the Bonds is June 1, 2023.

2. Computation of the bond yield and future values are based upon a 30-day month, 360-day year, and semiannual compounding.

3. The initial offering price of the Bonds is $6,394,780.25 ($6,000,000 par plus $394,780.25 original issue premium).

4. For cash flow and yield computation purposes, all payments and receipts are assumed to be paid or received, respectively, as shown in the attached schedules.

SOURCE INFORMATION

The information used to complete the rebate calculation was obtained from the following sources:

BOND DETAIL	**SOURCE**
Issue date	IRS Form 8038-G
Amounts and payment dates of principal and interest	Official Statement
Initial offering price	IRS Form 8038-G
Deposit and withdrawal of bond proceeds	Statements provided by the City

INVESTMENTS

Detail of all investment transactions	Statements provided by the City

City of Waterloo, Black Hawk County, Iowa
$6,000,000 General Obligation Bonds
Series 2023A

Arbitrage Rebate Report

Computation Date	Yield on Issue	Payment Date	Amount Paid	Cumulative Arbitrage	FV Payments	Rebate Amount
05/31/2026	2.86183510%			$190,495.59	$0.00	$190,495.59

City of Waterloo, Black Hawk County, Iowa
$6,000,000 General Obligation Bonds
Series 2023A

Future Value Report
As of May 31, 2026

	Computation Receipt	Future Values @ 2.86183510%	Cumulative Arbitrage	Investment Yield	
Project Fund	$0.00	$197,037.75	$197,037.75	4.26823851%	150 cashflows
Computation Credit	0.00	(6,542.15)	(6,542.15)		3 cashflows
Total	$0.00	$190,495.59	$190,495.59		

Date	Project Fund	Computation Credit					Periods
06/01/2023	($6,292,049.00)						6.00000000
06/12/2023	23,715.00						5.93888889
06/20/2023	0.00						5.89444444
06/26/2023	19,500.00						5.86111111
07/17/2023	300,966.67						5.74444444
07/24/2023	7,141.38						5.70555556
08/07/2023	27,800.28						5.63333333
08/14/2023	88.12						5.59444444
08/21/2023	2,140.34						5.55555556
08/28/2023	244.51						5.51666667
09/05/2023	11,604.29						5.47777778
09/11/2023	3,708.75						5.44444444
09/18/2023	8,970.71						5.40555556
09/25/2023	4,151.57						5.36666667
10/02/2023	6,586.33						5.32777778
10/09/2023	7,041.81						5.28888889
10/16/2023	2,695.92						5.25000000
10/23/2023	347.59						5.21111111
10/31/2023	(331,912.29)						5.16666667
11/06/2023	72,857.41						5.13888889
11/13/2023	2,459.58						5.10000000
11/20/2023	49,188.50						5.06111111
11/27/2023	7,894.12						5.02222222
12/04/2023	4,350.97						4.98333333
12/11/2023	1,457.75						4.94444444
12/18/2023	10,699.23						4.90555556

Date	Project Fund	Computation Credit					Periods
01/02/2024	69,963.00						4.82777778
01/08/2024	6,005.37						4.79444444
01/16/2024	1,631.50						4.75000000
01/22/2024	79.99						4.71666667
02/05/2024	44,365.15						4.64444444
02/12/2024	0.00						4.60555556
02/19/2024	5,361.16						4.56666667
02/26/2024	14,588.50						4.52777778
03/04/2024	359.97						4.48333333
03/11/2024	999.99						4.44444444
03/18/2024	0.00						4.40555556
03/25/2024	2,252.55						4.36666667
04/01/2024	0.00						4.33333333
04/08/2024	2,420.87						4.29444444
04/15/2024	1,235.51						4.25555556
04/22/2024	1,688.18						4.21666667
05/06/2024	4,644.10						4.13888889
05/13/2024	7,683.85						4.10000000
05/20/2024	43,141.46						4.06111111
05/27/2024	20,440.60						4.02222222
05/31/2024	(54,804.99)						4.00000000
06/03/2024	17,257.47						3.98888889
06/10/2024	3,591.17						3.95000000
06/17/2024	16,276.76						3.91111111
06/24/2024	11,962.17						3.87222222
07/01/2024	46,231.05						3.83333333
07/08/2024	1,029.38						3.79444444
07/15/2024	27,678.41						3.75555556
07/22/2024	125,272.72						3.71666667
08/05/2024	22,301.46						3.64444444
08/12/2024	48,758.31						3.60555556
08/19/2024	15,357.05						3.56666667
08/26/2024	40,741.60						3.52777778
09/03/2024	38,346.63						3.48888889
09/09/2024	17,786.76						3.45555556
09/16/2024	472.58						3.41666667
09/23/2024	16,602.23						3.37777778
10/07/2024	53,310.72						3.30000000
10/14/2024	148,960.73						3.26111111
10/28/2024	6,925.50						3.18333333
11/04/2024	40,186.19						3.15000000
11/12/2024	29,611.37						3.10555556
11/18/2024	24,931.36						3.07222222

Date	Project Fund	Computation Credit					Periods
11/25/2024	24,075.94						3.03333333
12/02/2024	780.00						2.99444444
12/09/2024	17,844.01						2.95555556
12/16/2024	194,326.43						2.91666667
12/30/2024	84,075.91						2.83333333
01/06/2025	26,853.40						2.80555556
01/13/2025	35,890.63						2.76666667
01/21/2025	7,806.70						2.72222222
01/27/2025	69,637.80						2.68888889
02/03/2025	125,079.41						2.65555556
02/10/2025	3,271.55						2.61666667
02/17/2025	66,044.11						2.57777778
02/24/2025	29,327.47						2.53888889
02/28/2025	874.95						2.50000000
03/03/2025	6,527.91						2.48888889
03/10/2025	5,701.93						2.45000000
03/24/2025	46,679.89						2.37222222
03/31/2025	25,040.87						2.33333333
03/31/2025	(109.99)						2.33333333
04/07/2025	42.72						2.30000000
04/14/2025	3,092.34						2.26111111
04/21/2025	12,271.56						2.22222222
04/30/2025	(205,401.73)						2.16666667
05/05/2025	44,346.25						2.14444444
05/12/2025	42,996.51						2.10555556
05/19/2025	34,609.66						2.06666667
05/27/2025	32,194.45						2.02222222
05/31/2025	(5,267.70)						2.00000000
06/02/2025	5,284.03						1.99444444
06/09/2025	70,572.77						1.95555556
06/16/2025	6,812.41						1.91666667
06/23/2025	1,496.73						1.87777778
06/30/2025	38,046.65						1.83333333
06/30/2025	(88,377.56)						1.83333333
07/07/2025	149,059.55						1.80000000
07/14/2025	175.00						1.76111111
07/21/2025	271,857.99						1.72222222
07/28/2025	8,443.84						1.68333333
07/31/2025	(245.00)						1.66666667
08/05/2025	62,240.15						1.64444444
08/11/2025	128,341.78						1.61111111
08/18/2025	169,039.99						1.57222222
08/25/2025	268,612.36						1.53333333

Date	Project Fund	Computation Credit					Periods
08/31/2025	392,895.13						1.50000000
09/02/2025	64,720.47						1.49444444
09/08/2025	528,374.21						1.46111111
09/15/2025	76,256.26						1.42222222
09/22/2025	37,996.00						1.38333333
09/30/2025	2,143.42						1.33333333
10/06/2025	21,125.83						1.30555556
10/13/2025	196,723.37						1.26666667
10/20/2025	57,924.00						1.22777778
10/27/2025	82,496.09						1.18888889
11/03/2025	92,938.49						1.15555556
11/10/2025	54,949.95						1.11666667
11/17/2025	105,595.26						1.07777778
11/24/2025	14,405.87						1.03888889
11/30/2025	(605.30)						1.00000000
12/01/2025	500,052.71						1.00000000
12/08/2025	79,858.98						0.96111111
12/15/2025	580,101.84						0.92222222
12/22/2025	248,436.93						0.88333333
01/05/2026	10,597.40						0.81111111
01/12/2026	57,562.96						0.77222222
01/20/2026	88,426.51						0.72777778
01/26/2026	147,604.67						0.69444444
01/31/2026	560.00						0.66666667
02/02/2026	53,801.80						0.66111111
02/09/2026	3,394.50						0.62222222
02/16/2026	5,731.80						0.58333333
02/23/2026	33,779.39						0.54444444
03/02/2026	32,576.95						0.49444444
03/09/2026	110,518.87						0.45555556
03/23/2026	21,547.80						0.37777778
03/30/2026	27,823.65						0.33333333
04/06/2026	16,871.87						0.30555556
04/13/2026	12,116.32						0.26666667
04/20/2026	46,657.32						0.22777778
04/27/2026	160.60						0.18888889
04/30/2026	(176.86)						0.16666667
04/30/2026	68,055.92						0.16666667
05/31/2024		($2,070.00)					4.00000000
05/31/2025		(2,120.00)					2.00000000
05/31/2026		(2,170.00)					0.00000000
	$571,272.57	($6,360.00)					

EXHIBIT D

CITY OF WATERLOO

NOTES TO THE REPORT

1. The bond year end may be chosen by the City, but must fall within 365 days of the bond delivery date. We used May 31st as the bond year end.

2. No provision has been made in this report for any debt service fund. Under Section 1.148-(3)(k) of the Treasury Regulations, a "bona fide debt service fund" for bonds issued after June 30, 1993, is not subject to rebate if the average annual debt service on the corresponding bonds is less than $2,500,000. It appears this provision applies to the Bonds.

3. Purchase and sale prices of all investments are assumed to be at fair market value, exclusive of administrative or similar expenses, and representative of an arm's length transaction which did not artificially reduce the rebate amount for the Bonds. We did not analyze the investment purchases or sales to determine if they were completed at fair market value. In addition, we have undertaken no responsibility to review the tax exempt status of interest on the Bonds.

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT
Information Services Department

MEETING DATE
June 15, 2026

AGENDA ITEM TITLE
Motion to approve network equipment and services Request For Proposals for the City fiber backbone project.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS
1. City of Waterloo Network Equipment and Services RFP Final

REQUEST FOR PROPOSAL

WATERLOO ENTERPRISE NETWORK EQUIPMENT AND SERVICES

City of Waterloo, IA

June 2026

Table of Contents

1. **INTRODUCTION**

2. **ADMINISTRATIVE INFORMATION**

3. **FORM AND CONTENT OF PROPOSALS**

4. **SCOPE OF WORK**

5. **SPECIFICATIONS**

6. **EVALUATION AND SELECTION**

7. **CONTRACTUAL TERMS AND CONDITIONS**

SECTION 1 INTRODUCTION

1.1 Purpose

The City of Waterloo Department of Information Technology (**Owner**), is seeking proposals from qualified value-added resellers (**VARs**) to provide hardware, software, installation, and virtual workload migration services to implement a new enterprise network and compute/storage infrastructure connecting 260 sites and 2 geo-diverse data centers. The **Owner** is in process of considering a new property for relocation of City Hall including the data center facilities and virtualized workloads currently located there. The **Owner** is seeking a turnkey solution including all required hardware, software, installation materials, and professional services to implement the network described in this **RFP by November 15, 2026**. **Proposed Solutions** that cannot commit to meet this deployment schedule may be disqualified.

The **Owner** wishes to contract with a **Seller** able to provide the turn-key go-live ready system specified in this **RFP**. The **Owner** currently operates systems from Dell, Hewlett Packard/Aruba, Fortinet, VMWare, and TrendNET within their enterprise network and prefers a solution that builds on that installed base and staff experience. Therefore, **Proposed Solutions** that build on the **Owner's** existing expertise with these manufacturers are preferred.

Scope of work service requirements are more particularly identified in Section 4 of this RFP. Specifications and compatibility requirements are more particularly identified in Section 5 of this RFP.

The City of Waterloo IA (City) has contracted the services of ENTRUST Solutions to manage the selection, procurement, and integration of their new network. All references to "Owner", "Waterloo Enterprise IT", and "IT personnel" include both City and ENTRUST staff by extension. **The Seller is solely responsible for ensuring all equipment, software, and services required to fully commission the network as described by this RFP and its supporting documents are included in their Proposed Solution.**

1.2 Definitions

The City of Waterloo IA has made every effort to use industry standard terminology throughout this **RFP** and to provide clear definitions unique to the context. If the prospective **Seller** has questions on terminology or context, it is the responsibility of the **Seller** to request clarification in writing. Likewise, the **Seller** should define terms that may be unclear in their proposal. The following definitions and clarifications are provided:

Term	Definition
Owner	The City of Waterloo enterprise IT department is responsible for operating the network being procured by this RFP.
RFP (Request for Proposal)	Consists of this requirements document with all its exhibits and attachments.
Proposed Solution	Defined as all materials, software, licensing, and labor necessary to implement the turn-key system described and required by this **RFP**.
Shall	Designates a requirement of the **Proposed Solution**.
VAR (Value Added Reseller)	An IT vendor providing a turnkey solution for the **Owner** including multi-vendor hardware and software along with significant pre-sale and post-sale services.
Seller	A **VAR** submitting a **Proposed Solution** purported to satisfy the requirements of the **RFP**.
Contract	The contract(s) entered into with the successful **Seller**(s) as described in Section 7.1.
Qualified Seller	A **Seller** that has the capability in all material respects to perform the scope of work and specifications of the **Contract**. In determining whether a **Seller** is a **Qualified Seller**, the **Owner** may consider various factors including, but not limited to, the **Seller's** bid price, competence and qualifications to provide the goods or services requested, integrity and reliability, the past performance of the **Seller** and the best interest of the **Owner.**
Qualified Proposal	A Proposal that complies with the material provisions of this **RFP**.
ISP (Inside Plant infrastructure)	All racks, cable management, power, cooling, electronics, and installation components located inside an environmentally controlled structure.
OSP (Outside Plant Infrastructure)	Fiber optic cable, vaults, cabinets, pedestals, splice enclosures, and installation components located underground and/or aerially on poles.
Project Completion	Defined as the time when the **Seller** has:

	• delivered, installed, configured, and successfully tested the proposed network, and • provided all required documentation and training, and • received final acceptance from the **Owner**
General Terms and Conditions	The General Terms and Conditions for Services Contracts.

1.3 Overview of the RFP Process

This **RFP** is designed to provide **Sellers** with the information necessary to develop a **Proposed Solution**. The **RFP** process is for the **Owner's** benefit and is intended to provide the detailed and competitive information required to assist in the selection process. It is not intended to be a comprehensive engineering design. Each **Seller** is solely responsible for determining all factors affecting the design, configuration, and implementation of a comprehensive proposal that will accomplish the technical and business goals described by this **RFP**.

1.4 RFP Schedule

The **Owner** will make every effort to adhere to the following schedule leading to the award of a contract; however, this schedule is subject to change. **Sellers** will be notified of significant schedule changes:

Action	Responsible Party	Target Date
Issuance of RFP	**Owner**	June 16, 2026
Non-mandatory Pre-Proposal Conference via **Microsoft Teams video conference,**	**Owner**	June 23, 2026
Submission of Questions	**Sellers**	June 30, 2026
Submission of Proposals	**Sellers**	July 16, 2026
Evaluation of Proposals	**Owner**	August 3, 2026
Contract Award (anticipated)	**Owner**	August 17, 2026
Desired test sites turn-up	**Seller/Owner**	November 2, 2026

1.5 Proposal Submission

The **Seller** shall submit a digital copy of their completed and signed Proposal to Waterloo City Clerk's Office, 715 Mulberry Street, Waterloo, IA, no later than 1:00 p.m. CT on the designated due date. The **Owner** reserves the right to reject any and all proposals that are deemed out of compliance with the **RFP** requirements and to waive any irregularities within a particular proposal. Proposals received after the deadline for submission of proposals as stated herein shall not be considered and shall be returned to the late proposer unopened.

1.6 Project Acceptance

The **Seller** must demonstrate to the **Owner** full and complete compliance with all requirements in the **RFP** and successfully complete an Acceptance Test Plan (ATP) to validate the operational performance of the installed network to receive final acceptance for **Project Completion**. The **Owner** reserves the right to withhold final payment until the **Seller** meets all requirements in this **RFP** to the **Owner's** satisfaction.

The **Seller** shall provide as part of their proposal a list of acceptance tests in addition to those in Section 4 that they believe best demonstrate the operation and performance of the **Owner** network as described in this **RFP**. The specific acceptance tests and procedures to perform them will be developed jointly by the **Owner** and **Seller** during implementation of the network.

After completion of the network implementation, the **Owner** will review the scope of work in Section 4 to determine if the **Proposed Solution** as installed satisfies the RFP requirements. The **Owner** will document in writing any deficiencies discovered, and upon the **Seller's** completion or correction of these items, the **Owner** shall authorize final payment to the **Seller**.

1.7 Deployment Strategy and Schedule

To reduce storage space, preserve manufacturer warranties, and prevent premature maintenance expenses, the **Seller** shall align shipment of the **Proposed Solution** with the estimated installation schedule. **Project Completion** shall be defined as the **Proposed Solution** being fully deployed and operational across City Hall and Public Works data centers, designated city sites and utility/traffic cabinets being connected, virtual workloads migrated to the new compute/storage system, completion of acceptance testing, and delivery of training/documentation. The **Owner** will install, power, and cross-connect any remaining site and cabinet switches. The **Seller** shall provide in their Proposal an estimated timeline relative to the contract award date with projected milestones including equipment delivery, high level design, equipment installation, VM workload migration, acceptance testing, and **Project Completion**.

No equipment shall be shipped or invoiced without prior written approval from the **Owner**.

1.8 Project Contract Requirements

The **Owner** understands that the solution set for **Owner** can be provided in multiple configurations with differing costs and will therefore evaluate proposals using criteria included in this **RFP** to select a **Seller** and award a contract. This **RFP** with all stated requirements, **Seller** responses, and clarifications will become part of the final contract. Deviations to the above listed terms and conditions may be considered cause for immediate disqualification of the **Seller's** proposal from further consideration, at the **Owner's** discretion.

1.9 Bid Bond Requirements

The **Owner** does NOT require a Bid Bond for this project.

1.10 Performance Bond Requirements

The **Owner** does NOT require a Performance Bond for this project.

1.11 RFP Attachments and Exhibits

The **Proposed Solution** should be developed to incorporate the network architecture, service integrations, and traffic capacities described and required by this **RFP**. A list of Attachments and Exhibits accompanying this **RFP** to assist the **Seller** include:

- **Attachment A - Waterloo Enterprise Network Architecture**- provides a high-level conceptual diagram showing the network components, connectivity of components and sites, and the estimated link speeds of the **Owner** network.
- **Exhibit A - Point by Point Response** – provides for the **Seller's** description of, and point-by-point response to, the **RFP** requirements and specifications.
- **Exhibit B - Proposal Materials and Pricing** – provides the format and tab structure for submission of **Seller's** detailed bill of materials, services, and pricing for the **Proposed Solution**.
- **Exhibit C – VM Workload Migration Plan and MoP** – provides for the **Seller's** description of their proposed plan and method of procedure (MoP) to migrate the **Owner's** virtual workloads from the existing VMWare host to the new geo-diverse cluster.
- **Exhibit D – Site Connectivity** – provides detail on lateral and ring connections to inform **Seller's** port/ring counts, aggregation switch capacities, and transceiver types in the **Proposed Solution**.

Some sections of this **RFP** require a description of the **Proposed Solution** and a point-by-point response to the specifications. The **Seller** shall describe their **Proposed Solution** for each section of **Exhibit A - Point by Point Response** and identify its level of compliance with any requirements listed. Compliance shall be indicated with "Y" = Yes, "P" = Partial, or "N" = No for each item. The terms "Understood" and "Read and Understood" are unacceptable.

The point-by-point response provided by the **Seller** shall be for the system as proposed and shall reflect the costs included in **Exhibit B – Proposal Materials and Pricing**. The **Seller** shall only indicate Compliant to items qualified with "Support" if the **Proposed Solution** includes all the necessary components to satisfy the requirement. The Seller shall only indicate Compliant to Items qualified with "Option" if it is generally available from the manufacturer. Otherwise, they shall indicate "P" or "N" as the case may be to that requirement.

The proposed plan and MoP for VM workload migration described in **Exhibit C – VM Workload Migration Plan and MoP** shall provide enough detail to clearly communicate the required tasks and expected timeline for pre-migration planning, migration MoP, and post-migration validation/testing of all documented workloads to the new compute/storage solution.

Exhibit D – Site Connectivity is an Excel workbook that contains detailed information for each connected site to assist the Seller in calculating switch port capacity, throughput, link speeds, and transceiver types for their proposed solution. In addition, it provides fiber termination/cross-connect information for each site within the data centers. The tab "Legend" provides definition for the data contained in the relevant columns of tab Sites.

SECTION 2 ADMINISTRATIVE INFORMATION

2.1 Restriction on Communication

From the issue date of this RFP until a Notice of Intent to Award the Contract is issued, **Sellers** may contact only the Issuing Officer, Chris Youngblut, Director of Technology. The Issuing Officer will respond only to written questions regarding the procurement process. Questions related to the interpretation of this RFP must be submitted as provided in Section 2. Oral questions related to the interpretation of this RFP will not be accepted. **Sellers** may be disqualified if they contact any City of Waterloo employee or official other than the Issuing Officer about the RFP.

This section shall not be construed as restricting communications related to the administration of any contract currently in effect between a **Seller** and the City of Waterloo.

2.2 Downloading the RFP from the Internet

The RFP document and any addenda to the RFP will be posted at the Waterloo municipal government bids website. The **Seller** is advised to check the website periodically for Addenda to this RFP. It is the **Seller's** sole responsibility to check daily for addenda to posted documents.

2.3 Procurement Timetable

The dates provided in the procurement timetable within this RFP are provided for informational and planning purposes. The City reserves the right to change the dates. If the City changes any of the deadlines for **Seller** submissions, the City will issue an addendum to the RFP.

2.4 Non-Mandatory Pre-Proposal Conference

The City will receive sealed proposals for the above-named project until 1:00 PM CT on July 16, 2026, at the Office of the City Clerk, City Hall, 715 Mulberry Street, Waterloo, IA 50703. Any sealed proposal received after the specified time and date will not be considered. A Non-Mandatory Pre-Bid Conference will be held at 10:00 am CT on June 23, 2026, at Mollenhoff Conference Room, City Hall, 715 Mulberry Street, Waterloo, IA 50703 in person or join via **Microsoft Teams video conference,**

Inquiries For Information Should Be Directed to: Chris Youngblut via email only at: chris.youngblut@waterloo-ia.org. All questions must be submitted via e-mail before 5:00 pm CT on June 30, 2026. RFP documents may be examined at the City Clerk's Office. Electronic copies of RFP documents in PDF format are available for download on the the Waterloo municipal government bids website.

It shall be the responsibility of the **Seller** to monitor the City's website and above noted e-procurement websites for published addenda. All fully executed addendum must be returned to the City with proposal submission. The City will not accept faxed or emailed addenda.

In Compliance with this **RFP** and to All the Conditions Imposed Therein and Hereby Incorporated by Reference, the Undersigned Offers, And Agrees to Furnish Services requested in the solicitation.

The pre-bid conference may be recorded. Questions asked at the conference that cannot be adequately answered during the conference may be deferred. A copy of the questions and answers will be sent to **Sellers** who submit a letter of intent to propose and will be posted in the form of an addendum at: the Waterloo municipal government bids website.

2.5 Questions, Requests for Clarification, and Suggested Changes

Sellers are invited to submit written questions and requests for clarifications regarding the **RFP**. **Sellers** may also submit suggestions for changes to the specifications of this **RFP**. The questions, requests for clarifications, or suggestions must be in writing and received by the Issuing Officer on or before the date and time listed within the **RFP**. Oral questions will not be permitted. If the questions, requests for clarifications, or suggestions pertain to a specific section of the **RFP**, **Seller** shall reference the page and section number(s). The City will send written responses to questions, requests for clarifications, or suggestions received from **Sellers** before the date listed within the **RFP**. The City's written responses will become an addendum to the **RFP** and be provided to all potential **Sellers**. If the City decides to adopt a suggestion that modifies the **RFP**, the **Owner** will issue an addendum to the **RFP**.

The **Owner** assumes no responsibility for oral representations made by its officers or employees unless such representations are confirmed in writing and incorporated into the **RFP** through an addendum.

2.6 Amendment to the RFP

The City reserves the right to amend the **RFP** at any time using an addendum. The **Seller** shall acknowledge receipt of all addenda in its Proposal.

2.7 Amendment and Withdrawal of Proposal

The **Seller** may amend or withdraw and resubmit its Proposal at any time before the Proposals are due. The amendment must be in writing, signed by the **Seller** and received by the time set for the receipt of Proposals. Electronic mail and faxed amendments will not be accepted. **Sellers** must notify the Issuing Officer in writing prior to the due date for Proposals if they wish to completely withdraw their Proposals.

2.8 Proposal Opening

The City will open Proposals at 1pm CT on the Proposal due date. The Proposals will remain confidential until the City has issued a Notice of Intent to Award a Contract. However, the names of Sellers who submitted timely Proposals will be publicly available after the Proposal opening. The announcement of Sellers who timely submitted Proposals does not mean that an individual Proposal has been deemed technically compliant or accepted for evaluation.

2.9 Costs of Preparing the Proposal

The costs of preparation and delivery of the Proposal are solely the responsibility of the **Seller**.

2.10 No Commitment to Contract

The City reserves the right to reject any or all Proposals received in response to this RFP at any time prior to the execution of the Contract. Issuance of this RFP in no way constitutes a commitment by the City to award a contract.

2.11 Rejection of Proposals

The City may reject outright and not evaluate a Proposal for reasons including, without limitation:

2.11.1 The **Seller** fails to deliver a complete Proposal.

2.11.2 The **Seller** acknowledges that a mandatory specification of the RFP cannot be met.

2.11.3 The **Seller's** Proposal changes a material specification of the **RFP** or the Proposal is not compliant with the mandatory specifications of the **RFP**.

2.11.4 The **Seller's** Proposal limits the rights of the **Owner**.

2.11.5 The **Seller** fails to include information necessary to substantiate that it will be able to meet a specification of the **RFP** as provided in Section 5 of this RFP.

2.11.6 The **Seller** fails to timely respond to the City's request for information, documents, or references.

2.11.7 The **Seller** presents the information requested by this RFP in a format inconsistent with the instructions of the **RFP** or otherwise fails to comply with the specifications of this RFP.

2.11.8 The **Seller** initiates unauthorized contact regarding the **RFP** with a City employee or official other than, Chris Youngblut, Issuing Officer.

2.11.9 The **Seller** provides misleading or inaccurate responses.

2.11.10 The **Seller's** Proposal is materially unbalanced.

2.11.11 There is insufficient evidence (including evidence submitted by the **Seller** and evidence obtained by the City from other sources) to satisfy the City that the **Seller** is a **Qualified Seller**.

2.12 Reference Checks

The City reserves the right to contact any reference to assist in the evaluation of the Proposal, to verify information contained in the Proposal and to discuss the **Seller's** qualifications and the qualifications of any subcontractor identified in the Proposal.

2.13 Information from Other Sources

The City reserves the right to obtain and consider information from other sources concerning a **Seller**, such as the **Seller's** capability and performance under other contracts, the qualifications of any subcontractor identified in the Proposal, the **Seller's** financial stability, past or pending litigation, and other publicly available information.

2.14 Verification of Proposal Contents

The content of a Proposal submitted by a **Seller** is subject to verification. If the City determines in its sole discretion that the content is in any way misleading or inaccurate, the City may reject the Proposal.

2.15 Proposal Clarification Process

The City reserves the right to contact a **Seller** after the submission of Proposals for the purpose of clarifying a Proposal. This contact may include written questions, interviews, site visits, a review of past performance if the **Seller** has provided goods and/or services to the City of Waterloo or any other political subdivision wherever located, or requests for corrective pages in the **Seller's** Proposal. The City will not consider information received from or through **Seller** if the information materially alters the content of the Proposal or the type of goods and/or services the **Seller** is offering to the City. An individual authorized to legally bind the **Seller** shall sign responses to any request for clarification. Responses shall be submitted to the City within the time specified in the City's request. Failure to comply with requests for additional information may result in rejection of the Proposal.

2.16 Disposition of Proposals

All Proposals become the property of the City and shall not be returned to the **Seller**. Once the City issues a Notice of Intent to Award the Contract, the contents of all Proposals will be public records available for inspection by interested parties.

2.17 Copyright Permission

By submitting a Proposal, the **Seller** agrees that the City may copy the Proposal for purposes of facilitating the evaluation of the Proposal or responding to requests for public records. By submitting a Proposal, the **Seller** consents to such copying and warrants that such copying will not violate the rights of any third party. The **Owner** shall have the right to use ideas or adaptations of ideas that are presented in Proposals.

2.18 Release of Claims

By submitting a Proposal, the **Seller** agrees that it will not bring any claim or cause of action against the City based on any misunderstanding concerning the information provided in the RFP or concerning the City's failure, negligent or otherwise, to provide the **Seller** with pertinent information in this RFP.

2.19 Evaluation of Proposals Submitted

Proposals that are submitted on time and not rejected will be reviewed and evaluated in accordance with Section 6 of the RFP. The City will not necessarily award a Contract resulting from this RFP to the **Seller** offering the lowest cost. Instead, the City will award the Contract(s) to the **Qualified Seller(s)** whose **Qualified Proposal** the **Owner** believes will provide the best value to the City.

2.20 Award Notice and Acceptance Period

Notice of Intent to Award the Contract(s) will be sent to all Sellers submitting a timely Proposal and may be posted at the website listed within the RFP. Negotiation and execution of the Contract(s) shall be completed no later than thirty (30) days from the date of the Notice of Intent to Award or such other time as designated by City. The **Seller's** form of contract may be utilized and the City reserves the right to

negotiate the terms of the agreement. If the successful **Seller** fails to negotiate and deliver an executed Contract by that date, the City, in its sole discretion, may cancel the award and award the Contract to the remaining **Seller** the **Owner** believes will provide the best value to the City.

2.21 No Contract Rights until Execution

No **Seller** shall acquire any legal or equitable rights regarding the Contract unless and until the Contract has been fully executed by the successful **Seller** and the City.

2.22 Choice of Law and Forum

This RFP and the Contract shall be governed by the laws of the State of Iowa. Changes in applicable laws and rules may affect the award process or the Contract. Sellers are responsible for ascertaining pertinent legal requirements and restrictions. Any and all litigation or actions commenced in connection with this RFP shall be brought in the appropriate Iowa forum.

2.23 No Minimum Guaranteed

The City does not guarantee any minimum level of purchases under the Contract.

SECTION 3 FORM AND CONTENT OF PROPOSALS

3.1 Instructions

These instructions prescribe the format and content of the Proposal. They are designed to facilitate a uniform review process. Failure to adhere to the Proposal format may result in the rejection of the Proposal.

3.2 Submission of Proposals

The **Seller** shall submit an electronic copy of their proposal on a flash drive that includes:

- an executive summary of the **Proposed Solution**
- a diagram of the **Proposed Solution** showing the components, connectivity, and link speeds
- proposed rack elevations showing equipment power connections and breaker requirements
- a completed copy of **Exhibit A - Point by Point Response**
- a completed copy of **Exhibit B – Proposal Materials and Pricing**
- a completed copy of **Exhibit C – VM Workload Migration Plan and MoP**
- a completed copy of **Exhibit D – Site Connectivity**
- any other pertinent documentation such as data sheets, diagrams, and training catalogs
- references and contact information

The electronic copy shall be submitted in the most appropriate format of each item including MS Word, MS Excel, MS Visio, and/or Adobe Acrobat formats. All Exhibits required in the submission shall be completed and submitted in the format they were provided in the RFP. **Sellers** submitting incomplete or materially deficient proposals may be disqualified.

3.3 References and Contact Information

The **Owner** requires sufficient corporate, financial, and reference information to adequately assess the qualifications of the **Seller** to sell, install, and support the **Proposed Solution**. The reference information will be used by the **Owner** to differentiate between **Sellers** with similar **Proposed Solutions**, and shall be provided in a separate document including the following information:

Corporate Information

The **Seller** shall provide an overview of their corporate structure. The overview should address the following specific items:

- Name, address, and contact information of the Company and representative
- Company History and Formation
- Ownership (Public or Privately Held)
- Number of Employees
- Organizational chart of the management and implementation teams for the project
- A detailed history of all mergers or acquisitions (if applicable).
- **Seller's** financial condition and supporting documentation (ie. audited annual reports, etc.)

Implementation Experience

Seller shall provide a brief summary of their experience implementing and supporting municipal IT networks, compute/storage systems, and workload migrations including the following:

- Implementations of municipal networks with similar architectures
- List of certifications relative to the **Proposed Solution** held by the implementation team
- List of partner certifications relative to the **Proposed Solution** held by the **Seller**
- Proven experience in VMware infrastructure design and workload migration
- Familiarity with VMware SRM and vSAN technologies
- Experience migrating workloads in the context of VMWare replacement

Sellers with specialization in HPE/Aruba, VMWare, Fortinet, and Dell/EMC products are preferred. Copies of formal manufacturer-conferred certifications including the certification name, description, requirements, and date of award/renewal should be provided in the **Seller's** response.

The **Seller** shall submit a list of three (3) references who have deployed similar networks and compute/storage architectures within the last three (3) years. The reference information shall include the company name with dates of implementation along with the name, address, and phone number of the individual(s) that may be contacted at the company.

The **Seller** shall provide a summary of their **Proposed Solution** for this section and indicate its compliance with each of the requirements in **Exhibit A – Point by Point Response.**

3.4 Termination, Litigation, Debarment

3.4.1 The **Seller** must provide any information regarding contract termination, litigation, and debarment for the past five (5) years

3.4.2 Has the **Seller** had a contract for goods and/or services terminated for any reason? If so, provide full details regarding the termination.

3.4.3 Describe any damages or penalties assessed against or dispute resolution settlements entered into by **Seller** under any existing or past contracts for goods and/or services. Provide full details regarding the circumstances, including dollar amount of damages, penalties and settlement payments.

3.4.4 Describe any order, judgment or decree of any Federal or State authority barring, suspending or otherwise limiting the right of the **Seller** to engage in any business, practice or activity.

3.4.5 A list and summary of all litigation or threatened litigation, administrative or regulatory proceedings, or similar matters to which the **Seller** or its officers have been a party.

3.4.6 Any irregularities discovered in any of the accounts maintained by the **Seller** on behalf of others. Describe the circumstances and disposition of the irregularities.

3.4.7 Failure to disclose these matters may result in rejection of the Proposal or termination of any subsequent Contract. The above disclosures are a continuing requirement of the **Seller**. **Seller** shall provide written notification to the **Owner** of any such matter commencing or occurring after submission of a Proposal, and with respect to the successful **Seller**, following execution of the Contract.

3.5 Payment Methods

3.5.1 **Seller** agrees to submit monthly invoices and accept payment in the form of check or ACH.

3.6 Acceptance of Terms and Conditions

By submitting a Proposal, **Seller** acknowledges its acceptance of the terms and conditions of the RFP and the General Terms and Conditions without change except as otherwise expressly stated in its Proposal. If the **Seller** takes exception to a provision, it must identify it by page and section number, state the reason for the exception, and set forth in its Proposal the specific RFP or General Terms and Conditions language it proposes to include in place of the provision. If **Seller's** exceptions or responses materially alter the RFP, or if the **Seller** submits its own terms and conditions or otherwise fails to follow the process described herein, the **Owner** may reject the Proposal, in its sole discretion.

3.7 Firm Proposal Terms

The **Seller** shall guarantee in writing the goods and/or services offered in the Proposal are currently available and that all Proposal terms, including price, will remain firm for the number days indicated on the RFP cover sheet 90 days following the deadline for submitting Proposals.

3.8 Proposal Shall Include Only Generally Available Equipment and Software

a) All **Seller** supplied programs and software must be field operational before the date the proposal is submitted.
b) Demonstrations must utilize the proposed equipment, programs or software precisely as proposed.
c) Unless otherwise specified in the specifications, all items on which a **Seller** submits a proposal must be new, of the latest model or manufacture, and be at least equal in quality to that specified in the bidding documents.

3.9 Seller Required to Identify Patented Items, and Copyrighted Text, Information, Data, or Software Included in Its Proposal; Seller Required to Include with Its Proposal any Licenses that Owner Will be Expected to Execute.

Sellers shall identify any patented equipment, processes, materials, or hardware, or any copyrighted text, information, data, or software that it proposes to supply as part of the goods or services it is required to provide under the RFP. Every **Seller** shall likewise identify the licensing agent for the patented or copyrighted items, and shall provide with its proposal a copy of any licensing or user agreement that the **Owner** will be expected to execute for the use of patented equipment, processes, materials, or hardware, or copyrighted text, information, data, or software included in a proposal, as well as the anticipated cost to the **Owner**, if any, for use under a license or agreement. The **Seller** to whom the contract is awarded warrants that the intellectual property

rights of third parties (e.g. copyright, trademark, or patent) will not be violated by the **Seller's** or the **Owner's** use of any equipment, process or service provided in response to the RFP.

SECTION 4 SCOPE OF WORK

The **Seller** shall provide the services to the **Owner** in accordance with the requirements of this Scope of Work (SoW) and indicated in their response to Exhibit A-D. It is the **Seller's** responsibility to ensure full interoperability of all proposed hardware, software, and protocols required for the network described in this RFP. All planning and tasks required by this section shall begin upon award of a contract to the **Seller**. The **Proposed Solution** must include professional services to fully commission the network including, but not limited to:

4.1 Pre-installation Site Survey (Onsite)

- Evaluate readiness of data centers, LAN sites, and ring sites for equipment installation
- Evaluate rack elevations
- Evaluate power, distribution, and receptacle types
- Evaluate fiber distribution panel locations and connector profiles
- Evaluate current compute/storage hardware, software, and virtual workloads
- Evaluate current backup system hardware, software, and operations
- Identify required fiber strands/ports
- Verify availability of direct Internet access (DIA) services
- Develop a list of installation materials and procurement plan
    - Fiber and copper jumper cables
    - Equipment power wiring, fusing, and grounding components
    - Equipment mounting hardware
    - Power whips and power distribution units (PDUs)
    - Determine sourcing for procurement
- All power whips provided by the **Seller** shall be rated for use in a data center environment and shall be halogen-free, low smoke cables. The **Seller** shall adhere to all NEC and TIA/EIA-942 grounding and bonding requirements for the proposed equipment installation.
- Provide pre-migration planning requirements to **Owner** for VMWare workload migrations.
- Assist **Owner** in creating BoM for procurement of installation materials.

4.2 High Level Configuration Design – (Remote)

- Conduct interactive logical network and compute/storage design sessions with **Owner**
- Define requirements for transport architecture
- Define requirements for L2/L3 services and QoS
- Define requirements for ERPS network major and sub-rings
- Define requirements for routing protocols
- Define IPv4/v6 subnets, numbering plans, and address assignments
- Define requirements for geo-diverse compute/storage architecture
- Define requirements for virtual machine configurations
- Develop a detailed virtual workload migration plan with timelines and milestones
- Define requirements for backup/restore of new compute/storage system and endpoint devices
- Define strategy for recovery of VMs, endpoint devices, and disaster events
- Define management network requirements and design

- Create network planning document (NPD) using inputs from interactive design sessions
- Validate and finalize NPD with **Owner**

4.3 Installation and Configuration of Network Equipment – (Onsite)

- Install power whips and PDUs
- Rack/Stack/Power equipment in data centers
- Rack/Stack/Power equipment in designated city department and ring sites
- Install fiber jumpers and cabling as required by the NPD
- Coordinate with internet providers to turn-up and test DIA services
- Develop low level configurations and documentation
- Install latest stable release software
- Create and load individual device configurations
- Validate and test low-level design and device configurations

4.4 Installation and Configuration of Compute/Storage Equipment (Onsite)

- Install and configure compute/storage system across data center sites
- Create and configure resources required for virtual workload migrations
- Migrate virtual workloads with minimal downtime
- Ensure data integrity and consistency during the transition
- Implement failover and failback tests to ensure disaster recovery readiness
- Install and configure backup/restore system to support site recovery

4.5 Installation and Configuration of Management Network – (Onsite)

- Create virtual machines for management software
- Install and configure alarm monitoring software
- Install and configure performance monitoring software
- Install and configure logging software
- Provide DHCP, DNS, and IP address (DDI) configuration requirements to **Owner** staff.
- Install and configure out-of-band management hardware and software
- Coordinate and assist with installation and configuration of **Owner**-supplied firewalls

4.6 Acceptance Testing Plan (ATP) – (Onsite)

- Specific acceptance tests to be developed cooperatively by **Owner** and **Seller**
- Simulate component and link failures to ensure proper operation of hardware and software redundancy mechanisms
- Verify operations of all L2/L3/services failover and high availability functionality
- Configure and test DIA service failover and verify route updates
- Perform end-to-end testing to validate network performance
- Verify performance of compute/storage system and virtual machines
    - Test hardware fault tolerance
    - Test VM operation and fault tolerance

    - Test application performance
    - Test VM replication, snapshot, and backup operations
- Provide ATP performance report including each test, execution methodology, corrective actions, and results.

4.7 Training – (Onsite and/or Remote)

- **Seller** shall provide "Day 2" operational training on:
    - hardware configuration
    - L2/L3 services and IP routing
    - compute/storage hypervisor functionality
    - backup/restore system operation
    - network and application performance monitoring
    - high-level troubleshooting techniques
    - management network
    - firewall management
    - ring management and troubleshooting
    - IPAM operation, alarm monitoring, and logging

4.8 Documentation – (Deliverables)

- Cable, panel, and equipment labeling
- Detailed documentation of network (format to be determined)
    - Rack elevations
    - Power, fiber, copper cross-connects
    - Detailed L2 and L3 network diagrams
    - Shelf level diagrams
    - IP address and subnet assignments
    - Subscriber IP address pools for DHCP
- Electronic backups of all element configurations on portable media
- Detailed documentation of the new compute/storage environment

The **Seller** shall deliver and maintain a detailed project plan with timelines to deploy the new infrastructure within 7 days of the project kick-off meeting. The **Seller** shall deliver a detailed VM migration plan with timelines within 7 days of the pre-installation site survey.

For purposes of this proposal, tasks marked "Onsite" should include travel in the professional services pricing. Owner reserves the right to coordinate with the Seller to modify the services and their delivery to reduce their overall cost.

SECTION 5 SPECIFICATIONS

5.1 Overview

The City of Waterloo desires to procure equipment and services to deploy a new IT infrastructure connecting 260 city, utility, and traffic sites to 2 geo-diverse data centers and to migrate production applications from a single VMWare system to redundant compute/storage clusters. The **Proposed Solution** must include all the hardware, software, and services necessary for the **Seller** to provide the turn-key solution, implementation, documentation, and operational training described in this RFP. Should the **Owner** decide to relocate City Hall to the new facility, the **Proposed Solution** shall include components for temporary connectivity of the existing City Hall data center to the new core network until it is abandoned in mid-2027 for migration of IT services. The **Owner** desires a solution that builds on their working experience, spares, and maintenance practices with HP/Aruba, TRENDnet, Dell/EMC equipment, Fortinet, and VMWare. Proposals must identify any deviations and/or non-compliance with the specifications. If the **Seller** deviates from or cannot satisfy the specification(s) of this RFP, the **Owner** may reject the Proposal.

The **Seller** shall be solely responsible for ensuring the **Proposed Solution** contains all the necessary components to support the specifications of this RFP, is configured with sufficient port capacity and software features for the architecture and connectivity described, is fully interoperable regarding components and protocols used to deploy the network, and serves the application requirements described in this RFP.

5.2 Architecture

The physical network architecture will connect a total of 263 city sites consisting of 54 offices and parks, 76 utility cabinets, 130 traffic signal controllers with surveillance cameras, 2 data center sites located in the Public Works and City Hall buildings, and possibly the existing data center for migration of IT services to a new City Hall facility. The two data centers will be connected in a physical ring over a 288-count fiber backbone and will contain aggregation switches connecting the 54 offices and parks over fiber laterals and the 206 utility/traffic sites over fiber rings. The offices and parks will connect to one or both data centers depending on the fault tolerance requirements of each.

This RFP will designate connected sites as P1 for the data centers, P2 for sites with two lateral uplinks to both data centers (redundant), P3 for sites with one lateral uplink to one data center (non-redundant), or P4 for a ring site**.** Refer to **Attachment A and Attachment D** for the total counts of P2, P3, and P4 sites connecting to each of the two P1 data centers for sizing of core/aggregation switch port capacity. The new compute/storage solution for hosting city applications will consist of two VMWare vSphere clusters located within the data centers. All hardware will be configured for component fault-tolerance.

The logical network architecture will consist of a 100Gbps routed core connecting city sites to the distributed compute/storage clusters and direct Internet access (“DIA”) services. City office sites will connect to one (P3) or both (P2) data centers over 10Gbps uplinks using L3 protocols. Utility/traffic sites (P4) will connect over eighteen (18) 1Gbps rings using ITU G.8032v2 Ethernet Ring Protection Switching (ERPS). Each ring will contain no more than 16 nodes and connect through both data centers to provide fault tolerance in the event of an aggregation switch failure. The new compute/storage

solution will host city application workloads migrated from the existing VMWare system and network management software for DNS/DHCP, alarm/performance monitoring, and logging. All network links, protocols, and services shall be configured for Layer 2/3 fault-tolerant operations in the event of an individual link or component failure.

5.3 IP Service Edge

The IP service edge will be configured to support redundant Direct Internet Access (DIA) services over 10GE links using IPv4 and BGP. The **Owner** network will be configured as dual-stack IPv4/IPv6 to simultaneously support IPv4 and IPv6 services.

5.4 Core/Aggregation Network

The core/aggregation network shall be configured to support the link types, capacities, and configurations shown in **Attachment A** and the additional specifications in this section. The core equipment shall consist of HPE 8360 or equivalent routers located at both City Hall and Public Works, connected in a 100GE routed ring. The aggregation equipment shall consist of HPE 6300 or equivalent switches with 50GE uplinks to the core network and 1GE/10GE links to the city endpoint sites and ERPS rings.

The core equipment shall support bi-directional switching throughput of 4.8Tbps and shall include a minimum integrated port mix of 12x 1/10/25/50GE and 4x 40/100GE. Each router shall be configured with redundant AC power supplies. The aggregation equipment shall support bi-directional switching throughput of 1.76 Tbps switching capacity, 400 Gbps stacking bandwidth, and shall include a minimum integrated port mix of 24x 1/10GE and 4x 1/10/25/50GE. Each router shall be configured with redundant AC power supplies. The operating software shall include support for OSPF and BGP routing, multi-chassis LAG, dynamic VXLAN, and ITU G.8032v2 ERPS.

The aggregation equipment at each P1 site must be equipped with the following optical SFP/SFP+ types and counts for connectivity of city sites as detailed in **Exhibit D – Site Connectivity**:

Public Works Access Ports	50
100GE 10km/40km/80km	0 / 0 / 0
10GE 10km/40km/80km	17 / 0 / 0
1GE 10km/40km/80km	10 / 0 / 0
1GE ERPS Rings (<10km links)	18
1GE ERPS Interconnect (5:1)	5
City Hall Access Ports	66
100GE 10km/40km/80km	0 / 0 / 0
10GE 10km/40km/80km	28 / 0 / 0
1GE 10km/40km/80km	15 / 0 / 0
1GE ERPS Rings (<10km links)	18
1GE ERPS Interconnect (5:1)	5

The **Seller** shall provide a summary of their **Proposed Solution** for this section and indicate its compliance with each of the requirements in **Exhibit A – Point by Point Response.**

5.5 Access Network

The access network shall be configured to support the port/ring counts, link types, capacities, and configurations shown in **Attachment A** and the additional specifications in this section. The **Proposed Solution** shall serve two different access architectures including Ethernet Line Service (E-Line) for city office site connections and Ethernet Ring Protection Switching (ERPS) for utility/traffic site connections.

The E-Line access network shall contain HPE 6200M or equivalent switches at the office and park sites connected over 1/10Gb links to the aggregation network. The E-Line switches shall support dual AC power supplies and support a minimum integrated port mix of 48x 1000BASE-T PoE+ ports and 4x 10GE SFP+ ports. City office sites are designated as P2 or P3 connections for protected and unprotected uplink to the aggregation network. The P2 sites will have fiber connections to each of the two data centers for geo-diverse redundancy. The **Seller** shall assist the **Owner** in the installation of up to five city sites in the **Proposed Solution**. In addition, the **Seller** shall provide optional per-site pricing to install additional city sites while they are onsite.

The ERPS access network shall contain TRENDnet TI-PG102i or equivalent hardened switches at the utility/traffic (P4) sites connected over eighteen (18) 1Gb physical rings to the aggregation network for uplink of signal controllers, SCADA devices, and surveillance cameras in non-environmentally controlled cabinets. The utility/traffic switches shall support DIN rail powering and shall include a minimum integrated port mix of 8x 1000Base-T PoE+ ports and 2x SFP+ ports. Each physical ring shall contain no more than 16 nodes including the aggregation switches at each of the two data centers and shall be configured using ITU G.8032 v2 sub-rings connecting to major rings in the core network. The rings will interconnect between the data centers over 10GE trunk ports, and to the core network through routed interfaces on each ring at each data center. The **Owner** currently sources these switches but will consider sourcing through the **Seller** depending on price and availability. The **Seller** shall assist the **Owner** in the installation, configuration, and testing of up to five ERPS rings and their connected nodes in the **Proposed Solution**. In addition, the **Seller** shall provide optional per-ring pricing to install additional ERPS rings while they are onsite.

The WAN SFP/SFP+ type and bandwidth of the access equipment may be derived from **Exhibit D – Site Connectivity**. All P2/P3/P4 fiber lateral distances are <10km, and connection of the access links to the aggregation equipment at each P1 site shall be distributed equally across the available equipment.

The **Seller** shall provide a summary of their **Proposed Solution** for this section and indicate its compliance with each of the requirements in **Exhibit A – Point by Point Response.**

5.6 Compute/Storage Network

The **Owner** currently maintains a single VMware cluster with three ESXi hosts and one VCenter instance running vSphere 8 Standard. The host serves 40+ virtual machines (VMs) running various workloads with a local storage area network (SAN) and a basic networking setup. The current environment has no capabilities for failover or fault tolerance. The **Seller** shall supply and install a fully redundant dual-cluster VMWare solution to replace and migrate the existing cluster at the existing City Hall data center and a backup/recovery solution. The **Seller** will assist the **Owner** in migrating the VMware environment and workloads from the existing compute/storage cluster to the

new geographically redundant infrastructure. This initiative aims to enhance system availability, disaster recovery capabilities, and overall operational resilience.

The new compute/storage architecture will consist of:

- Two VMware clusters across two geographically separated sites
- Implementation of VMware vCenter Server for centralized management
- A shared storage solutions with redundancy (e.g., VMware vSAN)
- Advanced networking configurations supporting failover and load balancing
- Integration with disaster recovery tools such as VMware Site Recovery Manager (SRM)
- A solution supporting full backup and recovery of the virtual environment and other endpoints

The **Seller** shall provide two options for storage that are appropriately configured for geo-diverse redundancy and support of the specified workloads.

Option 1 shall consist of a Dell EMC solution configured as an upgrade to the current Dell EMC system and will be evaluated on its price and compatibility with the **Owner's** current staff experience and maintenance processes.

Option 2 shall consist of a next-generation solution providing an all-flash, unified platform capable of handling block, file, and object workloads with integrated compute convergence options for hybrid environments. It shall support non-disruptive upgrades via a subscription model, deliver high data reduction ratios through global deduplication and compression, ensure zero RPO/RTO replication for mission-critical applications, and incorporate cloud-native orchestration for containerized deployments. The system must achieve superior energy efficiency (at least 80% reduction in power usage versus legacy systems), predictive management via AI analytics, and guaranteed six-nines availability. Capacity and performance scaling must be independent, with built-in sustainability monitoring to minimize environmental footprint.

The **Seller** shall provide a comprehensive backup and restore solution fully integrated with vCenter Server for centralized management. The backup solution shall support agentless protection of virtual machines with application-aware processing, Changed Block Tracking (CBT), instant VM recovery, granular file and application item restore, replication for disaster recovery between data centers, automated verification of recovery points, and low RPO/RTO for critical workloads including public safety and SCADA-related applications. It shall provide endpoint backup and restore for Windows and macOS physical and virtual devices including full system image, bare-metal recovery, file-level backup, source-side deduplication, compression, and incremental processing. It shall also include selective secure backup for Android and iOS mobile devices with integration to enterprise MDM platforms where applicable. The solution shall support backup to local storage media and integration with cloud storage services.

All backups shall employ AES-256 encryption for data in transit and at rest, immutable storage capabilities, ransomware protection features including anomaly detection and air-gapped/immutable copies, and support for the 3-2-1 backup rule with verified recovery points and integration with cloud storage services. The system shall feature high-availability management across both data centers with automatic failover, centralized web-based console with role-based access control, multi-factor authentication, auditing, alerting, and compliance support for CJIS, NIST, and governmental data protection standards.

The **Seller** shall provide a summary of their **Proposed Solution** for this section and indicate its compliance with each of the requirements in **Exhibit A – Point by Point Response.**

5.7 Management and Security

The **Proposed Solution** shall include components for network monitoring, element management, log management, and out-of-band access. The network will be protected by a pair of existing Fortinet firewalls in a high-availability production configuration at the IP edge. The firewalls will be configured by the **Owner** and will be used to provide remote virtual private network (VPN) access for **Seller's** implementation of the network.

The network monitoring solution (NMS) shall be an SNMP-based system providing automatic network discovery, device and protocol support for all equipment in the **Proposed Solution**, a customizable alarm management and alerting system with multiple avenues of notification, comprehensive performance monitoring including device and traffic statistics, service monitoring of OSI Layer 4 network services, a mobile-friendly web interface, customizable dashboards and visualization tools, collection and storage of device configurations, native iOS and Android apps, and access control for user/group security management.

The element management solution (EMS) shall provide access to device configuration, properties, telemetry data, and software updates of the network hardware through a web-based UI and mobile app. The EMS may be premise or cloud based.

The log management solution (LMS) shall be an open-source platform with a commercial enterprise upgrade path. The solution shall provide centralized log management, multiple common log formats, advanced search across large volumes of log data, configurable data retention policies, creation of dashboards to visualize log data trends, alert configurations based on custom log content and conditions, and notifications via multiple common methods.

The proposed management network shall include an LTE-based out-of-band access solution (OAS) with support for both Ethernet and serial console ports, configured to support all core, aggregation, and business network equipment at the two data centers. The equipment shall be AC powered, and the **Seller** shall provide the power loading requirements necessary for the **Owner** to supply battery backup support.

The **Owner** currently uses Microsoft Active Directory for DNS, DHCP, and IP address management (DDI), but is interested in considering alternative solutions. In this context, the **Seller** shall propose an optional DDI solution that provides automated subnet discovery, IP scanning, IP address history tracking/viewing, and IP address conflict management. The system shall provide integration with SolarWinds User Device Tracker to facilitate DHCP troubleshooting using device and switch port information. The system shall be deployed on a compute/storage VM and shall support VMware Aria Automation Orchestrator for IP address assignments in virtual environments. Pricing for this optional component shall be included in **Exhibit B tab 5.7** under the total line and will not count toward evaluation of the bid pricing. Should the **Owner** not elect to purchase this optional solution, the **Owner** will be responsible for configuration of DDI services as required by the **Seller** for implementation of the **Proposed Solution**.

The **Seller** shall provide a summary of their **Proposed Solution** for this section and indicate its compliance with each of the requirements in **Exhibit A – Point by Point Response.**

5.8 Warranty, Maintenance, and Technical Support

Owner shall require maintenance and support services including hardware repair/replace, software fix/features, and technical support for all components in the **Proposed Solution**. **Owner** requires 24 x 7 access to a manufacturer-certified technical support center (TAC) and major/maintenance software releases for each of the proposed components. **Owner** shall require next business day hardware replacement and TAC access for fault resolution during business hours with option for hourly extension. All critical core/aggregation and compute/storage components shall include spare parts for items that can be field replaced. Optical transceivers shall include one manufacture-branded spare for each type of transceiver in the **Proposed Solution**. Maintenance and support services shall be quoted for 1-year, 3-year, and 5-year terms. Manufacturer warranty on hardware components shall be a minimum of 1 year from delivery to **Owner**.

The **Seller** shall provide a summary of their **Proposed Solution** for this section and indicate its compliance with each of the requirements in **Exhibit A – Point by Point Response.**

SECTION 6 EVALUATION AND SELECTION

6.1 Introduction

This section describes the evaluation process that will be used to determine which Proposal(s) provides the greatest value to the Owner. **Owner** will not necessarily award the Contract to the **Seller** offering the lowest cost to the **Owner**. Instead, the **Owner** will award to the **Seller** whose **Qualified Proposal** the **Owner** believes will provide the best value to the Owner.

6.2 Evaluation Committee

The **Owner** will conduct a comprehensive, fair, and impartial evaluation of Proposals received in response to this RFP. The **Owner** will use an evaluation committee to review and evaluate the Technical Proposals. The evaluation committee will recommend an award based on the results of their evaluation to the **Owner** or to such other person or entity who must approve the recommendation.

6.3 Proposal Evaluation and Scoring

The evaluation of the proposals and any requested oral presentations will be based on the following criteria:

1. Overall Price (lowest cost / proposal cost)	0-30 points
2. **Exhibit A - Point by Point Response** Compliance Score (Y=1; P=0.5; N=0 sum of all items / total items)	0-30 points
3. **Exhibit C – VM Workload Migration Planning and MoP** tasks and timeline are clear, thorough, and considerate of the **Owner's** operating environment.	0-15 points
4. Section 1 response thoroughness (-1 point for each unfulfilled requirement)	0-10 points
5. Section 3 response thoroughness (-1 point for each unfulfilled requirement)	0-15 points
TOTAL POINTS AWARDED	0-100 points

SECTION 7 CONTRACT TERMS AND CONDITIONS

7.1 Contract Terms and Conditions

The Contract that the **Owner** expects to award as a result of this RFP shall comprise all or the specifications, terms and conditions of the RFP, written clarifications or changes made by the **Owner** to the RFP through an amendment to the RFP in accordance with the provisions of the RFP, the General Terms and Conditions, the offer of the successful **Seller** contained in its Proposal, and any other terms deemed necessary by the **Owner**. No objection or amendment by a **Seller** to the provisions or terms and conditions of the RFP or the General Terms and Conditions shall be incorporated into the Contract unless **Owner** has explicitly accepted the **Seller's** objection or amendment in writing.

The **Owner** reserves the right to either award a Contract(s) without further negotiation with the successful **Seller** or to negotiate Contract terms with the successful **Seller** if the best interests of the **Owner** would be served.

7.2 Contract Length

The term of the Contract will be for three (3) years. The **Owner** shall have the sole option to renew the Contract upon the same or more favorable terms and conditions.

7.3 Insurance

The Contract will require the successful **Seller** to maintain insurance coverage(s) in the minimum amounts set forth below, unless otherwise required by the **Owner**.

Type of Insurance	**LIMIT**	**AMOUNT**
General Liability (including contractual liability) written on an occurrence basis	General Aggregate Products – Comp/Op Aggregate Personal injury Each Occurrence	$2 million $1 Million $1 Million $1 Million
Automobile Liability (including contractual liability) written on an occurrence basis	Combined single limit	$1 Million
Excess Liability, Umbrella Form	Each Occurrence Aggregate	$1 Million $1 Million
Errors and Omissions Insurance	Each Occurrence	$1 Million
Cyber Insurance	Each Occurrence	$3 Million
Workers Compensation (Coverage A) Employer Liability (Coverage B)	As Required by Iowa law Bodily Injury by Accident/Disease	As required by Iowa law $100,000

Seller shall name the Owner as an additional insured on a primary and non-contributory basis including a waiver of subrogation in favor of the Owner. Seller shall also provide certificates of insurance to the Owner with submission of the RFP, and upon request by the Owner.

Acceptance of the insurance certificates by the **Owner** shall not act to relieve **Seller** of any obligation under this Contract. It shall be the responsibility of **Seller** to keep the respective insurance policies and coverages current and in force during the life of this Contract. **Seller** shall be responsible for all premiums, deductibles and for any inadequacy, absence or limitation of coverage, and the **Seller** shall have no claim or other recourse against the **Owner** for any costs or loss attributable to any of the foregoing, all of which shall be borne solely by the **Seller**. Notwithstanding any other provision of this Contract, **Seller** shall be fully responsible and liable for meeting and fulfilling all of its obligations under this section of the Contract.

7.4 **Termination and Adjustment**

A. If **Seller** fails to fulfill its obligations under this Contract, the **Owner** may terminate this Contract after giving the Seller ten days written notice to cure such failure. The ten day cure period will begin on the date shown on the written notification from the **Owner**. If within the 10 day period Seller fails to cure to the reasonable satisfaction of the **Owner**, then the **Owner** may give notice that it is terminating this Contract and Seller shall cease all activity associated with this Contract at such time as the notification is received. The **Owner** has the right to set off the cost of procuring another contractor to perform or complete the Scope of Work in the event Seller fails to perform the Work satisfactorily.

B. At any time prior to completion of the Work, the **Owner** may, in its sole discretion, terminate the contract by providing the **Seller** written notice of its intention to terminate. Unless the notification provides otherwise, **Seller** shall cease all activity associated with this Contract at the time the notification is received. If the termination is without fault of the **Seller**, the **Owner** shall pay for Work satisfactorily performed to the date of termination and reimburse **Seller** for unrecoverable expenses Seller incurred prior to receiving the notification.

7.5 Indemnification Requirements

For purposes of this section 7.5, the term "Owner" means the City of Waterloo and its elected and appointed officials, agents, employees, volunteers, and others working on its behalf. To the fullest extent permitted by law, Seller agrees to defend, pay on behalf of, indemnify, and hold harmless the **Owner** against any and all claims, demands, suits, damages or losses, together with any and all outlay and expense connected therewith including, but not limited to, attorneys' fees and court costs that may be asserted or claimed against, recovered from or suffered by the **Owner** by reason of any injury or loss including, but not limited to, personal injury, bodily injury including death, property damage, including loss of use thereof, and economic damages that arise out of or are in any way connected or associated with Seller's work or services under this Contract, including that of its officers, agents, employees, subcontractors and others under the control of Seller, except to the extent caused by or resulting from the sole negligence of the Owner.

Seller's obligation to indemnify the Owner contained in this Contract is not limited by the amount or type of damages, compensation or benefits payable under any workers' compensation acts, disability benefit acts, or other employee benefits acts.

The **Owner** shall not be liable or in any way responsible for any injury, damage, liability, claim, loss or expense incurred by Seller arising out of or in any way connected or associated with **Seller's** work or services under this Contract, including that of its officers, agents, employees, subcontractors and others under control of **Seller**, except to the extent caused by or resulting from the sole negligence of the Owner.

Seller expressly assumes responsibility for any and all damage caused to **Owner** property arising out of or in any way connected or associated with **Seller's** work or services under this Contract, including its officers, agents, employees, subcontractors and others under the control of Seller.

7.6 **Ownership of Documents**

The **Seller** agrees that the **Owner** is the sole and exclusive owner of all designs, design plans, images, drawings, models, survey notes, reports, specifications, studies, records and other data and documents, in whatever form, prepared under this Contract (the "Design Documents"). The **Seller** hereby irrevocably assigns, transfers and conveys to the **Owner** all right, title and interest in and to the Design Documents and all intellectual property rights and proprietary rights arising out of the Design Documents, including copyrights, patents, trademarks, and derivative works and interests. The **Seller** warrants to the **Owner** that the Design Documents will be free from any claims or encumbrances of intellectual property or proprietary rights of the **Seller** and any third party, including any employee, agent, contractor, sub-Contractor, subcontractor, subsidiary or affiliate of **Seller**. Upon completion or termination of this Contract, the **Seller** shall immediately turn over to the **Owner** all Design Documents not previously delivered to the Owner.

To the extent any of the **Seller's** rights in the Design Documents are not subject to assignment or transfer, including any moral rights and any rights of attribution and integrity, the Seller hereby irrevocably and unconditionally waives such rights, and the enforcement of them, and agrees not to challenge the **Owner's** rights in and to the Design Documents.

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT
City Clerk Department

MEETING DATE
June 15, 2026

AGENDA ITEM TITLE
Motion approving an Exception to Burning Yard Waste Application by Dales Petroleum, Service to perform flaring of LP tanks for John Deere on property located not of the John Deere Sercie Part Building, June 16-19, 2026.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS
1. Application

Application
Exception to Burning Yard Waste
City of Waterloo, Iowa

The undersigned hereby requests that the City of Waterloo, Iowa, consider the following application to allow the burning of yard waste in accordance with Section 4-3-8 of the Waterloo Code of Ordinances.

1. **Name of Applicant:** Dales Petroleum Service Rob Ehq

2. **Address and Phone No. of Applicant** 1222 W 23rd Street Fort Dodge, Ia

John Deere Service Parts
1400 Westfield Ave (515)570-7555

3. **General Description of area to be burned (including size):**

Flaring of Lp Tanks

Our Burn down tool Will have a flame off the ground 6' + we have Valve we can regulate Pressure

4. **Dates and times of burning:** 6-16 through 6-19

Will call Fire dept. every Morning and Night till complete

5. **Description of ~~Vegetation~~:** We Will be burning Vapor pressure from the Lp tanks.

6. **Description of management techniques:** our burn down tool will be placed in a remote area.

We have 2- 2016 Fire Extinguisher on site

7. **Describe containment procedures:** The Fire will be 6' in the Air We have a Valve in place so we can stop Fire.

The Burn Will happen
North of the John Deere Service Part Building

Signature of Applicant

The Waterloo City Council will act on this applicant and you will be notified of their decision. Prior to burning, please notify the Waterloo Fire Department:

1. To determine if proper weather conditions exist, and
2. To determine need for stand-by vehicles.

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT	MEETING DATE
Human Resources Department	June 15, 2026

AGENDA ITEM TITLE

Motion to approve the hiring of **Andrew Shimp** from the current Civil Service List to the position of Solid Waste Technician in the Sanitation, effective June 16, 2026.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. SOLID WASTE TECH (exp 1.27)
2. SOLID WASTE TECHNICIAN 10.2025

715 Mulberry St, Waterloo, IA 50703
Phone: (319) 291-4303
Fax: (319) 291-4569
CITYOFWATERLOOIOWA.COM

January 16, 2026

TO: Honorable Mayor & City Council

We, the members of the Civil Service Commission, certify the following list of applicants, who are eligible based upon the examination process as set forth by the Civil Service Commission for the appointment to the position of Solid Waste Technician for the City of Waterloo, Iowa Public Works Sanitation Department. This list shall be used to fill any vacancy in the Solid Waste Technician classification from January 16, 2026 – January 15, 2027.

CERTIFIED LIST

Hunter Dally
Jason Heffelmeier
Robert Roby Victor Rottinghaus
Britani Young
Andrew Shimp
Jeremiah Reed
Andrew Peverill

Respectfully submitted,

Dr. Bev Smith	Date	Dr. Robert Welch	Date

Marianne Kurtenbach	Date

*December 1, 2025- The Waterloo City Council voted to suspend the Civil Service hiring practices for entrance positions as allowed by the Iowa Administrative Code section 400.12A until January 6, 2027; therefore, no signatures are required to certify this list.

PERSONNEL REQUISITION FORM

Check as applicable: ☒ To start recruiting or civil service process and/or ☒ To fill a vacancy
☐ Active Civil Service List Expires: _____

A proposed job description and questionnaire must accompany this form at time of submission to Human Resources.

****

Position Title: Solid Waste Technician Department: Sanitation Department

Reports To: Sanitation Director Work Location: 625 Glenwood Street

Employment Status:
☒ Regular Full Time ☐ Temporary Full Time from _____ to _____
☐ Regular Part Time ☐ Temporary Part Time from _____ to _____
☐ Regular 7-Month ☐ Intern/Co-op Student from _____ to _____

Type of Position:
Civil Service Position: ☒ Yes ☐ No
Bargaining Position: ☒ Yes ☐ No
Bargaining Group: 177
Non-bargaining Position: ☐ Yes ☒ No

Recommended Recruitment Sources:
☐ Internal Posting Only
☒ Internal Posting and External Advertising

****

Complete the following if the requisition is to fill a vacancy:

☐ New Position or ☒ Replacement Position for: Collin Weber, Solid Waste Technician
(Specify name and title of former incumbent)

If replacement, former incumbent: ☒ Retired/Resigned/Terminated ☐ Transferred ☐ Promoted

Date incumbent terminated employment: 10/6/2025 Date of final payout: 10/31/25

Anticipated start date: ASAP No. of hours/week: 40 Work schedule: 6:00 am - 2:00 pm

Justification of need for position: Position is required to support Sanitation Department operations in refuse can delivery, recycling and yard waste pick-ups, and compost site maintenance.

What are the likely consequences if the position is not filled? A reduced number of employees will have a negative impact on the department's ability to complete all necessary operations.

APPROVALS

Annual salary requirements: 64,567.22 Hourly Rate: 31.97 Benefits: 50.30 / 104,619.00
(Payroll taxes, pension, health ins.- assuming family)

Is position budgeted for this and future FYs? ☒ Yes ☐ No If no, how will position be funded? _____

Approved subject to the following conditions: _____

10-8-25
Submitting Department Head Date

Mayor Date

Chief Financial Officer Date

Human Resources Director Date

Human Resources Committee Chairperson Date

Created 6/30/2017

PERSONNEL REQUISITION
Solid Waste Technician

The following questions are provided as guidelines to assist you in developing your rational for the position of **Solid Waste Technician** in the Sanitation Department. Depending upon your situation, some questions may or may not apply. Please provide written responses to these questions as part of your preparation for meeting with the Mayor.

(1) What are the key job responsibilities of this position? **Delivery of garbage carts, maintain yard waste site, service sanitation routes if operator is unavailable, complete recycle and yard waste routes as assigned.**

(2) Can the job responsibilities of this position be assigned to other employees within the department? If no, why not? **Yes; however, a reduced number of operators will directly impact the ability to provide timely citizen services.**

(3) How is the work of this position being accomplished now? **Reduced number of operators equals reduced tasks that can be accomplished.**

(4) Are the filled positions in your department currently being utilized to their maximum potential? **Yes**

(5) How would filling this position meet the needs of your department or the City on either a short-term basis (if temporary position) or a long-term basis (if a regular position)? **This position is necessary for the department to meet departmental objectives – ie. delivery of garbage carts, maintain yard waste site, service sanitation routes if operator is unavailable, complete recycle and yard waste routes as assigned.**

(6) What cost savings or revenues, if any, would your department or the City realize if this position is filled? **No cost savings or increased revenues would be realized by this position. This position is directly related to providing citizen services in a timely manner.**

(7) If you are paying overtime or comp time within your department to accomplish this work now, how much overtime or comp time has been paid out or earned that is directly attributable to this position and over what period of time? **Overtime/comp time requirements are seasonal or based on weather events. The department pays overtime only as necessary.**

(8) How has the work load or demands of your department changed in comparison to your staffing levels over the past three fiscal years? Provide statistics if possible. **Staffing levels have remained consistent over the past three fiscal years.**

(9) If this position is not filled, what affect will it have on your department? What work will not get done? What costs will you incur? Please be as specific as possible. **Department will incur additional overtime/comp time costs.**

(10) How do you cover the responsibilities for this position whenever the incumbent is out on vacation? **Employee time off is managed to ensure daily work assignments are covered.**

(11) Is it possible that the City could outsource this position to an outside agency? If so, what savings, if any, would the City realize as a result of this change? I**t would not be practical to outsource this position. Outsourcing this position would require outsourcing the entire department.**

(12) How would you rank this position in terms of its contribution to City business in comparison with other positions reporting to you? **This position is funded completely by user fees and not property taxes. The contribution of this position is critical to the overall objectives of the department.**

(13) How does this position impact the Goals and Objectives for the City adopted by the City Council? **This position directly impacts the department's ability to develop a customer-centered service delivery approach.**

Note: Forward completed questionnaire to Human Resources Department with original copy of Personnel Requisition form.

CITY OF WATERLOO IOWA
Community of Opportunity

CIVIL SERVICE NOTICE
CITY OF WATERLOO, IOWA
OPEN EXAMINATION

PUBLIC WORKS – SOLID WASTE TECHNICIAN

DEPARTMENT	**SANITATION**
SALARY	**$30.97, WITH $1.00 INCREASE AFTER 6 MO**
FLSA	**NON-EXEMPT**
CIVIL SERVICE	**INCLUDED**
BARGAINING UNIT	**CONSTRUCTION & PUBLIC EMPLOYEES LiUNA Local #177**

GENERAL STATEMENT OF DUTIES

Under the general direction of the Sanitation Director, or his/her designee, performs collection of solid waste, trash, refuse, yard waste and recycling during all weather conditions. Other duties that may be required include customer satisfaction, code enforcement cleanups, maintenance, cart delivery, cart pickup, cart repair & washing, and flood relief. Will also be required, as necessary, to support emergency City-wide operations.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative only)

These functions are considered essential for successful performance in this job classification.

1. Operates a variety of heavy equipment including but not limited to dump truck, automated garbage truck, rear packer garbage truck, backhoe, multi-compartment recycling truck, end loader, compost turner, screener and yard waste grinder.
2. Performs daily work as directed by Sanitation Director in support of department objectives. Work may include but not be limited to curbside collection, delivery of customer carts, repairs to customer carts, missed garbage, missed yard waste, missed recycling, code enforcement clean-ups, bulk item clean-ups and yard waste site maintenance.
3. Follows established routes and maintains collection schedules and route logs. Prepares and leaves notices or tags on refuse not complying with established ordinance/rules. Enters data into collection system for proper and accurate data collection.
4. Ensures vehicles and equipment are properly equipped, operate correctly, present a neat and clean appearance and are completely fueled at the end of the workday in preparation for the next day's work assignment. Equipment pre-check forms to be completed prior to equipment use and any issues relayed to Sanitation Director.
5. Supports special events including but not limited to neighborhood clean-ups, City-wide clean-ups and hazardous materials collection and disposal events.
6. Responds to citizen complaints, questions and requests for service.

7. May assist in answering telephone customer service calls, filling out reports and servicing calls or inquiries.
8. Work is performed in busy traffic areas, in vehicle and on foot, in all weather conditions. Operates equipment that causes vibration, noise level is loud, atmosphere may contain dust and traffic fumes, work environment is dirty with low visibility during bad weather. Works in inclement weather conditions for extended periods of time.
9. Works independently and with others with minimum supervision.
10. Performs work of a repetitive nature and varied workload.
11. Attends work regularly at the designated place and time.
12. Performs all duties and activities in accordance with City policies and procedures. Must comply with OSHA, EPA and Public Works safety rules and regulations.
13. Supports department goals and objectives by making recommendations to management for delivery of service improvements.
14. Performs all other related duties as assigned.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES

1. Knowledge of traffic laws and safety rules.
2. Ability to learn City street layout.
3. Ability to read street signs, chemical hazard labels and written directions.
4. Ability to keep work logs and prepare notices.
5. Ability to safely operate department equipment.
6. Ability to respond to questions and comments from the public tactfully and politely.
7. Ability to communicate effectively and maintain working relationships with other City employees, supervisors and the public.
8. Knowledge of occupational hazards associated with and the safety precautions necessary when working in busy traffic or unfavorable weather conditions.
9. Ability to work with people from a broad variety of social, economic, racial, ethnic and educational backgrounds.
10. Ability to work with a tablet for proper data entry of the day's tasks.

MISCELLANEOUS

1. Must wear personal protective equipment whenever and wherever necessary such as safety shoes, safety glasses, hard-hat, reflective vest, hearing protection, gloves and over-garments as required by daily work assignment.
2. Must wear standard uniform as supplied by City. Uniform must be clean and present a neat appearance.
3. Must submit to Department of Transportation requirements including pre-employment, post-accident, reasonable suspicion, random and return-to-duty/follow-up alcohol and drug testing.
4. Following a conditional offer of employment, the City of Waterloo requires a physical examination and a drug test by a physician of the City's choice to determine if an applicant is capable of performing the essential functions of the position. Failure to pass the physical exam and drug test will result in withdrawal of the employment offer.
5. The City of Waterloo reserves the right to conduct a background investigation including education, employment and criminal history checks on any applicant being considered for this position.

6. Must submit to Civil Service examination procedures including an equipment driving test and a panel interview

ACCEPTABLE EXPERIENCE & TRAINING

1. High school graduate/GED.
2. Minimum one year experience in the skilled operation of a large truck or other large vehicle or equipment

   OR

   Any equivalent combination of education and experience that provides the knowledge, skills and abilities necessary to perform the essential functions of the position.
3. Required to possess or obtain an Iowa Class B Commercial Drivers' License (CDL) with air brake and tanker endorsements within 6 months of employment. Good driving record based on City of Waterloo driver performance criteria. A candidate with any of the following will not be considered for employment: loss of license for any reason during the period of candidacy for employment, if the candidate remains without a valid, current license for the position when the City issues an offer of employment; loss of license, plea of guilty, plea of no contest or its equivalent or conviction for OWI, reckless driving or other major moving violation within the previous five years; four or more citations for moving violations within the previous three-year period, excluding speeding violations of 10 mph or less over the posted speed limit; three or more citations for moving violations within the previous one-year period. After appointment to the position, disciplinary action or continuing employment status may be reviewed for the following: four or more moving violations within the previous three years, three or more moving violations within the previous one year or loss of license or conviction for OWI, reckless driving or other major moving violation within the previous five years; two or more at-fault accidents within a three-year period while driving on City business; three or more at-fault within a three-year period.
4. An applicant's driving record will be reviewed prior to consideration for an interview, prior to offer of employment and at least annually after hire.

ESSENTIAL PHYSICAL ABILITIES

The following physical abilities are required with or without accommodation.

1. Sufficient strength to perform assigned tasks.
2. Sufficient physical and mental stamina to work at a steady pace for up to ten hours or longer during unfavorable weather conditions or during special projects. Must be able to lift up to 100 pounds with assistance.
3. Sufficient speech and hearing that permits the employee to communicate effectively with coworkers in person or over a radio, to understand and give verbal instructions, respond to questions from the public and to hear and respond to approaching traffic.
4. Sufficient color vision, depth perception, distance and peripheral vision, and hand/eye coordination to safely operate vehicles and equipment in all weather conditions, work in high traffic areas and climb on and off vehicles and equipment; dexterity and grip strength to run controls on compactor and inside automated trucks.
5. Sufficient personal mobility that permits the employee to operate required equipment safely in all types of weather and a variety of road conditions.
6. For applicants that meet the essential physical abilities standards, reasonable accommodations may be considered.

WORK SCHEDULE

Scheduled work shift is generally 6:00 a.m. - 2:00 p.m. Monday-Friday. Weather, holidays, or emergency conditions may require working later, other days or weekends. May be significant overtime during weather emergencies.
Required to adjust work week to support department/City programs and objectives, including but not limited to neighborhood clean-up events, City-wide clean-up events, etc.

EQUIPMENT **EXAMINATION**

Those applicants with a good motor vehicle driving record will be required to participate in a driving test that will test skills in operating equipment used in this job classification. An individual must receive a minimum of eighty out of one hundred points to achieve a passing score on the equipment examination.

ORAL **EXAMINATION**

Those candidates who successfully complete the equipment examination will be required to appear before an interview panel consisting of a minimum of three people who have expertise in the areas being tested. An individual must receive a minimum average score of sixty points out of one hundred to achieve a passing score on the interview.

EXAMINATION INFORMATION

Those applicants who successfully complete the equipment and oral examinations, as outlined above, will have their total scores determined by giving 40% weight to the equipment test score and 60% weight to the oral test score. The top applicants, as ranked by their scores, will be the individuals placed on the certified list. Applicants who qualify as outlined and are full-time regular employees of the City of Waterloo shall have one additional point per full year of employment up to a maximum of five points added to their final score. Honorably discharged men and women from the armed forces of the United States who qualify per provisions of Chapter 35 of the Code of Iowa and who are citizens and residents of the United States shall have five additional points added to their final score upon submission of their DD214 or ten points added if they were awarded a Purple Heart or have a service connected disability.

Employment is contingent on possession of a good driving record based on City of Waterloo driver performance criteria and passing a post job offer physical and drug test. Failure to pass these tests will result in the withdrawal of the employment offer.

All qualified candidates who apply by the deadline date will be notified of the time, place and date of the equipment and oral examinations.

A.A./E.E.O.

Minority, female & disabled individuals are encouraged to apply.

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT
Human Resources Department

MEETING DATE
June 15, 2026

AGENDA ITEM TITLE
Motion to approve the hiring of **Keith Sammons** from the current Civil Service List to the position of Sewer Maintenance Worker in the Waste Management Services, Publice Works, effective June 16, 2026.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS
1. WMS SEWER MAINTENANCE 4.2026
2. SEWER MAINTENANCE WORKER CS LIST (exp 5.27)

PERSONNEL REQUISITION FORM

Check as applicable: |X| To start recruiting or civil service process and/or ☒ To fill a vacancy
☐ Active Civil Service List Expires: _____

A proposed job description and questionnaire must accompany this form at time of submission to Human Resources.

****

Position Title: Sewer Maintenance Department: Waste Management Services

Reports To: Sewer Maintenance Foreman Work Location: 3505 Easton Av, Waterloo IA 50702

Employment Status:
☒ Regular Full Time ☐ Temporary Full Time from _____ to _____
☐ Regular Part Time ☐ Temporary Part Time from _____ to _____
☐ Regular 7-Month ☐ Intern/Co-op Student from _____ to _____

Type of Position:
Civil Service Position: ☒ Yes ☐ No
Bargaining Position: ☒ Yes ☐ No
Bargaining Group: 177
Non-bargaining Position: ☐ Yes ☒ No

Recommended Recruitment Sources:
☐ Internal Posting Only
☒ Internal Posting and External Advertising

****

Complete the following if the requisition is to fill a vacancy:

☐ New Position or ☒ Replacement Position for: Todd Gaede - Sewer Maintenance
(Specify name and title of former incumbent)

Date incumbent terminated employment: 04/10/26 Date of final payout: 5/1/2026

Anticipated start date: ASAP No. of hours/week: 40 Work schedule: 7:00AM TO 3:00PM

Justification of need for position: This is a regular position and is needed to ensure compliance with CMOM activities which are critical to maintain proper preventative maintenance work to prevent future SSOs and basement backups.

What are the likely consequences if the position is not filled? Would not be able to properly complete preventative maintenance work to avoid more potential repairs or sewer backups.

APPROVALS

Annual salary requirements: $67,208.83 Hourly Rate: $32.31 Benefits: $50.70hrly/$105,449.64yrly
(Payroll taxes, pension, health ins.- assuming family)

Is position budgeted for this and future FYs? ☒ Yes ☐ No If no, how will position be funded? _____

Approved subject to the following conditions: _____

Submitting Department Head 2/31/26 Date

Mayor Date

Chief Financial Officer Date

City Clerk/Human Resources Director Date

Human Resources Committee Chairperson Date

Created 8/7/2014

PERSONNEL REQUISITION
Sewer Maintenance Worker

The following questions are provided as guidelines to assist you in developing your rational for the position of *Sewer Maintenance Worker* in the *Waste Management Services* Department. Depending upon your situation, some questions may or may not apply. Please provide written responses to these questions as part of your preparation for meeting with the Mayor.

(1) What are the key job responsibilities of this position?
Provides manpower for routine sanitary and storm sewer maintenance activities such as cleaning waterways, construction, flushing sewer mains, and SL-RAT operation. Also responsible for completing CMOM required sewer televising and cleaning.

(2) Can the job responsibilities of this position be assigned to other employees within the department? If no, why not?
To a minimal amount, yes. This is a specialty work activity and needs personnel with a special trained skill set and doing so would result in loss of progress in other areas.

(3) How is the work of this position being accomplished now?
By other workers in this position.

(4) Are the filled positions in your department currently being utilized to their maximum potential?
Yes

(5) How would filling this position meet the needs of your department or the City on either a short-term basis (if temporary position) or a long-term basis (if a regular position)?
This is a regular position and is needed to ensure compliance with CMOM activities which are critical to maintain proper preventive maintenance work to prevent future SSOs and basement backups.

(6) What cost savings or revenues, if any, would your department or the City realize if this position is filled?
Cost savings will result in having the manpower to ensure required preventative maintenance work is completed in accordance with the CMOM plan.

(7) If you are paying overtime or comp time within your department to accomplish this work now, how much overtime or comp time has been paid out or earned that is directly attributable to this position and over what period of time?
For the most part OT is only incurred from emergency related operations.

(8) How has the work load or demands of your department changed in comparison to your staffing levels over the past three fiscal years? Provide statistics if possible.
Each sewer main repair takes approximately 4 days, 3 employees – resources that are taken from other jobs such as construction and inspections.
Since 2022, Sewer Maintenance has been assigned 148 'tasks' by the Engineering/Stormwater Departments. These tasks are labor intensive and can take anywhere from several days to months to complete. These are resources that are being pulled from our department to fulfill the needs of other city departments.
The Sewer Maintenance Department has competed jobs/tasks for, or assisting, other departments resulting in the following number of hours (this data is not including work done for Engineering/Stormwater):
FY2024: 516 hours
FY2025: 212.5 hours
FY2026 (to date): 160 hours

(9) If this position is not filled, what affect will it have on your department? What work will not get done? What costs will you incur? Please be as specific as possible.
The Sewer Maintenance Department may fail to reach the yearly inspection mileage goal as outline in the CMOM Program requirements and may not be able to properly complete preventative maintenance to avoid more potential repairs and/or sewer backups. It is important that we maintain the minimum requirements of the CMOM Program and those set forth in the Consent Decree, which was recently terminated, in order to meet the guidelines put in place by the EPA, DOJ, and DNR. If we fail to meet such guidelines, it is possible we may be forced into another Consent Decree with the EPA/DOJ and will incur fines as well as experience developmental/economic setbacks for the City.

(10) How do you cover the responsibilities for this position whenever the incumbent is out on vacation?
By other workers and in many cases the work to be delayed.

(11) Is it possible that the City could outsource this position to an outside agency? If so, what savings, if any, would the City realize as a result of this change?
This position individually – no. The whole division – yes but it would not be advisable as these services are costly.

(12) How would you rank this position in terms of its contribution to City business in comparison with other positions reporting to you?
This position is a very important aspect of the department's overall staffing plan.

(13) How does this position impact the Goals and Objectives for the City adopted by the City Council?
Maintaining proper preventative maintenance, saving the potential for long term and more expensive consequences. Preventing delays and ensuring such maintenance activities are properly completed.

Note: Forward completed questionnaire to Human Resources Department with original copy of Personnel Requisition form & updated job description.

Submit resume by going to www.cityofwaterlooiowa.com clicking on Career Opportunities, reviewing the position and following the directions to submit a resume. We will not accept mailed, faxed, hand-delivered or directly mailed resumes. We will accept applications until Friday __ at noon.

CIVIL SERVICE NOTICE
CITY OF WATERLOO, IOWA
OPEN EXAMINATION

SEWER MAINTENANCE WORKER

DEPARTMENT	**WASTE MANAGEMENT SERVICES**
SALARY	**$31.31 HOURLY WITH $1.00 INCREASE AFTER 6 MONTH PROBATION**
FLSA	**NON-EXEMPT**
CIVIL SERVICE	**INCLUDED**
BARGAINING UNIT	**CONSTRUCTION & PUBLIC EMPLOYEES LiUNA Local #177**

GENERAL STATEMENT OF DUTIES

Performs maintenance, repair and construction of municipal storm and sanitary wastewater collection systems. The work is performed under the general direction of the Collection Systems Foreman and Collection Systems/Maintenance Supervisor. May perform basic foreman duties in absence of Collection Systems Foreman.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative only)

These functions are considered essential for successful performance in this job classification.

1. Performs routine preventive maintenance on storm and sanitary wastewater collection systems including the repair and construction of catch basins, manholes and related structures.
2. Cleans and unclogs sewer lines and catch basins and rebuilds catch basins and manholes.
3. Lays sanitary and storm sewer tile and raises and lowers manholes.
4. Operates hydro-flusher, combination sewer cleaning unit, bucket machine, air compressor, cement mixer, portable pumps, backhoe, crawler, excavator, large and small trucks.
5. Enters and works in confined spaces to check lines or perform maintenance.
6. Uses hand tools, makes hose and pipe connections, operates jackhammer, shovels material into concrete mixer, hauls cement and other materials with wheelbarrow, operates manual gate openers, cleans debris from catch basins, loads sand, gravel, cold mix or other materials, pulls ropes to start gas engines, uses pick and shovel to pry, move, load and unload manhole covers, casings and other heavy items.
7. Performs general maintenance activities such as snow removal, building and equipment repair.
8. Operates television equipment used to inspect new and existing sewers.
9. Sets up, monitors and operates portable flood pumps during flood emergencies.
10. Completes daily work sheets.
11. Operates heavy duty and rough-riding vehicles and equipment.

12. Lifts and carries items weighing up to one hundred pounds with assistance as needed.
13. Works outside in all weather conditions; works near moving vehicles and equipment and around mechanical and electrical hazards; operates equipment and tools that cause vibration; noise level is loud; atmosphere may contain dust, infectious wastes, toxic and explosive gases or unfavorable natural ventilation; visibility might be poor and mobility limited.
14. Responds to citizen complaints, questions and requests for service.
15. Performs work of a repetitive nature and varied workload pace.
16. Works independently and with others with minimum supervision.
17. Attends work regularly at the designated place and time.
18. Performs all work duties and activities in accordance with City policies, procedures and OSHA, City and Waste Management Services safety rules and regulations.
19. Performs all other related duties as assigned.

REQUIRED KNOWLEDGE & ABILITIES

1. General knowledge of the use of a wide variety of hand tools; ability to read and follow simple blueprints.
2. Knowledge of occupational hazards and safety precautions necessary in the maintenance of sanitary and storm sewer systems.
3. Ability to limit exposures to infectious waste, toxic and explosive gases.
4. Ability to complete daily work sheets.
5. Ability to complete assigned work projects without direct supervision.
6. Ability to respond to questions and comments from the public tactfully and politely.
7. Ability to communicate effectively and maintain working relationships with coworkers, supervisors and the public.
8. Ability to work with people from a broad variety of social, economic, racial, ethnic and educational backgrounds.

ACCEPTABLE EXPERIENCE & TRAINING

1. High school graduate/GED.
2. Minimum two years of experience in sewer maintenance construction, plumbing or other heavy construction in all types of weather.

   OR

   Any equivalent combination of training and experience that provides the knowledge, skills and abilities necessary to perform the essential functions of the position.
3. Required to possess or obtain an Iowa Class A Commercial Drivers' License (CDL) with air brake and tanker endorsements within 6 months of employment. Good driving record based on City of Waterloo driver performance criteria. A candidate with any of the following will not be considered for employment: loss of license for any reason during the period of candidacy for employment, if the candidate remains without a valid, current license for the position when the City issues an offer of employment; loss of license, plea of guilty, plea of no contest or its equivalent or conviction for OWI, reckless driving or other major moving violation within the previous five years; four or more citations for moving violations within the previous three-year period, excluding speeding violations of 10 mph or less over the posted speed limit; three or more citations for moving violations within the previous one-year period. After appointment to the position, disciplinary action or continuing employment status may be reviewed for the following: four or more moving violations within the previous three years, three or more moving violations within the previous one year or loss of license or conviction

for OWI, reckless driving or other major moving violation within the previous five years; two or more at-fault accidents within a three-year period while driving on City business; three or more at-fault within a three-year period.

4. Must be trained regarding Permit Required Confined Space Program after beginning employment.

ESSENTIAL PHYSICAL ABILITIES

The following physical abilities are required with or without accommodation.

1. Sufficient strength to perform assigned tasks.
2. Sufficient physical and mental stamina to work twelve hour or double shifts during flood emergencies.
3. Sufficient speech and hearing that permits the employee to communicate effectively with coworkers, supervisors and the public in person, over the telephone and over a radio.
4. Sufficient personal mobility that permits the employee to operate vehicles and equipment safely in all types of weather and a variety of road conditions, enter and work in confined spaces with entry being as small as twenty-two inches, use ladders to climb up to thirty feet, visit work sites anywhere in Waterloo and meet with the public inside and outdoors.
5. Sufficient manual dexterity and grip/grasp ability to use hand tools such as pipe wrench, pick, shovel and rake, make hose and pipe connections, operate jackhammer, operate manual gate openers and pull ropes.
6. Sufficient vision to operate vehicles and equipment and use construction maintenance tools.

MISCELLANEOUS

1. Must wear personal protective equipment including but not limited to safety shoes, safety glasses, safety vest, hearing protection, gloves and hardhat as job assignment requires.
2. Must wear standard uniform as supplied by City.
3. Must comply with City of Waterloo Residency Policy for Critical Employees (physically reside within thirty-mile radius of Waterloo City Hall-will be given reasonable compliance period as determined by department head). Must maintain a local telephone number in order to be contacted during emergencies.
4. Must submit to Department of Transportation requirements including pre-employment, post-accident, reasonable suspicion, random and return-to-duty/follow-up alcohol and drug testing.
5. The City of Waterloo reserves the right to conduct a background investigation including employment, education, driving and criminal history checks on any applicant being considered for this position.
6. Must submit to and pass Civil Service examination procedures including a panel interview.
7. Must submit to and pass pre-employment physical and drug test. Failure to pass these tests will result in withdrawal of employment offer.

WORK SCHEDULE

Scheduled shift is generally 7:00 a.m.-3:00 p.m. Monday-Friday with a 20-minute paid lunch break. During flood emergencies, may transition to 12-hour shifts. Subject to emergency call during flood or other severe weather conditions. Rotates call with other Sewer Maintenance Workers about every ninth week.

Employees hired in this job classification may be cross-utilized in other City departments in emergency and non-emergency situations as determined by the workload. Consequently, hours of work, including starting and ending times, work schedule, rest periods, work duties etc. will vary depending on the department to which the employee is assigned.

EXAMINATION INFORMATION

All qualified candidates who apply by the deadline date will be required to appear before an interview panel consisting of a minimum of three people who have expertise in the areas being tested. An individual must receive a minimum average score of sixty points out of one hundred to achieve a passing score on the interview. The top applicants, as ranked by their scores on the interview, will be the individuals placed on the certified list. Applicants who qualify as outlined and are full time regular employees of the City of Waterloo shall have one additional point per full year of employment up to a maximum of five points added to their final score. Honorably discharged men and women from the armed forces of the United States who qualify per provisions of Chapter 35 of the Code of Iowa and who are citizens and residents of the United States shall have five additional points added to their final score upon submission of their DD214 or ten points added if they were awarded a Purple Heart or have a service connected disability. Employment is contingent on possession of a good driving record based on City of Waterloo driver performance criteria and passing a post job offer physical and drug test.

EXAMINATION DATE

All qualified candidates who apply by the deadline date will be notified of the time, place and date of the oral examination.

A.A./E.E.O.

Minority, female & disabled individuals are encouraged to apply.

715 Mulberry St, Waterloo, IA 50703
Phone: (319) 291-4303
Fax: (319) 291-4569
CITYOFWATERLOOIOWA.COM

May 22, 2026

TO: Honorable Mayor & City Council

We, the members of the Civil Service Commission, certify the following list of applicants, who are eligible based upon the examination process as set forth by the Civil Service Commission for the appointment to the position of Sewer Maintenance Worker for the City of Waterloo, Iowa WMS. This list shall be used to fill any vacancy in the Sewer Maintenance Worker classification from May 22, 2026 – May 22, 2027.

CERTIFIED LIST

Keith Sammons
Brian Schmitz
Miguel Vasquez
Brandon Secor

Respectfully submitted,

Dr. Bev Smith Date

Dr. Robert Welch Date

Marianne Kurtnebach Date

*January 6, 2025 the Waterloo City Council voted to suspend the Civil Service hiring practices for entrance positions as allowed by the Iowa Administrative Code section 400.12A until January 6, 2027; therefore no signatures are required to certify this list.

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT
Mayor Department

MEETING DATE
June 15, 2026

AGENDA ITEM TITLE
Rajane Grant, Board/Commission: Cultural and Arts Commission, Expiration Date: June 15, 2029, New appointment.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS
1. Boards & Commissions Application_Cultural and Arts Commission_Rajane Grant

CITY OF WATERLOO, IOWA
BOARDS & COMMISSIONS APPLICATION

Date: 05/30/2026

I, Rajane Grant, request to be appointed to (state preference):
(Name)

1. CULTURAL AND ARTS COMMISSION 2. _____

Home Phone: _____ Cell Phone: 4236450283 Work Phone: _____

Email Address Rajane@CVGPathways.org

Home Address 1542 Flammang Dr. #1060, Waterloo IA Zip Code 50702

Employer Cedar Valley Global Pathways Title Director

Employer Address _____ Zip Code _____

How long have you resided in Waterloo? ___ yrs Email address: _____

List current membership in organizations and offices held: Four Corners Coalition - Co owner
Director - Cedar Valley Global Pathways
Board Co-Chair - Cedar Valley Immigrant Community Alliance
Board Secretary - The River ARC

I am available for meetings: ☑ A.M. ☑ P.M. ☑ Noon ☑ Evenings
I am available to serve on a Board/Commission the entire year: ◉ Yes ○ No If no, list months not able to serve: _____

Briefly explain your qualifications for appointment to a designated Board/Commission:
As an immigrant and nonprofit leader, I am committed to fostering cultural exchange, celebrating diversity, and building inclusive communities.
As Director of Cedar Valley Global Pathways, I develop programs that support immigrants, and refugees while creating opportunities for cultural learning
and community connections. My lived and professional experiences would bring a valuable perspective to the Waterloo Center for the Arts.

Additional information and comments that may not be evident from information already on this form: ___
I believe the arts play a critical role in bringing people together, preserving cultural traditions, and promoting mutual understanding.
I would be honored to support the Waterloo Center for the Arts in expanding access to cultural experiences for all residents.

References (include phone numbers): ReShonda Young - 3195042323
Kyle Baker - 8125893600
Leah Elrod - 7123500981

I understand this application does not bind me to accept an appointment should it be offered, nor does it guarantee an appointment to a Board/Commission. If selected, I will be available to attend appropriate training sessions. This application will remain valid and on file for one calendar year from above date.

Signature _____

or **RETURN TO MAYOR'S OFFICE, 715 MULBERRY ST., WATERLOO, IA 50703 FAX 291-4286; EMAIL: mayor@waterloo-ia.org; PHONE 291-4301**

Rev 02/20/2020

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Lance Dunn, Human Resources Director
Human Resources Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Communication from the Building Inspections Department on the notice of the conclusion of employment of Jeffrey Siebel, Property Safety Inspector, effective May 29, 2026, with recommendation of approval of payout of $974.66 for unused benefits.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. SIEBEL PAYOUT 6.15.2026

CITY OF WATERLOO IOWA
Community of Opportunity

City Council
Notice of Employment Severance

Today's Date: 6/1/2026 **Department:** Building Inspections

Effective Date: 5/29/2026 **Job Classification:** Property Safety Inspector 75%

Employment Date: 10/1/2025 **Employee Name:** Jeffrey Siebel

The employment with the named City of Waterloo employee has been severed by reason of:

- ☐ **Retired**
  - **Disability Related** ☐ **No** ☐ **Yes**
- ☐ **Resigned**
- ☑ **Termination**
- ☐ **Other** _____

In accordance with City Policy, it is requested to allow payment which consists of the following:

Benefits	Total Hours	(x) Hourly Rate		Payout
Vacation-Accrued	17	$ 37.13		$ 631.21
Vacation-Current	0	$ -		$ -
Usable Sick Leave	13	$ 37.13	25%	$ 120.67
Casual Hours	0	$ -		$ -
Comp Time Pay	0	$ -		$ -
Unscheduled Leave	0	$ -		$ -
Other Pay (Bday)	6	$ 37.13		$ 222.78
		Total Payment		**$ 974.66**

Comments Funding through ARPA ceased.

Approved by Brian J Bak **Date** 6/1/26

Human Resources Nikki Fischels **Date** 06/01/2026

Council Agenda Date: 6/15/2026 KMW

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Lance Dunn, Human Resources Director
Human Resources Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Communication from the Building Department on the notice of the conclusion of employment of Gregory Ahlhelm, Building Official, effective May 18, 2026, with recommendation of approval of payout of $7,782.54 for unused benefits.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. AHLHELM PAYOUT 6.15.2026

CITY OF WATERLOO IOWA
Community of Opportunity

City Council
Notice of Employment Severance

Today's Date: 5/22/2026 **Department:** Building Inspections

Effective Date: 5/18/2026 **Job Classification:** Building Official

Employment Date: 4/4/2011 **Employee Name:** Gregory A. Ahlhelm

The employment with the named City of Waterloo employee has been severed by reason of:

- ☑ **Retired**
  - **Disability Related** ☑ **No** ☐ **Yes**
- ☐ **Resigned**
- ☐ **Termination**
- ☐ **Other** _____

In accordance with City Policy, it is requested to allow payment which consists of the following:

Benefits	Total Hours	(x) Hourly Rate		Payout
Vacation-Accrued	60	$ 51.54		$ 3,092.40
Vacation-Current	89	$ 51.54		$ 4,587.06
Usable Sick Leave	8	$ 51.54	25%	$ 103.08
Casual Hours	0	$ -		$ -
Comp Time Pay	0	$ -		$ -
Unscheduled Leave	0	$ -		$ -
Other Pay (Bday)	0	$ -		$ -
		Total Payment		**$ 7,782.54**

Comments _____

Approved by Brian Bak **Date** 5/22/26

Human Resources Nikki Fischels **Date** 05/22/2026

Council Agenda Date: 6/15/26 KMW

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Lance Dunn, Human Resources Director
Human Resources Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Communication from the Leisure Services Department on the notice of the conclusion of employment of Joel Schares, Assistant Arena Manager, effective May 22, 2026, with recommendation of approval of payout of $3,489.15 for unused benefits.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. SCHARES PAYOUT 6.15.2026

CITY OF WATERLOO IOWA
Community of Opportunity

City Council Notice of Employment Severance

Today's Date: 5/22/2026 **Department:** Young Arena

Effective Date: 5/22/2026 **Job Classification:** Assistant Arena Manager

Employment Date: 4/10/1995 **Employee Name:** Joel Schares

The employment with the named City of Waterloo employee has been severed by reason of:

- ☑ **Retired**
  - **Disability Related** ☑ **No** ☐ **Yes**
- ☐ **Resigned**
- ☐ **Termination**
- ☐ **Other** _____

In accordance with City Policy, it is requested to allow payment which consists of the following:

Benefits	Total Hours	(x) Hourly Rate		Payout
Vacation-Accrued	78	$ 33.23	$	2,591.94
Vacation-Current	0	$ -	$	-
Usable Sick Leave	88	$ 33.23	25% $	731.06
Casual Hours	5	$ 33.23	$	166.15
Comp Time Pay	0	$ -	$	-
Unscheduled Leave	0	$ -	$	-
Other Pay (Bday)	0	$ 37.26	$	-
		Total Payment	**$**	**3,489.15**

Comments _____

Approved by Todd Duffield **Date** 5/27/26

Human Resources Nikki Fischels **Date** 05/22/2026

Council Agenda Date: 6/15/2026 KMW

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Lance Dunn, Human Resources Director
Human Resources Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Communication from the Library Department on the notice of the conclusion of employment of Adria Ebersole, Library Assistant, effective May 7, 2026, with recommendation of approval of payout of $3,091.74 for unused benefits.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. EBERSOLE PAYOUT 6.15.2026

CITY OF WATERLOO IOWA
Community of Opportunity

City Council Notice of Employment Severance

Today's Date: 5/24/2026
Effective Date: 5/7/2026
Employment Date: 5/30/2023
Department: Library
Job Classification: 29-Hour Library Assistant
Employee Name: Adria Ebersole

The employment with the named City of Waterloo employee has been severed by reason of:

- ☐ **Retired**
  - **Disability Related** ☐ **No** ☐ **Yes**
- ☑ **Resigned**
- ☐ **Termination**
- ☐ **Other** _____

In accordance with City Policy, it is requested to allow payment which consists of the following:

Benefits	Total Hours	(x) Hourly Rate		Payout
Vacation-Accrued	54.88	$ 28.01		$ 1,537.19
Vacation-Current	49.5	$ 28.01		$ 1,386.50
Usable Sick Leave			25%	$ -
Casual Hours				$ -
Comp Time Pay				$ -
Unscheduled Leave				$ -
Other Pay	6	$ 28.01		$ 168.06
		Total Payment		**$ 3,091.74**

Comments _____

Approved by _____ **Date** 5/27/26

Human Resources Nicole Fischels **Date** 05/27/2026

Council Agenda Date: 6/15/2026 KMW

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Lance Dunn, Human Resources Director
Human Resources Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Communication from the Police Department on the notice of the conclusion of employment of Corbin Payne, Police Lieutenant, effective May 19, 2026, with recommendation of approval of payout of $39,539.83 for unused benefits.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. PAYNE PAYOUT 6.15.2026

CITY OF WATERLOO IOWA
Community of Opportunity

City Council
Notice of Employment Severance

Today's Date: 5/20/2026 **Department:** Police Department

Effective Date: 5/19/2026 **Job Classification:** Lieutenant

Employment Date: 7/8/1996 **Employee:** Corbin Payne

The employment with the named City of Waterloo has been severed by reason of:

- ✓ **Retired**
  - **Disability Related** **No** **Yes**
- **Resigned**
- **Termination**
- **Other** _____

In accordance with City Policy, it is requested to allow payment which consists of the following:

Benefits	Total Hours	(x) Hourly Rate		Payout
Vacation-Accrued	103	$ 63.62		$ 6,552.86
Vacation-Current	0	$ 63.62		$ -
Usable Sick Leave	58	$ 63.62	25%	$ 922.49
Casual Hours	24	$ 63.62		$ 1,526.88
Comp Time Pay	480	$ 63.62		$ 30,537.60
Unscheduled Leave	0	$ 63.62		$ -
Other Pay				$ -
		Total Payment		**$ 39,539.83**

Comments _____

_____

Approved by _____ F3631 **Date** 5/20/26

Human Resources Nicole Fischels **Date** 05/22/2026

Council Agenda Date: 6/15/2026 KMW

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Noel Anderson, Community Planning and Development Director
Planning & Zoning Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Motion to receive and file Board of Adjustment minutes for April 2026.

RECOMMENDED COUNCIL ACTION

Approval

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. BoA Minutes April 28, 2026

CITY OF WATERLOO, IOWA
BOARD OF ADJUSTMENT MINUTES
REGULAR MEETING - 4:00 P.M., APRIL 28, 2026

The regular meeting of the City of Waterloo Board of Adjustment was called to order by Chairperson Thornsberry at 4:00 p.m., in the Harold E. Getty Council Chambers at Waterloo City Hall.

Members present were: Jeri Thornsberry, Ras Smith, Tom Powers, and John Beckman.

Members absent were: Craig Holidman.

Others present were Aric Schroeder, Adarsh Tummala, Joseph Geilman, and John Dornoff from the Planning Department, Dave Morrow – Waterloo City Council and 5 citizens.

Others present electronically: Steve Schmitt – Waterloo City Council.

I. Approval of the Agenda

It was moved by Beckman and seconded by Powers to approve the amended agenda, moving item 7 to the first decision item on the agenda. Motion carried unanimously.

II. Approval of the Minutes from the regular meeting on March 24, 2026.

It was moved by Powers, seconded by Beckman, to approve the amended minutes of the March 24, 2026, Board of Adjustment meeting, correcting one name on page 4. Motion carried unanimously.

III. Decision Items

1. Request by Waleed Parvez for a Special Permit to allow for a non-limited alcohol sales use, a variance to allow a non-limited alcohol sales use within 600 feet of a protected use, and a variance to allow for a non-limited alcohol sales use within 600 feet of another non-limited alcohol sales site in the "C-2" Commercial District located at 2060 Sovia Drive, Suite 112.

Tummala read the staff report recommending approval of the request with the following condition: That the final site plan meets all applicable city codes, regulations, etc., including but not limited to parking, landscaping, drainage, etc.

Thornsberry complimented the site history in the report.

Beckman asked whether the Zoning Ordinance change affecting tobacco and vape stores will pass and would affect the request. Schroeder responded that the changes will add restrictions on those stores and that they have passed their first and second readings at City Council and will have a 3rd reading on May 4th and if it does not pass, then the moratorium will likely be extended.

Eric Johnson, Beecher Law Firm, representing the property owner and the applicant himself, went over the request, including the wholesale sales and credit card services for over 200 businesses. Johnson further stated that this site reminds him of Kimball Ridge, which has a Hy-Vee Wine and Spirits store that has condominiums, single-family residential, a nursing home, and a Walgreens in close proximiatey but feels that this location is even more commercial in nature and that the actual protected uses are far from the location of the proposed business, and it will be a net positive for the site.

Waleed Parvez, 507 Winding Ridge Road, Cedar Falls, stated that he has been in this business for over 10 years, and his business is a one-stop shop for businesses such as bars. Parvez did note that when the new Tobacco Ordinance gets approved, he plans to add a walk-in cigar area.

Beckman asked if the applicant was planning to occupy all the space between Planet Fitness and Tiny Bubbles, to which Parvez stated that yes, his location will include 17,000 square feet, although he may have multiple businesses within the space he will lease.

It was moved by Powers, seconded by Smith, to approve, per staff recommendation, the request by Waleed Parvez for a Special Permit to allow for a non-limited alcohol sales use, a variance to allow a non-limited alcohol sales use within 600 feet of a protected use, and a variance to allow for a non-limited alcohol sales use within 600 feet of another non-limited alcohol sales site in the "C-2" Commercial District located at 2060 Sovia Drive, Suite 112 with the following condition: That the final site plan meets all applicable city codes, regulations, etc. including, but not limited to, parking, landscaping, drainage, etc. Motion carried unanimously.

2. Request by Randy Howe on behalf of Tyler Tri for a variance to the accessory structure square footage limit to allow for 972 square feet, 122 square foot more than the 850 square feet allowed in order to construct a 140 square foot covered patio and 832 square foot accessory structure in the "R-2" One and Two Family Residence District located in at 1010 Scott Avenue.

Tummala read the staff report recommending approval of the request with the following conditions: 1) that the detached accessory structure can not be a commercial use unless a Special Permit is granted by the Board of Adjustment and if it meets the Home Occupation requirements; and 2) that the final site plan meets all applicable city codes, regulations, etc. including, but not limited to, parking, landscaping, drainage, etc.

There were no comments on this request.

It was moved by Beckman, seconded by Powers, to approve, per staff recommendation, the request by Randy Howe on behalf of Tyler Tri for a variance to the accessory structure square footage limit to allow for 972 square feet, 122 square foot more than the 850 square feet allowed in order to construct a 140 square foot covered patio and 832 square foot accessory structure in the "R-2" One and Two Family Residence District located in at 1010 Scott Avenue with the following conditions: 1) that the detached accessory structure can not be a commercial use unless a Special Permit is granted by the Board of Adjustment and if it meets the Home Occupation requirements; and 2) that the final site plan meets all applicable city codes, regulations, etc. including, but not limited to, parking, landscaping, drainage, etc. Motion carried unanimously.

3. Request by John and Kristi Forbes for a variance to the accessory structure square footage limit to allow for 1,424 square feet of accessory structures, 348 square feet more than the 1,076 square feet allowed, in order to construct a 1,040 square foot accessory structure in the "R-2" One and Two Family Residence District located at 545 Cloverdale Avenue.

Dornoff read the staff report recommending approval of the request with the following conditions: 1) that the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc.; and 2) that the detached accessory structures cannot be a commercial use unless a Special Permit is granted by the Board of Adjustment and if it meets the Home Occupation requirements.

John Forbes, 545 Cloverdale Avenue, was available to answer questions.

Beckman asked if the new accessory structure would open to the east, to which Forbes stated yes and that they will be using the existing driveway.

It was moved by Smith, seconded by Beckman to approve, per staff recommendation, the request by John and Kristi Forbes for a variance to the accessory structure square footage limit to allow for 1,424 square feet of accessory structures, 348 square feet more than the 1,076 square feet allowed, in order to construct a 1,040 square foot accessory structure in the "R-2" One and Two Family Residence District located at 545 Cloverdale Avenue with the following conditions: 1) that the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc.; and 2) that the detached accessory structures cannot be a commercial use unless a Special Permit is granted by the Board of Adjustment and if it meets the Home Occupation requirements. Motion carried unanimously.

4. Request by the Iowa Heartland Habitat for Humanity for a variance to the minimum lot width to allow for widths of 48 feet and 49 feet, 2 feet and 1 foot less than the 50-foot minimum required, a variance to the minimum lot size to allow for lots of 4,900 square feet and 4,800 square feet, 1,100 square feet and 1,200 square feet less than the 6,000 square feet required, and a variance to the side yard setbacks to allow for a side yard setbacks of 4 feet, 1 foot less than the 5 feet required on three of the four side yards in the "R-4" Multiple Residence District located on two lots at and adjacent to 212 Oaklawn Avenue.

Geilman read the staff report recommending approval of the request with the following conditions: that the final site plan meets all applicable city codes, regulations, etc. including, but not limited to, parking, landscaping, screening, drainage, etc.

Thornsberry asked what the term "get" means regarding the adjacent land owned by the State of Iowa, to which Geilman responded that the City of Waterloo has been considering a land swap with the State of Iowa to obtain land acquired for right-of-way that is not needed.

Beckman asked how much land is being discussed and what the likelihood is of the land acquisition being done before Habitat is ready to start their project. Geilman was not sure of the exact number, and Schroeder responded that it is a sizable area, but it is a lengthy project, including survey work and attempting to contact former owners, which is why Habitat was looking to proceed with the variances.

Ali Parrish, Executive Director of Iowa Heartland Habitat for Humanity, was available to answer questions.

Beckman asked if they were willing to drag their feet on this until this happens or if Habitat is going to proceed, to which Parrish responded that they have a buyer for the south lot already, so ideally it wouldn't delay too long, on the other hand, if Habitat can acquire the triangle, it will change the plan for the area a little. Parrish further stated if Habitat is able to get the variance, at least the organization is covered for these lots, and they can proceed with the work.

Beckman asked what would happen if the land is acquired, but the homes are already built, to which Parrish responded that they already have concepts for the area, which would either have two or three lots, and Schroeder responded that the land could be added to the south lot or another lot created and Parrish responded that she likes to cover all her basis.

It was moved by Beckman, seconded by Powers, to approve, per staff recommendation, the request by Iowa Heartland Habitat for Humanity for a variance to the minimum lot width to allow for widths of 48 feet and 49 feet, 2 feet and 1 foot less than the 50-foot minimum required, a variance to the minimum lot size to allow for lots of 4,900 square feet and 4,800 square feet, 1,100 square feet and 1,200 square feet less than the 6,000 square feet required, and a variance to the side yard setbacks to allow for a side yard setbacks of 4 feet, 1 foot less than the 5 feet required on three of the four side yards in the "R-4" Multiple Residence District located on two lots at and adjacent to 212 Oaklawn Avenue with the following conditions: that the final site plan meets all applicable city codes, regulations, etc. including, but not limited to, parking, landscaping, screening, drainage, etc. Motion carried unanimously.

5. Request by Iowa Heartland Habitat for Humanity for a Special Permit to convert a duplex into 4-units, a variance to the front yard setback requirements to allow for a front yard setback of 17 feet, 8 feet less than the 25 feet required, and a variance to the parking lot setback requirements to allow for a 2 foot setback, 3 feet less than the 5 feet required in the "R-4" Multiple Residence District located at 624-626 West Park Avenue.

Geilman read the staff report recommending approval of the request with the following conditions: that the final site plan meets all applicable city codes, regulations, etc. including, but not limited to, parking, landscaping, screening, drainage, etc.

Beckman asked what does it mean that the applicants are not looking to subdivide the property to which Geilman answered that they are not looking to subdivide or split the property into smaller lots.

Beckman noted that the plans include building a garage in the future and asked if the garage is built would there be enough room for the garage and the required parking to which Geilman answered he believed they would and Schroeder responded that they possibly need a setback variance for the building but if the garage took out four spaces they would still have enough because the garages can count for half of the parking required.

Thornsberry asked if the ADA parking space would always be one and would be marked in blue, to which Schroeder responded yes.

Ali Parrish, Executive Director of Iowa Heartland Habitat for Humanity, noted it is a historical home and will be using historic tax credits, so they have specifics on how certain things can be done and are looking to restore it to the way it used to look. Parrish further noted that down the line, they would be interested in converting it back into a duplex.

Beckman asked where the entrances are to the building, to which Parrish responded on the side and gave more information on how the buildings would be set up.

Powers asked if a structural engineer had looked over the building, to which Parrish stated yes.

It was moved by Powers, seconded by Smith to approve, per staff recommendation, the request by Iowa Heartland Habitat for Humanity for a Special Permit to convert a duplex into 4-units, a variance to the front yard setback requirements to allow for a front yard setback of 17 feet, 8 feet less than the 25 feet required, and a variance to the parking lot setback requirements to allow for a 2 foot setback, 3 feet less than the 5 feet required in the "R-4" Multiple Residence District located at 624-626 West Park Avenue with the following conditions: that the final site plan meets all applicable city codes,

regulations, etc. including, but not limited to, parking, landscaping, screening, drainage, etc. Motion carried unanimously.

6. Request by the City of Waterloo on behalf of the Iowa National Guard for a Special Permit to construct a 25,000 square foot building in the "M-2,P" Planned Industrial District located north of 3106 Airport Blvd.

Dornoff read the staff report recommending approval of the request with the following conditions: 1) that the final site plan meets all applicable city codes, regulations, etc. including, but not limited to, parking, landscaping, screening, drainage, etc.; and 2) that a lease be approved by the Waterloo City Council for expansion and extensions to the existing lease, to continue the partnership in this area between the City of Waterloo and the Iowa Army National Guard.

Beckman asked what would happen if the National Guard decided to walk away from this building, to which Dornoff responded that it would become property of the city.

It was moved by Smith, seconded by Beckman, to approve the request by the City of Waterloo on behalf of the Iowa National Guard for a Special Permit to construct a 25,000 square foot building in the "M-2,P" Planned Industrial District located north of 3106 Airport Blvd with the following conditions: 1) that the final site plan meets all applicable city codes, regulations, etc. including, but not limited to, parking, landscaping, screening, drainage, etc.; and 2) that a lease be approved by the Waterloo City Council for expansion and extensions to the existing lease, to continue the partnership in this area between the City of Waterloo and the Iowa Army National Guard. Motion carried unanimously.

7. Request by A-LINE EDS for a Special Permit in order to expand an existing salvage yard to include a former self-storage facility and to construct two industrial buildings on the southwest corner of the property, and to move the fence line closer to the Canadian National Railroad in the "M-1" Light Industrial District located at 808 Dearborn Avenue.

Tummala read the staff report recommending approval of the request with the following condition: That the final site plan meets all applicable city codes, regulations, etc. including, but not limited to, parking, landscaping, drainage, etc.

Thornsberry asked what chops are and how the Board is to deal with the condition that needs to be amended, to which Tummala stated he was not sure what chops are, and Schroeder responded that he would recommend a condition number 2 be added, stating, "The conditions of the previously approved Special Permit are amended to allow the proposed buildings."

Smith asked where the area was that had the previously approved Special Permit, to which Schroeder responded that it was primarily to the east and south.

Thornsberry asked if the area where the new buildings are going will not be in the same area where the neighbors had concerns during the previous Special Permit request to which Schroeder responded that while it is in the area, it is not close to the residences and noted that notice was mailed on this request and no one has contacted the Planning offices about the request.

Smith asked what the reason was for the previous condition to which Schroeder responded that it was noise and soot.

Anne Bailey, with A-Line EDS, stated that chops is a finer finished product and noted they are a processor and not a true salvage yard. Bailey further stated that the buildings are to put more operations indoors and that they do have a scrap metal recover oven which is EPA regulated.

Beckman asked who is PETCOR who owns the adjacent lots to which Schroeder responded be believes it is subsidiary of PCI and Bailey stated they have no connection with them.

Beckman also complimented A-Line EDS on the quality of their facility.

It was moved by Beckman, seconded by Smith to approve, per staff recommendation, the request by A-LINE EDS for a Special Permit in order to expand an existing salvage yard to include a former self-storage facility and to construct two industrial buildings on the southwest corner of the property, and to move the fence line closer to the Canadian National Railroad in the "M-1" Light Industrial District located at 808 Dearborn Avenue with the following conditions: 1) That the final site plan meets all applicable city codes, regulations, etc. including, but not limited to, parking, landscaping, drainage, etc and 2) The conditions of the previously approved Special Permit are amended to allow the proposed buildings. Motion carried unanimously.

IV. Discussion

The next meeting of the Board of Adjustment will be on May 26, 2026.

V. Adjournment

It was moved by Beckman, seconded by Powers, to adjourn the meeting at 5:27 p.m. Motion carried unanimously.

Respectfully submitted,

John Dornoff,
Planner II

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT
Planning & Zoning Department

MEETING DATE
June 15, 2026

AGENDA ITEM TITLE
Motion to receive and file Planning, Programming, and Zoning Commission minutes of April 2026.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS
1. P&Z Minutes April 14, 2026

MINUTES
CITY OF WATERLOO, IOWA
PLANNING, PROGRAMMING, AND ZONING COMMISSION
REGULAR MEETING - 4:00 P.M. APRIL 14, 2026

The regular meeting of the Waterloo Planning, Programming, and Zoning Commission was called to order by Chairperson Leistikow at 4:00 p.m. via Zoom and in person in the Harold E. Getty Council Chambers at Waterloo City Hall.

Members present were: Cody Leistikow, Brandon Schoborg, Eric Poe, Scott Voight, Kristin Schaefer and Eric Donat.

Members absent were: Janelle Ewing, Philip Shirk, and Jessica Rucker.

Others present were: Noel Anderson, Aric Schroeder, Adarsh Tummala, Joseph Geilman, and John Dornoff – Planning Department; Jamie Knutson – City Engineer; Dave Morrow – City Council Liaison, and 7 citizens.

Others present electronically: Steve Schmitt and Hector A Salamanca Arroyo – City Council Liaisons, and 2 citizens.

I. Approval of the Agenda

It was moved by Donat and seconded by Schoborg to approve the amended agenda combining items B-1 and C-1. Motion carried unanimously.

II. Approval of the Minutes from the regular meeting on March 10, 2026.

It was moved by Schoborg and seconded by Poe to approve the minutes of the March 10, 2026, meeting. Motion carried unanimously.

III. Oral Presentations

There were no Oral Presentations.

IV. New Business

A. Encroachment Agreements

1. Request by Ryan Myers for an Encroachment Agreement to allow for the replacement of an existing fence in the Greenhill Road Right-of-Way in the "R-2" One and Two Family Residence District located in the rear of 343 to 349 Norris Court.

Tummala read the staff report recommending approval of the request with the following condition: A fully signed and executed Encroachment Agreement.

Schoborg asked if the city built the soundwall originally to which Anderson stated it was either the City or the Iowa Department of Transportation that built it.

Voight asked if what is already there is being rebuilt, to which Anderson responded that it will be taller and not a true sound wall as it is currently, and speculated that it was a smaller fence because there were no homes there at the time.

It was moved by Schaefer and seconded by Donat to recommend approval of a request by Ryan Myers for an Encroachment Agreement to allow for the replacement of an existing fence in the Greenhill Road Right-of-Way in the "R-2" One and Two Family Residence District located in the rear of 343 to 349 Norris Court with the following condition: A fully signed and executed Encroachment Agreement. Motion carried unanimously.

2. Request by Martin Flats, LLC for an Encroachment Agreement to allow for four bike racks on city-owned property in the "C-3" Central Business District located adjacent to 321 East 4th Street, on the sidewalk of East 4th Street.

Tummala read the staff report recommending approval of the request with the following condition: A fully signed and executed Encroachment Agreement.

Schroeder noted that public works stated that they were fine with the bike racks not having to be removed every winter and would prefer them to be bolted down.

Donat asked if the bike racks would block the sidewalk to which Schroeder responded no and the sidewalk will still meet ADA requirements.

It was moved by Schoborg and seconded by Schaefer to recommend approval of a request by Martin Flats, LLC for an Encroachment Agreement to allow for four bike racks on city-owned property in the "C-3" Central Business District located adjacent to 321 East 4th Street, on the sidewalk of East 4th Street with the following condition: A fully signed and executed Encroachment Agreement. Motion carried unanimously.

B. Hearings – Rezones/Site Plan Amendments

1. Request by the City of Waterloo on behalf of the Iowa National Guard for a Site Plan Amendment to construct a 25,000 square foot building in the "M-2,P" Planned Industrial District located north of 3106 Airport Blvd**.**

It was moved by Donat and seconded by Schoborg to receive and place on file the statement of verification at 4:13 p.m. Motion carried unanimously, and Leistikow declared the hearing open.

Dornoff read the staff report recommending approval of the request with the following condition: That the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc.

Kara Garside, Farnsworth Group Architects, noted that the access drives that were showing as gravel will be hard surfaced so that they will not need a variance.

It was moved by Schoborg, seconded by Donat, to close the public hearing. Motion carried unanimously. The hearing was closed at 4:19 p.m.

It was moved by Schoborg and seconded by Poe to recommend approval of a request by the City of Waterloo on behalf of the Iowa National Guard for a Site Plan Amendment to construct a 25,000 square foot building in the "M-2,P" Planned Industrial District located north of 3106 Airport Blvd with the

following condition: That the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc. Motion carried unanimously.

C. Special Permit

1. Request by the City of Waterloo on behalf of the Iowa National Guard for a Special Permit to construct a 25,000 square foot building in the "M-2,P" Planned Industrial District located north of 3106 Airport Blvd.

Dornoff read the staff report recommending approval of the request with the following condition: That the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc.

This item was discussed with B-1.

It was moved by Schoborg and seconded by Poe to recommend approval of a request by the City of Waterloo on behalf of the Iowa National Guard for a Special Permit to construct a 25,000 square foot building in the "M-2,P" Planned Industrial District located north of 3106 Airport Blvd with the following condition: That the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc . Motion carried unanimously.

2. Request by Iowa Heartland Habitat for Humanity for a Special Permit to convert a duplex into 4-units in the "R-4" Multiple Residence District located at 624-626 West Park Avenue.

Geilman read the staff report recommending approval of the request with the following condition: That the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc.

Ali Parish, Iowa Heartland Habitat for Humanity, noted that this is a project that will be using multiple forms of tax credits, and even being split into 4 units, will still have a large amount of space and will be designed that they can be converted back into a duplex in the future.

Donat asked who would be the expected residents, to which Parish stated they will be market rate.

It was moved by Poe and seconded by Schoborg to recommend approval of a request by Iowa Heartland Habitat for Humanity for a Special Permit to convert a duplex into 4-units in the "R-4" Multiple Residence District located at 624-626 West Park Avenue with the following condition: That the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc. Motion carried unanimously.

3. Request by Kelly Freese for a Special Permit to allow rubble fill on a lot in the "M-1" Light Industrial District located at 1250 West Airline Highway.

Dornoff read the staff report recommending denial of the request.

Schoborg asked if the property received a Special Permit to be built as a residential property in an area zoned for industrial, to which Schroeder responded that it was most likely that the house was there when the property was annexed into the city, but it's not uncommon to have residential property that was built before the creation of the Zoning Ordinance.

Kelly Freese, 1250 West Airline Highway, stated that he runs a concession business with trailers and food trucks, and found out about the City demolition of the former nursing home on Upland, and because it was clean, contacted the demo contractor to dump it, and did not know they needed a permit, and did not change any grade. Freese further stated that the plan was to top dress it with dirt so they could have parking, and it is not a rubble fill site.

Dan Arends, VJ Engineering, surveyed the site for the Special Permit process and stated that the project will not affect the natural drainage. Arends further stated that the area would receive topsoil and be seeded, with the exception of the 5,000 square foot area to be used for parking.

Schoborg asked if it was an assumption that it would affect drainage in the area to which Arends responded that it filled in a low spot in the lot.

Leistikow asked if the Commission were to recommend approval, could a condition be put in that top fill had to be put in, to which Anderson responded yes.

Kelly White, 1242 West Airline Highway, stated that she owns the property that shares the driveway and asked that the Special Permit be declined for safety concerns, as there is rebar and other debris in there, and in the back of the property, run off will run into their home due to the height.

Schoborg stated he would like more information if the drainage is affected by the rubble to which Schaefer stated that she agrees with Schoborg.

Leistikow asked if this is an item that could be tabled to get additional information, and Poe expressed concerns about rebar being in the debris, to which Freese stated there could be some, but very little, and doesn't want rebar in there either.

Arends stated he would be willing to meet with the neighbor.

Leistikow asked if the parking was going to lead to increased traffic to which Arends stated the trailers are already parked there, and Freese stated we only have so many trailers and a food truck.

Voight stated that he heard VJ Engineering say it did not affect drainage and the neighbor say they were worried about water runoff and would like to know what the truth is about it to which Anderson responded that staff could run out and look at the site including drainage and the type of rubble.

Schoborg thought the request should be tabled until more information is available.

It was moved by Schoborg and seconded by Donat to table the request by Kelly Freese for a Special Permit to allow rubble fill on a lot in the "M-1" Light Industrial District located at 1250 West Airline Highway. Motion carried unanimously.

4. Request by A-LINE EDS for a Special Permit in order to expand an existing salvage yard to include a former self-storage facility and to construct two industrial buildings on the southwest corner of their property, and to move the fence line along the Canadian National Railroad in the "M-1" Light Industrial District located at 808 Dearborn Avenue.

Tummala read the staff report recommending approval of the request with the following condition: That the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc.

Schoborg asked that the condition imposed by the Board of Adjustment from 2018 will have to be amended by that Board to which Anderson responded yes.

It was moved by Schoborg and seconded by Donat to recommend approval of a request by A-LINE EDS for a Special Permit in order to expand an existing salvage yard to include a former self-storage facility and to construct two industrial buildings on the southwest corner of their property, and to move the fence line along the Canadian National Railroad in the "M-1" Light Industrial District located at 808 Dearborn Avenue with the following condition: That the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc . Motion carried unanimously.

5. Request by Waleed Parvez for a Special Permit to allow for a Non-Limited alcohol sales use in the "C-2" Commercial District located at 2060 Sovia Drive suite 112**.**

Tummala read the staff report recommending approval of the request with the following condition: That the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc.

Donat asked how this request is affected by the proposed Ordinance on Tobacco and Vape shops that was on the agenda at the March Planning and Zoning Commission meeting, to which Schroeder responded that this is about the alcohol, and discussed the Ordinance Amendment concerning tobacco and vaping is at the City Council and if approved the site would need to meet the requirements of the new Ordinance.

Leistikow asked if this property was ever a planned district to which Schroeder responded no.

Eric Johnson, attorney at Beecher Law Firm representing both the property owner and the applicant, went over the request and what the applicant is looking to do with this business, then explained that while the property does border protected uses, because the complex is so large it is actually much farther from both the protected use and the nearby Non-Limited alcohol sales than it seems since the measurement is based on property lines.

It was moved by Poe and seconded by Donat to recommend approval of a request by Waleed Parvez for a Special Permit to allow for a Non-Limited alcohol sales use in the "C-2" Commercial District located at 2060 Sovia Drive suite 112 with the following condition: That the final site plan meets all applicable city codes, regulations, etc., including, but not limited to, parking, landscaping, screening, drainage, etc . Motion 5-1 (Voight voting nay).

V. Discussion

The next meeting of the Planning, Programming, and Zoning Commission will be held on May 12, 2026.

There was a discussion about the mailed packets and the Commission Members stated that they do not need the packets mailed to them and will be fine with electronic copies, then paper copies handed to them when they arrive.

VI. Adjournment

It was moved by Donat and seconded by Schoborg to adjourn the meeting at 5:13 pm. Motion carried unanimously.

Respectfully submitted,

John Dornoff,
Planner II

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Noel Anderson, Community Planning and Development Director
Planning & Zoning Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Motion to receive and file Historic Preservation Commission minutes of April 2026.

RECOMMENDED COUNCIL ACTION

Approval

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Historic Minutes 4-21-26

WATERLOO HISTORIC PRESERVATION COMMISSION MINUTES
REGULAR MEETING – April 21, 2026– 4:30 P.M.
The meeting was held in the Mollenhoff Conference Room at City Hall

Chairperson Hedrick called the regular meeting of the City of Waterloo Historic Preservation Commission to order at 4:30 p.m.

Commission Members present were: Nick Hedrick, Jared Hottle, Ed Ottesen, and Cole Weliver.

Commission Members present electronically were: None

Commission Member(s) absent were: Terry Stevens, Ivan Valtchev, and Alexander Hottle

Others present were: Joseph Geilman- Planning Staff, Ed Gallagher- Grout Museum, and 5 members of the public

Approval of Agenda

Motion made by J. Hottle and seconded by Ottesen to approve the agenda of the April 21, 2026 regular meeting.

Approval of Minutes

Motion made by J. Hottle and seconded by Weliver to approve the minutes of the March 31, 2026 special meeting. Motion carried unanimously.

Oral Presentations

No Report

Hearings

1. Request by Emma and Dalyne King for a Certificate of Appropriateness to build a 6’ tall wooden privacy fence in the rear yard at 104 Prospect Avenue.

King, 104 Prospect Ave, explained that they are wanting privacy in the backyard, as people are constantly walking through it. They will be the ones putting up the fence. Hottle questioned which street is on the side of the property. King noted that it is Steely Street. Hedrick noted that it is good to see solid wood for this request, as the commission typically see requests for chain link fencing. Ottesen noted that this is in the backyard as well.

It was moved by Ottesen and seconded by Weliver to approve the request by Emma and Dalyne King for a Certificate of Appropriateness to build a 6’ tall wooden privacy fence in the rear yard at 104 Prospect Avenue. The motion passed unanimously.

2. Request by Elias Escobedo and Lisset Rodriguez De Escobedo for a Certificate of Appropriateness to replace some fencing with a 6 foot tall wooden fence at 123 Alta Vista Avenue.

Escobedo explained that they will be replacing some fencing that is damaged. Some parts of the

fence are 4 feet tall, which will be replaced with 6 foot tall fencing to make it uniform. The commission had no concerns about this request.

It was moved by J. Hottle and seconded by Ottesen to approve the request by Elias Escobedo and Lisset Rodriguez De Escobedo for a Certificate of Appropriateness to replace some fencing with a 6 foot tall wooden fence at 123 Alta Vista Avenue. The motion passed unanimously.

3. Request by Lindsay Pieters and Heather Seitsinger to install new gutters on the house and garage at 202 Highland Boulevard.

Pieters, 202 Highland Blvd, explained that the new gutters will match the existing ones on the house. J. Hottle questioned if they would be painting them. Pieters stated that they would come from the factory in the correct color.

It was moved by Weliver and seconded by Ottesen to approve the request by Lindsay Pieters and Heather Seitsinger to install new gutters on the house and garage at 202 Highland Boulevard. The motion passed unanimously.

Building/ Project Consultation

No Consultations

Reports

1. **Main Street**

Ottesen noted that at the design review there were some signs that were tabled. They are also expecting outdoor seating applications to come soon. There was a parklet that was approved. There is a Tour de Loo meeting on April 22nd at Noon. They are still looking for people to help out. He also noted that Geno's is now open. They have also been doing some consulting on the Waterloo fruit company pole sign.

2. **Silos and Smokestacks**

No discussion

3. **Grout Museum**

Gallagher noted that the museums request for funding for 1 year was approved by City Council. There was some hail damage on the buildings. There is a temporary exhibit on nurses, and they are still working on reimagining the Imaginarium. There was a 90's trivia contest that had a good turnout. There was some turnover on their board recently. He also noted that the museum had a lot of visitors during spring break.

4. **Highland Neighborhood**

Hedrick and Weliver noted that 35 children came to the easter egg hunt. They did receive the grant for the light fixtures. The neighborhood is looking at replacing the neighborhood signs eventually.

5. **Walnut Neighborhood**

No discussion

Discussion Items/Possible Action Items

1. 2026 HPC Awards Banquet

It was noted that it is May 14th. Geilman stated that everyone should keep a watch on their emails for emails as prep for the banquet continues.

2. **Dunsmore House**

No discussion

3. Collaborations

No discussion

4. City-Owned Properties

The Rath Admin building, as well as the Courier block were brought up. Geilman stated that he would look into those projects to see if there was anything new. Hedrick questioned if Goodwill had ever worked with the city before. Geilman stated that he was not sure.

5. Goals and Action Plan

No discussion

Discussion Items

No discussion

Adjournment

Motion made by J. Hottle and seconded by Ottesen to adjourn the meeting at 5:04 p.m. Motion carried unanimously.

Respectfully submitted,

Joseph Geilman

Joseph Geilman
Planner I

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT	MEETING DATE
City Clerk Department	June 15, 2026

AGENDA ITEM TITLE

Liquor Licenses

Benevolent & Protective Order of Elks #290, 407 E. Park Avenue, Class C w/Sunday Sales (Ownership Update x 3) Exp. 06/30/2027.
Broadway Liquor, 821 Broadway Street, Class E w/Sunday Sales (Renewal) Exp. 06/10/2027.
Cedar Valley Irish Cultural AS, 330 E. 4th Street, Class C w/Outdoor Service and Sunday Sales (New-5-Day) Exp. 08/03/2026.
Chaser's Pub, 3005 University Avenue, Class E w/Outdoor Service and Sunday Sales (Renewal) Exp. 07/07/2026.
Doughy Joey's, 300 W. 4th Street, Class C w/Outdoor Service and Sunday Sales (Renewal) Exp. 02/07/2027.
Family Dollar Store #32879, Class B w/Sunday Sales, (New) Exp. 05/14/2027.
Hickory House, 3154 Park Road, Class C w/Sunday Sales, (Renewal) Exp. 05/23/2027.
Highway 63 Diner, 3030 Marnie Road, Class C w/Sunday Sales, (Renewal) Exp. 06/30/2027.
Hungry Charlie's/Fester's Pub, 324 E. 4th Street, Class C w/Sunday Sales, (Ownership Update) Exp. 07/21/2026.
Kwik Stop 4, 515 Broadway Street, Class E w/Sunday Sales, (Renewal) Exp. 05/07/2027.
Linn Mart, 926 Linn Street, Class E w/Sunday Sales, (Renewal) 05/15/2027.
Newton's Paradise Cafe, 128 E. 4th Street, Class C w/Outdoor Service and Sunday Sales, (Modify Privileges Outdoor Service) Exp. 01/31/2027.
Poppy's Sports Pub, 2026 Bopp Street, Class C w/Outdoor Service and Sunday Sales, (Renewal) Exp. 06/05/2027.
Steamboat Gardens, 1740 Falls Avenue, Class C w/Sunday Sales, (Renewal) Exp. 06/13/2027.
Sunnyside Country Club, 1600 Olympic Drive, Class F w/Outdoor Service and Sunday Sales, (Renewal) Exp. 04.13.2027.
WCA Building Amphitheatre, 225 Commercial Street, Class C Special, (Temporary Unlicense Portion) Exp. 07/05/2026.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

None

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT	MEETING DATE
City Clerk Department	June 15, 2026

AGENDA ITEM TITLE

Cigarette/Tobacco/Nicotine/Vapor Permits

7 Star Liquor & Tobacco, 2844 University Avenue (Retail Tobacco).
Behar Bar, 312 W. 4th Street (Retail Tobacco).
Casey's General Store #2427, 3035 Logan Avenue, (Retail Tobacco).
Casey's General Store #2866, 51 E. Tower Park Drive, (Retail Tobacco).
Casey's General Store #2867, 2424 Ranchero Road (Retail Tobacco).
Casey's General Store #2879, 3260 University Avenue, (Retail Tobacco).
Casey's General Store #2880, 1604 La Porte Road, (Retail Tobacco).
Casey's General Store #3880, 1900 W. Ridgeway Avenue, (Retail Tobacco).
Family Dollar #25600, 611 Broadway Street, (Retail Tobacco).
Family Dollar #32879, 1608 University Avenue, (Retail Tobacco).
Family Dollar #10944, 2206 Kimball Avenue, (Retail Tobacco).
Hometown Foods, 1010 E. Mitchell Avenue (Retail Tobacco).
Jim Lind Service, 230 E. Mitchell Avenue (Retail Tobacco) (New).
Karma Bar, 309 W. 4th Street (Retail Tobacco).
Kwik Stop 4, 515 Broadway Street (Retail Tobacco)
Love's Travel Stop #702, 3301 Greyhound Drive Ste. A (Retail Tobacco).
Marshall BWS, 2060 Sovia Drive, Ste. 112 (Retail Tobacco).
New Star, 1020 Franklin Street (Retail Tobacco).
Pink Cloud Smoke Shop, 3026 Ansborough Avenue (Retail Tobacco).
Pink Cloud Smoke Shop, 3026 Ansborough Avenue, (Device Permit).
Prime Mart 7, 1309 Lafayette street, (Retail Tobacco).
Prime Mart 7, 1309 Lafayette street, (Device Permit).
R Smoke Plus Waterloo, 3620 Kimball Avenue, (Device Permit).
The Spot #3, 117 E. San Marnan Drive, (Retail Permit).
Tobacco & Vape, 3821 University Avenue, (Device Permit).
UNI Mart, 1615 Bishop Avenue, (Retail Tobacco).
Walmart #1496, 1334 Flammang Drive, (Retail Tobacco).
West Side Convenience/West Side Liquor (Retail Tobacco).
XO Food & Liquor, 428 Franklin Street, (Retai Tobacco).
Yesway #1022, 1976 Franklin Street, (Retail Tobacco).

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

None

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Jamie Knutson, City Engineer
Engineering Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Bonds.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

These are Right-of-Way construction bonds for contractors wanting to do work within the City right-of-way. Work would include such items as plumbing repairs in the street, driveway construction and sidewalk construction. The bond ensures that if a contractor does not complete the work, the bonding company will step in and complete the work on the contractor's behalf.

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. ROW BONDS 6.15.2026

RIGHT OF WAY CONSTRUCTION BONDS
COUNCIL APPROVAL
JUNE 15, 2026

W150278883	Arends Excavating, Inc.	Waterloo, IA
100211094	Broadband Installations of Iowa	Carroll, IA
101868569	Communication Data Link, LLC	Grimes, IA
101887211	Concrete Solutions, LLC	Janesville, IA
W150256685	Dig America Utility Contracting, Inc.	Kimball, MN
101885790	E&C Investments, LLC	Cedar Falls, IA
95 BM J031 6	Gardner Plumbing, LLC	Waterloo, IA
101841223	HDB Partners, LLC	Ames, IA
95 BA J108 4	Jeff Even	Waterloo, IA
95 CC 8008 4	Joe Jones DBA Jones Brothers Asphalt Paving Company	Waterloo, IA
55223776	K & W Electric Inc.	Waterloo, IA
IA 550121	Magee Construction	Cedar Falls, IA
CNS039034	Metro Fibernet	
101299138	MTC Services, LLC	Medford, IA
101812570	Scarbrough Build Co.	Waterloo, IA
9424039	Terracon Consultants, Inc.	Cedar Falls, IA
7901334926	Trueg Custom Concrete	Jesup, IA
101892386	Zimmermans Digging Inc.	Charles City, IA

RIGHT OF WAY CONSTRUCTION BOND

No. W150278883

Applicant's Telephone Number: 319 404 4901

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), Arends Excavating, LLC,

of 3768 W Airline Hwy (Street), Waterloo (City), Iowa (State),

as Principal, and Old Republic Surety Company of

18500 W Corporate Dr, Ste 170, Brookfield, WI 53045,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden Arends Excavating, LLC of 3768 W Airline Hwy, Waterloo, IA 50703-9596 will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is May 1, 20 26, through April 30, 20 27.

Witness our hands this 29th day of January, 20 26.

Arends Excavating, LLC
PRINCIPAL

By: [signature]

Printed Name: Arends Excavating, LLC

Old Republic Surety Company
SURETY

By: [signature]
Attorney-in-fact

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

OLD REPUBLIC SURETY COMPANY

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That OLD REPUBLIC SURETY COMPANY, a Wisconsin stock insurance corporation, does make, constitute and appoint:

Anne Solomko of Brookfield, WI

its true and lawful Attorney(s)-in-Fact, with full power and authority, not exceeding $10,000,000, for and on behalf of the company as surety, to execute and deliver and affix the seal of the company thereto (if a seal is required), bonds, undertakings, recognizances or other written obligations in the nature thereof, ***(other than bail bonds, bank depository bonds, mortgage deficiency bonds, mortgage guaranty bonds, guarantees of installment paper and note guaranty bonds, self-insurance workers compensation bonds guaranteeing payment of benefits, waste management bonds, hazardous waste remediation bonds or black lung bonds),*** as follows: Effective Date: 05/01/

Bond Number: W150278883 Bond Amount: Twenty Thousand Dollars $ 20,000.00

Principal Name: Arends Excavating, LLC

Obligee Name: City of Waterloo - Engineering Dept, Iowa

and to bind OLD REPUBLIC SURETY COMPANY thereby, and all of the acts of said Attorneys-in-Fact, pursuant to these presents, are ratified and confirmed. This appointment is made under and by authority of the board of directors at a special meeting held on February 18, 1982.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following resolutions adopted by the board of directors of the OLD REPUBLIC SURETY COMPANY on February 18,1982.

RESOLVED that the president, any vice president or assistant vice president, in conjunction with the secretary or any assistant secretary, may appoint attorneys-in-fact or agents with authority as defined or limited in the instrument evidencing the appointment in each case, for and on behalf of the company to execute and deliver and affix the seal of the company to bonds, undertakings, recognizances, and suretyship obligations of all kinds; and said officers may remove any such attorney-in-fact or agent and revoke any Power of Attorney previously granted to such person.

RESOLVED FURTHER that any bond, undertaking, recognizance, or suretyship obligation shall be valid and binding upon the Company

(i) when signed by the president, any vice president or assistant vice president, and attested and sealed (if a seal be required) by any secretary or assistant secretary; or

(ii) when signed by the president, any vice president or assistant vice president, secretary or assistant secretary, and countersigned and sealed (if a seal be required) by a duly authorized attorney-in-fact or agent; or

(iii) when duly executed and sealed (if a seal be required) by one or more attorneys-in-fact or agents pursuant to and within the limits of the authority evidenced by the Power of Attorney issued by the company to such person or persons.

RESOLVED FURTHER that the signature of any authorized officer and the seal of the company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the company; and such signature and seal when so used shall have the same force and effect as though manually affixed.

IN WITNESS WHEREOF, OLD REPUBLIC SURETY COMPANY has caused these presents to be signed by its proper officer, and its corporate seal to be affixed this 29th day of January, 2026.

OLD REPUBLIC SURETY COMPANY

Assistant Secretary

President

STATE OF WISCONSIN, COUNTY OF WAUKESHA - SS

On this 29th day of January, 2026, personally came before me, Alan Pavlic and Kevin J. Abitz, to me known to be the individuals and officers of the OLD REPUBLIC SURETY COMPANY who executed the above instrument, and they each acknowledged the execution of the same, and being by me duly sworn, did severally depose and say: that they are the said officers of the corporation aforesaid, and that the seal affixed to the above instrument is the seal of the corporation, and that said corporate seal and their signatures as such officers were duly affixed and subscribed to the said instrument by the authority of the board of directors of said corporation.

Notary Public

My Commission Expires: 09/28/2026

(Expiration of notary's commission does not invalidate this instrument)

CERTIFICATE

I, the undersigned, assistant secretary of the OLD REPUBLIC SURETY COMPANY, a Wisconsin corporation, CERTIFY that the foregoing and attached Power of Attorney remains in full force and has not been revoked; and furthermore, that the Resolutions of the board of directors set forth in the Power of Attorney, are now in force.

0401983

Signed and sealed at the City of Brookfield, WI this 29th day of January, 2026.

Assistant Secretary

ORSC 22262 (3-06)

HOLMES, MURPHY & ASSOC., LLC

RIGHT OF WAY CONSTRUCTION BOND

No. 100211094

Applicant's Telephone Number: (515) 729-3474

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), Broadband Installations of Iowa,

of 603 W 8th Street, PO Box 728 (Street), Carroll (City), Iowa (State),

as Principal, and Merchants Bonding Company (Mutual) of

P.O. Box 14498, Des Moines, IA 50306-3498,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden Broadband Installations of Iowa of Carroll, IA will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is April 30, 2026, through April 30, 2027.

Witness our hands this 5th day of December, 2025.

Broadband Installations of Iowa
PRINCIPAL

By: Bud Harter by Julie Sanders

Printed Name: Bud Harter

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

Merchants Bonding Company (Mutual)
SURETY

By: James A. Holter

Attorney-in-fact
James A. Holter, Attorney-in-Fact

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

LP 0467 IA (4/23)

MERCHANTS BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, and MERCHANTS NATIONAL INDEMNITY COMPANY , an assumed name of Merchants National Bonding, Inc., (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

James A. Holter

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the By-Laws adopted by the Board of Directors of the Companies.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship o obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such Intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 5th day of December , 2025 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
MERCHANTS NATIONAL INDEMNITY COMPANY

By Larry Taylor

President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 5th day of December 2025 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA

Penni Miller
Commission Number 787952
My Commission Expires
January 20, 2027

Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 5th day of December , 2025 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

Secretary

POA 0018 (5/25)

RIGHT OF WAY CONSTRUCTION BOND

No. 101868569

Applicant's Telephone Number: 515 224 9544

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), Communication Data Link, L.L.C.,

of 1305 SW 37th Street (Street), Grimes (City), Iowa (State),

as Principal, and Merchants Bonding Company (Mutual) of

P.O. Box 14498, Des Moines, IA 50306-3498,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden Communication Data Link, L.L.C. of Grimes, IA will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is May 6, 2026, through April 30, 2027.

Witness our hands this 6th day of May, 2026.

Communication Data Link, L.L.C.
PRINCIPAL

By: [signature] CFO

Printed Name: STEVEN A. OLEJNICZAK

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

Merchants Bonding Company (Mutual)
SURETY

By: [signature]
Attorney-in-fact
James A. Holter, Attorney-in-Fact

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

LP 0467 IA (4/23)

MERCHANTS
BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, and MERCHANTS NATIONAL INDEMNITY COMPANY , an assumed name of Merchants National Bonding, Inc., (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

James A. Holter

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the By-Laws adopted by the Board of Directors of the Companies.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship o obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 6th day of May , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
MERCHANTS NATIONAL INDEMNITY COMPANY

By Larry Taylor

President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 6th day of May 2026 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA

Penni Miller
Commission Number 787952
My Commission Expires
January 20, 2027

Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 6th day of May , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

Secretary

POA 0018 (5/25)

RIGHT OF WAY CONSTRUCTION BOND

No. 101887211

Applicant's Telephone Number: 319 239 4861

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), Concrete Solutions LLC,

of 8293 Newell Rd (Street), Janesville (City), Iowa (State),

as Principal, and Merchants National Bonding, Inc. of

P.O. Box 14498, Des Moines, IA 50306-3498,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden Concrete Solutions LLC of Janesville, IA will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is May 19, 2026, through April 30, 2027.

Witness our hands this 21st day of May, 2026.

Concrete Solutions LLC
PRINCIPAL

By: Travis Moen

Printed Name: Travis Moen

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

Merchants National Bonding, Inc.
SURETY

By: James A. Holter
Attorney-in-fact
James A. Holter, Attorney-in-Fact

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

LP 0467 IA (4/23)

MERCHANTS BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, and MERCHANTS NATIONAL INDEMNITY COMPANY , an assumed name of Merchants National Bonding, Inc., (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

James A. Holter

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies In their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the By-Laws adopted by the Board of Directors of the Companies.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship o obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 21st day of May , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
MERCHANTS NATIONAL INDEMNITY COMPANY

By Larry Taylor

President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 21st day of May 2026 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA

Penni Miller
Commission Number 787952
My Commission Expires
January 20, 2027

Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 21st day of May , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

Secretary

POA 0018 (5/25)

RIGHT OF WAY CONSTRUCTION BOND

No. W150256685

Applicant's Telephone Number: 320·258·3447

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), Dig America Utility Contracting, Inc.,

of PO Box 409 (Street), Kimball (City), Minnesota (State),

as Principal, and Old Republic Surety Company of

18500 W Corporate Dr, Ste 170, Brookfield, WI 53045,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden Dig America Utility Contracting, Inc. of PO Box 409, Kimball, MN 55353-0409 will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is May 1, 20 26, through April 30, 20 27.

Witness our hands this 29th day of January, 20 26.

Dig America Utility Contracting, Inc.
PRINCIPAL

By: [signature]

Printed Name: Dig America Utility Contracting, Inc.

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

Old Republic Surety Company
SURETY

By: [signature]
Attorney-in-fact

OLD REPUBLIC SURETY COMPANY CORPORATE SEAL 1891

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

OLD REPUBLIC SURETY COMPANY

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That OLD REPUBLIC SURETY COMPANY, a Wisconsin stock insurance corporation, does make, constitute and appoint:

Anne Solomko of Brookfield, WI

its true and lawful Attorney(s)-in-Fact, with full power and authority, not exceeding $10,000,000, for and on behalf of the company as surety, to execute and deliver and affix the seal of the company thereto (if a seal is required), bonds, undertakings, recognizances or other written obligations in the nature thereof, ***(other than bail bonds, bank depository bonds, mortgage deficiency bonds, mortgage guaranty bonds, guarantees of installment paper and note guaranty bonds, self-insurance workers compensation bonds guaranteeing payment of benefits, waste management bonds, hazardous waste remediation bonds or black lung bonds),*** as follows: Effective Date: 05/01/

Bond Number: W150256685 Bond Amount: Twenty Thousand Dollars $ 20,000.00

Principal Name: Dig America Utility Contracting, Inc.

Obligee Name: City of Waterloo - Engineering Dept, Iowa

and to bind OLD REPUBLIC SURETY COMPANY thereby, and all of the acts of said Attorneys-in-Fact, pursuant to these presents, are ratified and confirmed. This appointment is made under and by authority of the board of directors at a special meeting held on February 18, 1982.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following resolutions adopted by the board of directors of the OLD REPUBLIC SURETY COMPANY on February 18,1982.

RESOLVED that the president, any vice president or assistant vice president, in conjunction with the secretary or any assistant secretary, may appoint attorneys-in-fact or agents with authority as defined or limited in the instrument evidencing the appointment in each case, for and on behalf of the company to execute and deliver and affix the seal of the company to bonds, undertakings, recognizances, and suretyship obligations of all kinds; and said officers may remove any such attorney-in-fact or agent and revoke any Power of Attorney previously granted to such person.

RESOLVED FURTHER that any bond, undertaking, recognizance, or suretyship obligation shall be valid and binding upon the Company

(i) when signed by the president, any vice president or assistant vice president, and attested and sealed (if a seal be required) by any secretary or assistant secretary; or

(ii) when signed by the president, any vice president or assistant vice president, secretary or assistant secretary, and countersigned and sealed (if a seal be required) by a duly authorized attorney-in-fact or agent; or

(iii) when duly executed and sealed (if a seal be required) by one or more attorneys-in-fact or agents pursuant to and within the limits of the authority evidenced by the Power of Attorney issued by the company to such person or persons.

RESOLVED FURTHER that the signature of any authorized officer and the seal of the company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the company; and such signature and seal when so used shall have the same force and effect as though manually affixed.

IN WITNESS WHEREOF, OLD REPUBLIC SURETY COMPANY has caused these presents to be signed by its proper officer, and its corporate seal to be affixed this 29th day of January, 2026.

OLD REPUBLIC SURETY COMPANY

Assistant Secretary

President

STATE OF WISCONSIN, COUNTY OF WAUKESHA - SS

On this 29th day of January, 2026, personally came before me, Alan Pavlic and Kevin J. Abitz, to me known to be the individuals and officers of the OLD REPUBLIC SURETY COMPANY who executed the above instrument, and they each acknowledged the execution of the same, and being by me duly sworn, did severally depose and say: that they are the said officers of the corporation aforesaid, and that the seal affixed to the above instrument is the seal of the corporation, and that said corporate seal and their signatures as such officers were duly affixed and subscribed to the said instrument by the authority of the board of directors of said corporation.

Notary Public

My Commission Expires: 09/28/2026

(Expiration of notary's commission does not invalidate this instrume

CERTIFICATE

I, the undersigned, assistant secretary of the OLD REPUBLIC SURETY COMPANY, a Wisconsin corporation, CERTIFY that the foregoing and attached Power of Attorney remains in full force and has not been revoked; and furthermore, that the Resolutions of the board of directors set forth in the Power of Attorney, are now in force.

0402243

Signed and sealed at the City of Brookfield, WI this 29th day of January, 2026.

Assistant Secretary

ORSC 22262 (3-06)

MARSH & MCLENNAN AGENCY LLC

RIGHT OF WAY CONSTRUCTION BOND

No. 101885790

Applicant's Telephone Number: (319) 290-9700

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), E&C investments LLC,

of 223 Willow Oak Dr (Street), Cedar Falls (City), Iowa (State),

as Principal, and Merchants National Bonding, Inc. of

P.O. Box 14498, Des Moines, IA 50306-3498,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden E&C investments LLC of Cedar Falls, IA will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is May 20, 2026, through April 30, 2028.

Witness our hands this 20th day of May, 2026.

E&C investments LLC
PRINCIPAL

By: _____

Printed Name: Cesar barrios

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

Merchants National Bonding, Inc.
SURETY

By: _____
Attorney-in-fact
James A. Holter, Attorney-in-Fact

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

MERCHANTS BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, and MERCHANTS NATIONAL INDEMNITY COMPANY , an assumed name of Merchants National Bonding, Inc., (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

James A. Holter

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the By-Laws adopted by the Board of Directors of the Companies.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship o obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 20th day of May , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
MERCHANTS NATIONAL INDEMNITY COMPANY

By Larry Taylor

President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 20th day of May 2026 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA

Penni Miller
Commission Number 787952
My Commission Expires
January 20, 2027

Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 20th day of May , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

Secretary

POA 0018 (5/25)

RIGHT OF WAY CONSTRUCTION BOND

NO. **95 BM J031 6**

Applicant's Telephone Number: 319-883-1928

KNOW ALL MEN BY THESE PRESENTS:

That (I) (We), **GARDNER PLUMBING LLC**,

of **PO BOX** **WATERLOO** **IA**,
Street City State

as Principal, and **STATE FARM FIRE AND CASUALTY COMPANY** of

ONE STATE FARM PLAZA, BLOOMINGTON, IL 61710,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden **GARDNER PLUMBING LLC** of **PO BOX WATERLOO IA** will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), for a violation of said Ordinances occurring during the life of this bond; and if (he),(she),(they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is **MAY 1, 2026** through **APRIL 30, 2027**.

Witness our hands this **15TH** day of **JANUARY, 2026**.

Gardner Plumbing LLC
PRINCIPAL

By: [signature]

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

STATE FARM FIRE AND CASUALTY COMPANY CORPORATE SEAL BLOOMINGTON, ILLINOIS

Printed Name: **BRAD MCCUNNIFF**

State Farm Fire and Casualty Company
SURETY

By: Marla K Murray
Attorney-in-Fact

Updated 1-24-00

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

SFB-400015IA.1

State Farm®

State Farm Fire and Casualty Company

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS: That STATE FARM FIRE AND CASUALTY COMPANY, an Illinois corporation, with its principal office in Bloomington, Illinois, does hereby constitute and appoint: Marla K Murray

of Cedar Falls, IA its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver for, and on its behalf as surety, any and all bonds, undertakings or other writings obligatory in the nature of a bond as follows:

$ 5,000 – License, Permit or Indemnity — Financial Guarantee	$ 50,000 – Notary Public
$ 50,000 – License & Permit — Code Compliance	$100,000 – Administrator, Executor, Personal Representative, or Trustee
$ 50,000 – Defective Title — Certificate of Title Surety Bond	$ 50,000 – Guardian, Conservator, or Curator
$ 25,000 – Public Official	

THIS POWER OF ATTORNEY IS NOT VALID FOR THE EXECUTION OF ANY CONTRACT (CONSTRUCTION OR SUPPLY) BOND - BID, PERFORMANCE OR PAYMENT.

This appointment is made under and by the authority of a resolution which was passed by the Executive Committee of the Board of Directors of State Farm Fire and Casualty Company on the 1st day of January, 2024, as is duly authorized by the Board of Directors in Article II, Section 6 of the By-Laws of the Company, which resolution is:

WHEREAS, the Board desires to delegate the authority to appoint persons as Attorneys-in-Fact for certain bonds, undertakings, or other writings obligatory in the nature of a bond.

RESOLVED, that any Officer of the Company who works regularly with surety bonds is hereby authorized to appoint and empower any representative of the Company as Attorney-in-Fact to execute on behalf of the Company any bonds, undertakings, or other writings obligatory in the nature of a bond, which the Company might execute through its officers. Any said execution of such documents by an Attorney-in Fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected or appointed officers of the Company. Any Attorney-in-Fact, so appointed, may be removed for good cause and the authority so granted may be revoked as specified in the Power of Attorney.

Resolved, that the seal of the Company may be affixed by facsimile on any power of attorney granted, and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power or certificate bearing such facsimile shall be valid and binding on the Company.

IN WITNESS THEREOF, STATE FARM FIRE AND CASUALTY COMPANY has caused this instrument to be signed by its Officer, and its Corporate Seal to be affixed this 1st day of January, 2024.

This APPOINTMENT SHALL CEASE AND TERMINATE AUTOMATICALLY AS OF DECEMBER 31, 2028, UNLESS SOONER REVOKED AS PROVIDED.

STATE FARM FIRE AND CASUALTY COMPANY

By: John R. Horton
John R. Horton - Assistant Secretary Treasurer

STATE OF ILLINOIS
COUNTY OF McLEAN

On this 1st day of January, 2024, before me personally came John R. Horton to me known, who being duly sworn, did depose and say that he is Assistant Secretary Treasurer of STATE FARM FIRE AND CASUALTY COMPANY, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such Corporate Seal; and that he executed said instrument on behalf of the corporation by authority of his office under the By-Laws of said corporation.

OFFICIAL SEAL
KAREN WEBER
NOTARY PUBLIC - STATE OF ILLINOIS
My Commission Expires JULY 24, 2026

Karen Weber
Notary Public
My commission expires July 24, 2026

CERTIFICATE

I, the undersigned Assistant Secretary Treasurer of STATE FARM FIRE AND CASUALTY COMPANY, do hereby certify that the original Power of Attorney of which the foregoing is a true and correct copy, is in full force and effect and has not been revoked and the resolutions as set forth are now in force.

Signed and sealed at Bloomington, Illinois. Dated this 20th day of April, 2026.

Brian A. Crook - Assistant Secretary Treasurer

If you have a questions concerning the validity of this Power of Attorney, call 309-766-2090.

1002460

124061.21 12-24-2025

RIGHT OF WAY CONSTRUCTION BOND

NO. **95 BA J108 4**

Applicant's Telephone Number: **319-961-1300**

KNOW ALL MEN BY THESE PRESENTS:

That (I) (We), **JEFF EVEN**,

of **605 HARWOOD AVE WATERLOO IA**,
Street City State

as Principal, and **STATE FARM FIRE AND CASUALTY COMPANY** of

ONE STATE FARM PLAZA, BLOOMINGTON, IL 61710,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden **JEFF EVEN** of **605 HARWOOD AVE WATERLOO IA** will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), for a violation of said Ordinances occurring during the life of this bond; and if (he),(she),(they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is **MAY 1, 2026** through **APRIL 30, 2027**.

Witness our hands this **4TH** day of **MARCH, 2026**.

PRINCIPAL

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

By: _____

Printed Name: **BRITTNEY ROYAL**

State Farm Fire and Casualty Company
SURETY

By: _____
Attorney-in-Fact

Updated 1-24-00

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

SFB-400015IA.1

Power of Attorney

STATE FARM FIRE AND CASUALTY COMPANY

KNOW ALL PERSONS BY THESE PRESENTS: That STATE FARM FIRE AND CASUALTY COMPANY, an Illinois corporation, with its principal office in Bloomington, Illinois, does hereby constitute and appoint: Staci Ballenger, Hailee Campbell, Pamela Chancellor, Brian A Crook, Sarah Deleon, Tina Easley, Kim Filter, Mark Fink, Aubrey Foxx, Dustin Fulks,Jay W. Hendren, LeAnn Henry, John R. Horton, Jeanette Hughes, Jerry Jacek, Lori McDowell, Taylor Manus, Jill Miller-Roberts, Cheriese Mickelson, Susan Mohr, Melissa L. Morris, Brianna Novacek, Whitney Risley, Suzanne M. Robertson, Brittney Royal, Mario Silva, Heidi Simmons, Michael S Timlin, Perry Tracy, Kathy J. Walker, Karen Weber, Dawn Welles Boyd, Karli Yoder of Bloomington, Illinois its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver for, and on its behalf as surety, any and all bonds, undertakings or other writings obligatory in the nature of a bond as follows:

Any such obligation in any amount

This appointment is made under and by the authority of a resolution which was passed by the Executive Committee of the Board of Directors of State Farm Fire and Casualty Company on the 1st day of January, 2024, as is duly authorized by the Board of Directors in Article II, Section 6 of the By-Laws of the Company, which resolution is:

Resolved, that the Officer of the Company who works regularly with surety bonds is hereby authorized to appoint and empower any representative of the Company or other person or persons as Attorney-in-Fact to execute on behalf of the Company any bonds, undertakings, policies, contracts of indemnity or other writings obligatory in the nature of a bond, which the Company might execute through its officers, and affix the seal of the Company thereto. Any said execution of such documents by an Attorney-in-Fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected or appointed officers of the Company. Any Attorney-in-Fact, so appointed, may be removed for good cause and the authority so granted may be revoked as specified in the Power of Attorney.

Resolved, that the signature of any Officer of the Company noted above and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the any Officer of the Company noted above, and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS THEREOF, STATE FARM FIRE AND CASUALTY COMPANY has caused this instrument to be signed by its Assistant Secretary Treasurer, and its Corporate Seal to be affixed this 1st day of January, 2024.

This APPOINTMENT SHALL CEASE AND TERMINATE AUTOMATICALLY AS OF DECEMBER 31, 2028, UNLESS SOONER REVOKED AS PROVIDED.

STATE FARM FIRE AND CASUALTY COMPANY

By: _____
John R. Horton - Assistant Secretary Treasurer

STATE OF ILLINOIS
COUNTY OF McLEAN

On this 1st day of January, 2024, before me personally came John R. Horton to me known, who being duly sworn, did depose and say that he is Assistant Secretary Treasurer of STATE FARM FIRE AND CASUALTY COMPANY, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such Corporate Seal; and that he executed said instrument on behalf of the corporation by authority of his office under the By-Laws of said corporation.

OFFICIAL SEAL
KAREN WEBER
NOTARY PUBLIC - STATE OF ILLINOIS
My Commission Expires JULY 24, 2026

Karen Weber
Notary Public
My commission expires July 24, 2026

CERTIFICATE

I, the undersigned Assistant Secretary Treasurer of STATE FARM FIRE AND CASUALTY COMPANY, do hereby certify that the original Power of Attorney of which the foregoing is a true and correct copy, is in full force and effect and has not been revoked and the resolutions as set forth are now in force.

Signed and sealed at Bloomington, Illinois. Dated this 4TH day of MARCH, 2026

Brian A. Crook – Assistant Secretary Treasurer

If you have a question concerning the validity of this Power of Attorney, call (309) 766-2090.
FB6-9045.R
(04-01-2024)

Printed in U.S.A.

RIGHT OF WAY CONSTRUCTION BOND

NO. **95 CC 8008 4**

Applicant's Telephone Number: **319-232-4203**
319 493 0288

KNOW ALL MEN BY THESE PRESENTS:

That (I) (We), **JOE JONES DBA JONES BROTHERS ASPHALT PAVING COMPANY**,

of **909 SHORT ST WATERLOO IA**,
Street City State

as Principal, and **STATE FARM FIRE AND CASUALTY COMPANY** of

ONE STATE FARM PLAZA, BLOOMINGTON, IL 61710,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden **JOE JONES DBA JONES BROTHERS ASPHALT PAVING COMPANY** of
909 SHORT ST WATERLOO IA will faithfully perform any and all duties
and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), for a violation of said Ordinances occurring during the life of this bond; and if (he),(she),(they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is **MAY 1, 2026** through **APRIL 30, 2027**.

Witness our hands this **4TH** day of **MARCH, 2026**.

PRINCIPAL

By: _____

Printed Name: **BRITTNEY ROYAL**

State Farm Fire and Casualty Company
SURETY

By: _____
Attorney-in-Fact

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

STATE FARM FIRE AND CASUALTY COMPANY
CORPORATE
SEAL
BLOOMINGTON, ILLINOIS

Updated 1-24-00

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

SFB-400015IA.1

Power of Attorney

STATE FARM FIRE AND CASUALTY COMPANY

KNOW ALL PERSONS BY THESE PRESENTS: That STATE FARM FIRE AND CASUALTY COMPANY, an Illinois corporation, with its principal office in Bloomington, Illinois, does hereby constitute and appoint: Staci Ballenger, Hailee Campbell, Pamela Chancellor, Brian A Crook, Sarah Deleon, Tina Easley, Kim Filter, Mark Fink, Aubrey Foxx, Dustin Fulks,Jay W. Hendren, LeAnn Henry, John R. Horton, Jeanette Hughes, Jerry Jacek, Lori McDowell, Taylor Manus, Jill Miller-Roberts, Cheriese Mickelson, Susan Mohr, Melissa L. Morris, Brianna Novacek, Whitney Risley, Suzanne M. Robertson, Brittney Royal, Mario Silva, Heidi Simmons, Michael S Timlin, Perry Tracy, Kathy J. Walker, Karen Weber, Dawn Welles Boyd, Karli Yoder of Bloomington, Illinois its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver for, and on its behalf as surety, any and all bonds, undertakings or other writings obligatory in the nature of a bond as follows:

Any such obligation in any amount

This appointment is made under and by the authority of a resolution which was passed by the Executive Committee of the Board of Directors of State Farm Fire and Casualty Company on the 1st day of January, 2024, as is duly authorized by the Board of Directors in Article II, Section 6 of the By-Laws of the Company, which resolution is:

Resolved, that the Officer of the Company who works regularly with surety bonds is hereby authorized to appoint and empower any representative of the Company or other person or persons as Attorney-in-Fact to execute on behalf of the Company any bonds, undertakings, policies, contracts of indemnity or other writings obligatory in the nature of a bond, which the Company might execute through its officers, and affix the seal of the Company thereto. Any said execution of such documents by an Attorney-in-Fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected or appointed officers of the Company. Any Attorney-in-Fact, so appointed, may be removed for good cause and the authority so granted may be revoked as specified in the Power of Attorney.

Resolved, that the signature of any Officer of the Company noted above and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the any Officer of the Company noted above, and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS THEREOF, STATE FARM FIRE AND CASUALTY COMPANY has caused this instrument to be signed by its Assistant Secretary Treasurer, and its Corporate Seal to be affixed this 1st day of January, 2024.

This APPOINTMENT SHALL CEASE AND TERMINATE AUTOMATICALLY AS OF DECEMBER 31, 2028, UNLESS SOONER REVOKED AS PROVIDED.

STATE FARM FIRE AND CASUALTY COMPANY

By: _____
John R. Horton - Assistant Secretary Treasurer

STATE OF ILLINOIS
COUNTY OF McLEAN

On this 1st day of January, 2024, before me personally came John R. Horton to me known, who being duly sworn, did depose and say that he is Assistant Secretary Treasurer of STATE FARM FIRE AND CASUALTY COMPANY, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such Corporate Seal; and that he executed said instrument on behalf of the corporation by authority of his office under the By-Laws of said corporation.

OFFICIAL SEAL
KAREN WEBER
NOTARY PUBLIC - STATE OF ILLINOIS
My Commission Expires JULY 24, 2026

Karen Weber
Notary Public
My commission expires July 24, 2026

CERTIFICATE

I, the undersigned Assistant Secretary Treasurer of STATE FARM FIRE AND CASUALTY COMPANY, do hereby certify that the original Power of Attorney of which the foregoing is a true and correct copy, is in full force and effect and has not been revoked and the resolutions as set forth are now in force.

Signed and sealed at Bloomington, Illinois. Dated this 4TH day of MARCH, 2026

Brian A. Crook – Assistant Secretary Treasurer

If you have a question concerning the validity of this Power of Attorney, call (309) 766-2090.

FB6-9045.R
(04-01-2024)

Printed in U.S.A.

RIGHT OF WAY CONSTRUCTION BOND

No. 55223776

Applicant's Telephone Number: 319 277 0415

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), K & W Electric Inc.,

of 1127 Lincoln St. (Street), Cedar Falls, Iowa (City, State),

as Principal, and United Fire & Casualty Company of

118 2nd Ave SE, Cedar Rapids, IA 52401,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden K & W Electric Inc. of Cedar Falls, Iowa will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is May 1, 2026, through April 30, 2027.

Witness our hands this 1st day of February, 2026.

K & W Electric Inc.
PRINCIPAL

By: BS

Printed Name: Brian DeVries

United Fire & Casualty Company
SURETY

By: Attorney-in-fact

Please mail or email to:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

city.engineer@waterloo-ia.org

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

UNITED FIRE & CASUALTY COMPANY, CEDAR RAPIDS, IA
UNITED FIRE & INDEMNITY COMPANY, WEBSTER, TX
FINANCIAL PACIFIC INSURANCE COMPANY, ROSEVILLE, CA

POWER OF ATTORNEY

To verify the authenticity of this Power of Attorney, please contact us at
UFG Insurance, 118 Second Ave SE, Cedar Rapids, IA 52401
telephone (800) 343-9130 or email *surety@unitedfiregroup.com*
THIS POWER OF ATTORNEY IS VOID IF ALTERED
To notify us of a claim, please contact us at *surety@unitedfiregroup.com*

KNOW ALL PERSONS BY THESE PRESENTS, That United Fire & Casualty Company, a corporation duly organized and existing under the laws of the State of Iowa; United Fire & Indemnity Company, a corporation duly organized and existing under the laws of the State of Texas; and Financial Pacific Insurance Company, a corporation duly organized and existing under the laws of the State of California (herein collectively called the Companies), and having their corporate headquarters in Cedar Rapids, State of Iowa, does make, constitute and appoint

KYANNA SAYLOR, BRAD HANCE, JUDITH A. JONES, MARY BERTSCH, PATRICIA WIEBEL ALLISON NISSEN, STEVEN KINNEY, KARRI L. MURPHY, JORDAN FELTMAN, AUSTIN NAUMAN, NICK LENZEN, NOLAN J. ARP, MONUEIR MOODIE, DAVIS MORTLAND PATTI WADDELL, KATHY DAKE, DEB GASKILL, CARRIE A. GRAY, PATRICIA L. NIEBES, MEREDITH UMSTEAD, CASS MOORE, BARBARA J. MALMBERG, MICHELLE L. MULLINEX, CAROL DAVISON, EACH INDIVIDUALLY

their true and lawful Attorney(s)-in-Fact with power and authority hereby conferred to sign, seal and execute in its behalf all lawful bonds, undertakings and other obligatory instruments of similar nature provided that no single obligation shall exceed $ 100,000,000.00 and to bind the Companies thereby as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Companies and all of the acts of said Attorney, pursuant to the authority hereby given and hereby ratified and confirmed.

The Authority hereby granted is continuous and shall remain in full force and effective until revoked by United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company

This Power of Attorney has been duly made, executed and delivered pursuant to, and in accordance with, the articles of incorporation, bylaws, and other governing documents of each of the respective Companies, and by authority therein granted and under applicable corporate law.

IN WITNESS WHEREOF, the COMPANIES have each caused these presents to be signed by its officer and its corporate seal to be hereto affixed this 26th day of January, 2026.

By: _____
Kyanna M. Saylor, Vice President of
United Fire & Casualty Company
United Fire & Indemnity Company
Financial Pacific Insurance Company

State of Iowa, County of Linn, ss:
On this 26th day of January, 2026, before me personally came Kyanna M. Saylor to me known, who being by me duly sworn, did depose and say; that she is a Vice President of UNITED FIRE & CASUALTY COMPANY, a Vice President of UNITED FIRE & INDEMNITY COMPANY, and a Vice President of FINANCIAL PACIFIC INSURANCE COMPANY, the corporations described in and which executed the above instrument; that she knows the seal of said corporations; that the seals affixed to the said instrument are such corporate seals; that these seals were so affixed pursuant to authority given by the Boards of Directors of said corporations and that she signed her name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporations.

Judith A. Jones
Iowa Notarial Seal
Commission number 173041
My Commission Expires 04/23/2027

Notary Public: _____
My commission expires: 04/23/2027

I, Mary A. Bertsch, do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and that the said Power of Attorney has not been revoked and is now in full force and effect.

In testimony whereof I have hereunto subscribed my name and affixed the corporate seal of each said Company this 1st day of February, 2026.

By: _____
Mary A. Bertsch, Assistant Secretary of
United Fire & Casualty Company
United Fire & Indemnity Company
Financial Pacific Insurance Company

BPOA0049 012026

This paper has a colored background and void pantograph.

RIGHT OF WAY CONSTRUCTION BOND

No. IA 550121

Applicant's Telephone Number: 3192770100

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), MAGEE CONSTRUCTION,

of _____ (Street), CEDAR FALLS (City), Iowa (State),

as Principal, and Merchants Bonding Company (Mutual) of

P.O. Box 14498, Des Moines, IA 50306-3498,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden MAGEE CONSTRUCTION of CEDAR FALLS, IA will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is April 30, 2026, through April 30, 2027.

Witness our hands this 21st day of January, 2026.

MAGEE CONSTRUCTION
PRINCIPAL

By: Chris Michels

Printed Name: Chris Michels

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

Merchants Bonding Company (Mutual)
SURETY

By: James A. Holter

Attorney-in-fact
James A. Holter, Attorney-in-Fact

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

LP 0467 IA (4/23)

MERCHANTS BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, and MERCHANTS NATIONAL INDEMNITY COMPANY , an assumed name of Merchants National Bonding, Inc., (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

James A. Holter

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the By-Laws adopted by the Board of Directors of the Companies.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship o obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 21st day of January , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
MERCHANTS NATIONAL INDEMNITY COMPANY

By Larry Taylor

President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 21st day of January 2026 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA

Penni Miller
Commission Number 787952
My Commission Expires
January 20, 2027

Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 21st day of January , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

Secretary

POA 0018 (5/25)

CONTINUATION CERTIFICATE

The RLI Insurance Company (hereinafter called the Surety) hereby continues in force its Bond No. CMS0349034 in the sum of Twenty Thousand Dollars and 00/100 ($20,000.00) Dollars, on behalf of Metro Fibernet, LLC in favor of City of Waterloo, Black Hawk County, Iowa for Right of Way Construction Bond subject to all the conditions and terms thereof through 30th Day of April, 2027 at location of risk.

This Continuation is executed upon the express condition that the Surety's liability shall not be cumulative and shall be limited at all times by the amount of the penalty stated in the bond.

IN WITNESS WHEREOF, the Surety has caused this instrument to be signed by its duly authorized Attorney-in-Fact and its corporate seal to be hereto affixed this 6th Day of February, 2026.

RLI Insurance Company
Surety
BY: Charissa D Wilson
Charissa D. Wilson, Attorney-in-Fact

RLI INSURANCE COMPANY CORPORATE SEAL ILLINOIS

POWER OF ATTORNEY

RLI Insurance Company
Contractors Bonding and Insurance Company

9025 N. Lindbergh Dr. Peoria, IL 61615
Phone: 800-645-2402

Bond No. CMS0349034

Know All Men by These Presents:

That this Power of Attorney is not valid or in effect unless attached to the bond which it authorizes, but may be detached by the approving officer if desired.

That this Power of Attorney may be effective and given to either or both of **RLI Insurance Company** and **Contractors Bonding and Insurance Company**, required for the applicable bond.

That **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, each Illinois corporations (as applicable), each authorized and licensed to do business in all states and the District of Columbia do hereby make, constitute and appoint: Charissa D. Wilson in the City of Overland Park, State of KS, it's true and lawful Agent and Attorney in Fact, with full power and authority hereby conferred upon him/her to sign, execute, acknowledge and deliver for and on its behalf as Surety, in general, any and all bonds and undertakings in an amount not to exceed Seventy Five Million Dollars ($75,000,000) for any single obligation, and specifically for the following described bond.

Principal: Metro Fibernet, LLC
Obligee: City of Waterloo, Black Hawk County, Iowa

RLI Insurance Company and **Contractors Bonding and Insurance Company**, as applicable, have each further certified that the following is a true and exact copy of a Resolution adopted by the Board of Directors of each such corporation, and now in force, to-wit:

"All bonds, policies, undertakings, Powers of Attorney or other obligations of the Corporation shall be executed in the corporate name of the Corporation by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or Agents who shall have authority to issue bonds, policies or undertakings in the name of the Corporation. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the Corporation. The signature of any such officer and the corporate seal may be printed by facsimile or other electronic image."

IN WITNESS WHEREOF, **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, as applicable, have caused these presents to be executed by its respective Sr. Vice President with its corporate seal affixed this 11th day of September, 2025.

RLI INSURANCE COMPANY CORPORATE SEAL ILLINOIS

CONTRACTORS BONDING AND INSURANCE COMPANY CORPORATE SEAL ILLINOIS

RLI Insurance Company
Contractors Bonding and Insurance Company

Eric Raudins — Sr. Vice President

State of Ohio
County of Cuyahoga } SS

On this 11th day of September, 2025, before me, a Notary Public, personally appeared Eric Raudins, who being by me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of the **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, and acknowledged said instrument to be the voluntary act and deed of said corporation.

By: Jill A. Scott — Notary Public

NOTARIAL SEAL STATE OF OHIO

JILL A. SCOTT
Notary Public, State of Ohio
My Commission Expires:
September 22, 2030

CERTIFICATE

I, the undersigned officer of **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable; and furthermore, that the Resolution of the Company as set forth in the Power of Attorney, is now in force. In testimony whereof, I have hereunto set my hand and the seal of the **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company** this 6th day of February, 2026.

RLI Insurance Company
Contractors Bonding and Insurance Company

By: Christina Dean — Corporate Secretary

RIGHT OF WAY CONSTRUCTION BOND

No. 101299138

Applicant's Telephone Number: 612 237 5111

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), MTC Services, LLC,

of PO Box 188 (Street), Medford (City), Minnesota (State),

as Principal, and Merchants Bonding Company (Mutual) of

P.O. Box 14498, Des Moines, IA 50306-3498,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden MTC Services, LLC of Medford, MN will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is April 30, 2026, through April 30, 2027.

Witness our hands this 14th day of May, 2026.

MTC Services, LLC
PRINCIPAL

By: _____

Printed Name: Michael Carr

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

Merchants Bonding Company (Mutual)
SURETY

By: _____
Attorney-In-fact
James A. Holter, Attorney-in-Fact

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

LP 0467 IA (4/23)

MERCHANTS BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, and MERCHANTS NATIONAL INDEMNITY COMPANY , an assumed name of Merchants National Bonding, Inc., (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

James A. Holter

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the By-Laws adopted by the Board of Directors of the Companies.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship o obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 14th day of May , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
MERCHANTS NATIONAL INDEMNITY COMPANY

By Larry Taylor

President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 14th day of May 2026 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA
Penni Miller
Commission Number 787952
My Commission Expires
January 20, 2027

Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 14th day of May , 2026 .

Secretary

POA 0018 (5/25)

RIGHT OF WAY CONSTRUCTION BOND

No. 101812570

Applicant's Telephone Number: (319) 240-5373

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), Scarbrough Build Co.,

of 6220 Kimball Ave (Street), Waterloo (City), Iowa (State),

as Principal, and Merchants National Bonding, Inc. of

P.O. Box 14498, Des Moines, IA 50306-3498,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden Scarbrough Build Co. of Waterloo, IA will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is March 16, 2026, through April 30, 2029.

Witness our hands this 16th day of March, 2026.

Scarbrough Build Co.
PRINCIPAL

By: _____

Printed Name: Lucas Scarbrough

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

Merchants National Bonding, Inc.
SURETY

By: _____
Attorney-in-fact
James A. Holter, Attorney-in-Fact

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

LP 0467 IA (4/23)

MERCHANTS
BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, and MERCHANTS NATIONAL INDEMNITY COMPANY , an assumed name of Merchants National Bonding, Inc., (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

James A. Holter

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the By-Laws adopted by the Board of Directors of the Companies.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship o obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 16th day of March , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933
MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003
MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
MERCHANTS NATIONAL INDEMNITY COMPANY

By Larry Taylor

President

STATE OF IOWA
COUNTY OF DALLAS ss.
On this 16th day of March 2026 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA
Penni Miller
Commission Number 787952
My Commission Expires
January 20, 2027

Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 16th day of March , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933
MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003
MERCHANTS NATIONAL INDEMNITY COMPANY CALIFORNIA

Secretary

POA 0018 (5/25)

RIGHT OF WAY CONSTRUCTION BOND

No. 9424039

Applicant's Telephone Number: (319) 277-4016

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), Terracon Consultants, Inc.,

of 3105 Capital Way, Suite 5, Cedar Falls, IA 50613,
Street City State

as Principal, and Fidelity and Deposit Company of Maryland of

1299 Zurich Way, Schaumburg, IL 60196-1056,
as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of FIVE THOUSAND DOLLARS ($5,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Five Thousand Dollars ($5,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden Terracon Consultants, Inc. of 3105 Capital Way, Suite 5, Cedar Falls, IA 50613 will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is May 1, 2026, through April 30, 2027.

Witness our hands this 24th day of March, 2026.

Terracon Consultants, Inc.
PRINCIPAL

By: _____

Printed Name: Patrick L. Courtney, Secretary

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

Fidelity and Deposit Company of Maryland
SURETY

By: _____
Attorney-in-fact Erin C. Lavin

Surety Phone No. 847-605-6000

Updated 1-24-00

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

Bond No. 9424039

Obligee: City of Waterloo, Iowa

ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Illinois, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Illinois (herein collectively called the "Companies"), by Christopher Nolan, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Erin C. Lavin, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings,** and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 7th day of February, A.D. 2025.

SEAL SEAL SEAL

ATTEST:
ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

By: Christopher Nolan
Vice President

By: Dawn E. Brown
Secretary

State of Maryland
County of Baltimore

On this 7th day of February, A.D. 2025, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Christopher Nolan, Vice President and Dawn E. Brown, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Genevieve M. Mason
Notary Public
My Commission Expire January 27, 2029

Authenticity of this bond can be confirmed at bondvalidator.zurichna.com or 410-559-8790

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify of revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 24th day of March, 2026.

MJ Pethick

Mary Jean Pethick
Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT A COMPLETE DESCRIPTION OF THE CLAIM INCLUDING THE PRINCIPAL ON THE BOND, THE BOND NUMBER, AND YOUR CONTACT INFORMATION TO:

Zurich Surety Claims
1299 Zurich Way
Schaumburg, IL 60196-1056
reportsfclaims@zurichna.com
800-626-4577

Authenticity of this bond can be confirmed at bondvalidator.zurichna.com or 410-559-8790

RIGHT OF WAY CONSTRUCTION BOND

No. 7901334926

Applicant's Telephone Number: _____

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), Trueg Custom Concrete,

of 1645 11th St (Street), Jesup (City), IA (State),

as Principal, and Nationwide Mutual Insurance Company of

1100 Locust Street, Department 2006, Des Moines, IA 50391,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden Trueg Custom Concrete of 1645 11th St , Jesup, IA 50648 will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is June 3rd, 2026, through April 30, 2027.

Witness our hands this 3rd day of June, 2026.

Trueg Custom Concrete
PRINCIPAL

By: _____

Printed Name: Scott Trueg

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

Nationwide Mutual Insurance Company
SURETY

By: _____
Attorney-in-fact Elizabeth Moore

SEAL

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

Bond Number: 7901334926

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS THAT:

Nationwide Mutual Insurance Company, an Ohio corporation

hereinafter referred to severally as the "Company" and collectively as "the Companies" does hereby make, constitute and appoint:

Elizabeth Moore

each in their individual capacity, its true and lawful attorney-in-fact, with full power and authority to sign, seal, and execute on its behalf on the date thereof any and all: (i)bonds and undertakings; (ii) Proposal Bonds; (ii) Letters of Surety; (iv) Consent of Surety; and (v) other obligatory instruments of similar nature, in penalties not exceeding the sum of

Twenty Thousand and No/100 Dollars ($20,000.00)

and to bind the Company thereby, as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Company; and all acts of said Attorney pursuant to the authority given are hereby ratified and confirmed.

This power of attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the board of directors of the Company:

"RESOLVED, that the president, or any vice president be, and each hereby is, authorized and empowered to appoint attorneys-in-fact of the Company, and to authorize them to execute and deliver on behalf of the Company any and all bonds, forms, applications, memorandums, undertakings, recognizances, transfers, contracts of indemnity, policies, contracts guaranteeing the fidelity of persons holding positions of public or private trust, and other writings obligatory in nature that the business of the Company may require; and to modify or revoke, with or without cause, any such appointment or authority; provided, however, that the authority granted hereby shall in no way limit the authority of other duly authorized agents to sign and countersign any of said documents on behalf of the Company."

"RESOLVED FURTHER, that such attorneys-in-fact shall have full power and authority to execute and deliver any and all such documents and to bind the Company subject to the terms and limitations of the power of attorney issued to them, and to affix the seal of the Company thereto; provided, however, that said seal shall not be necessary for the validity of any such documents."

This power of attorney is signed and sealed under and by the following bylaws duly adopted by the board of directors of the Company.

Execution of Instruments. Any vice president, any assistant secretary or any assistant treasurer shall have the power and authority to sign or attest all approved documents, instruments, contracts, or other papers in connection with the operation of the business of the company in addition to the chairman of the board, the chief executive officer, president, treasurer or secretary; provided, however, the signature of any of them may be printed, engraved, or stamped on any approved document, contract, instrument, or other papers of the Company.

IN WITNESS WHEREOF, the Company has caused this instrument to be sealed and duly attested by the signature of its officer the 23rd day of October, 2025.

Antonio C. Albanese, **Vice President** of Nationwide Mutual Insurance Company

ACKNOWLEDGMENT

STATE OF OHIO COUNTY OF FRANKLIN: ss
On this 23rd day of October, 2025, before me came the above-named officer for the Company aforesaid, to me personally known to be the officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, deposes and says, that he is the officer of the Company aforesaid, that the seal affixed hereto is the corporate seal of said Company, and the said corporate seal and his signature were duly affixed and subscribed to said instrument by the authority and direction of said Company.

Karen L. Karn
Notary Public, State of Ohio
No. 2018-RE-719796
Commission Expires July 7, 2028

Notary Public
My Commission Expires
July 7, 2028

CERTIFICATE

I, Lezlie F. Chimienti, Assistant Secretary of the Company, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney issued by the Company, that the resolution included therein is a true and correct transcript from the minutes of the meetings of the boards of directors and the same has not been revoked or amended in any manner; that said Antonio C. Albanese was on the date of the execution of the foregoing power of attorney the duly elected officer of the Company, and the corporate seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority of said board of directors; and the foregoing power of attorney is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of said Company this 3rd day of June, 2026.

Assistant Secretary

BDJ 1(10-25)00

RIGHT OF WAY CONSTRUCTION BOND

No. 101892386

Applicant's Telephone Number: 641-229-7639

KNOW ALL MEN BY THESE PRESENTS:

That (I), (We), Zimmermans Digging Inc,

of PO Box 9 (Street), Charles City (City), Iowa (State),

as Principal, and Merchants National Bonding, Inc. of

P.O. Box 14498, Des Moines, IA 50306-3498,

as Surety, are held and firmly bound unto the City of Waterloo, Black Hawk County, Iowa, in the penal sum of TWENTY THOUSAND DOLLARS ($20,000.00) lawful money of the United States of America, to the payment of which sum, well and truly to be made, the Principal herein firmly binds (himself) (herself) (themselves) their heirs, executors and administrators, and the said Surety binds themselves, their successors, assigns, executors and administrators, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, by the provisions of the Ordinances of the City of Waterloo, Iowa, a Surety Bond in the sum of Twenty Thousand Dollars ($20,000.00) must be filed with the City Clerk/Auditor of the City of Waterloo, Iowa, before one may engage in construction, reconstruction or excavation in the public right of way in said City.

NOW, THEREFORE, if the above bounden Zimmermans Digging Inc of Charles City, IA will faithfully perform any and all duties and abide by any and all regulations required by said Ordinances regulating the construction, reconstruction and excavation projects within said City; and if (he), (she), (they) will promptly pay to said City any and all sums and amounts due or that may become due or owing by reason of or under said Ordinances; and if (he), (she), (they) will pay all fines imposed upon (him), (her), (them), or a violation of said Ordinances occurring during the life of this bond; and if (he), (she), (they) will indemnify and keep the City harmless from all liability for any accident and/or damages arising from (his), (her), (their) doing, protecting or completing the work, then this obligation to be null and void, otherwise to remain in full force and effect.

The effective date of this Bond is May 28, 2026, through April 30, 2027.

Witness our hands this 28th day of May, 2026.

Zimmermans Digging Inc
PRINCIPAL

By: _____

Printed Name: David Zimmerman

PLEASE MAIL TO:

City of Waterloo, Iowa
Engineering Department
715 Mulberry Street
Waterloo, IA 50703

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

Merchants National Bonding, Inc.
SURETY

By: _____

Attorney-in-fact
James A. Holter, Attorney-in-Fact

Updated 2-28-2023

PLEASE COMPLETE CHECKLIST ON REVERSE SIDE BEFORE SUBMITTING BOND.

LP 0467 IA (4/23)

MERCHANTS BONDING COMPANY

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, and MERCHANTS NATIONAL INDEMNITY COMPANY , an assumed name of Merchants National Bonding, Inc., (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

James A. Holter

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the By-Laws adopted by the Board of Directors of the Companies.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship o obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 28th day of May , 2026 .

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
MERCHANTS NATIONAL INDEMNITY COMPANY

By Larry Taylor

President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 28th day of May 2026 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA

Penni Miller
Commission Number 787952
My Commission Expires
January 20, 2027

Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandorsfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL), MERCHANTS NATIONAL BONDING, INC., and MERCHANTS NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 28th day of May , 2026 .

Secretary

POA 0018 (5/25)

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Bridgett Wood, Finance Director
Finance Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving the Agreement with Ramp Business Corporation for the purpose of making available a Purchasing Card Program, Expense Tracking, and Travel Platform in the amount of $5,500.00, and authorizing the Mayor to execute said document.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

Currently, the City uses purchasing cards through a cooperative agreement that is headed by the University of Iowa. Ramp will provide a better way to manage travel expenses, spending limits, and policy compliance than the current set up. We will be transitioning to Ramp as the purchasing card provider for the City, and it will also have a platform for those purchasing cardholders to upload their receipts by taking a picture of the receipt at the time of purchase.

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. City of Waterloo - June Contract - OMNIA

ramp

Order Form

Ramp Business Corporation
28 West 23rd Street, Floor 2
New York, NY 10010

Quote Expiration August 1, 2026
Quote Number 00030964

Bill to Details

Bill To
The City of Waterloo
715 Mulberry Street
Waterloo, Iowa, 50703, United States

Primary Contact
Bridgett Wood
bridgett.wood@waterloo-ia.org

Subscription Details

Subscription Dates
Aug 1, 2026–Jul 31, 2027

First Billing Date
August 31, 2026

Complimentary Period End Date
August 1, 2026

Order Form Term
12 months

Payment Method
Invoice

Payment Terms
Net 30

Year 1

Total $5,500

Product Description	List Rate	Quantity	Discount	Discounted Rate	Annual Total
Ramp Plus User Seat	$12	55	58.33%	$5.00	$3,300

Product Description	Annual Fee	Discount	Annual Total
Platform Fee	$10,000	78.00%	$2,200

Subtotal	$17,920
Discount	69.31%
Total Subscription Fees	$5,500

Implementation Package Details

Implementation Start Date August 1, 2026	Implementation End Date November 29, 2026
Package Implementation	Implementation Fee (One-Time Fee) $0

Services Total $0

Terms and Conditions

- Company warrants that it is a Participating Member in the OMNIA public sector program. This Order Form is entered into under the Master Purchasing Agreement for the OMNIA public sector program (as of the date of this Order Form, OMNIA contract reference #R230102, as amended from time to time) and is governed by, and Company confirms its agreement to, the Government Addendum (available at https://ramp.com/legal/government-addendum) (the “Government Addendum”) and the Ramp Platform Agreement (available at https://ramp.com/legal/platform-agreement) (the “Platform Agreement”) and forms part of the Agreement (as defined in the Platform Agreement). All capitalized terms not defined in this Order Form shall have the meaning set forth in the Agreement. In the event of any conflict between this Order Form and the remainder of the Agreement, this Order Form shall govern and control with respect to the Services purchased hereunder.

- Special Term(s)
  - Notwithstanding anything to the contrary in the Agreement, this Order Form will not automatically renew and will instead expire at the end of the Order Form Term specified herein.
  - For the first 12 month renewal of Company’s Subscription Term for which pricing has not been agreed in this Order Form, Ramp will not increase the Subscription Fees by more than 10%. The preceding cap on price increases does not apply to any increases resulting from the addition of seats or subscription to additional Services.
- Seat Price
  - Except as otherwise provided in this Order Form: (i) Services are purchased for the Order Form Term specified above; and (ii) additional seats may be added to the subscription during the Order Form Term at the same per seat pricing as set out in this Order Form and shall be co-terminated and prorated for the remainder of the applicable Order Form Term.
- Billing
  - Company is responsible for payment in full of all Subscription Fees specified in this Order Form for access to use the applicable Services and for the Implementation Package as further described in the Implementation Package Statement of Work (attached hereto). On the First Payment Date, Ramp will bill Company for all amounts owed under this Order Form for the Subscription Services, and on the Implementation Billing Date specified in the SOW, Ramp will bill Company for all amounts

owed under this Order Form for the Implementation Package, in each case including any applicable taxes.

- All amounts billed will include any applicable taxes. Taxes will be applied based on the address provided above. Company shall remit payment within 30 days of the billing date. If any Fees are not received by us when due, then without limiting our other rights or remedies, those Fees may accrue late interest at the rate of 1.5% of the outstanding balance, or the maximum rate permitted by law, whichever is lower.
- Ramp will evaluate and calculate the number of seats used by Company on a daily basis. If Company's used seat count exceeds the current quantity of seats specified in this Order Form (determined on a daily basis), Ramp will bill Company on the monthly anniversary of the Subscription Start Date for the seats exceeding the stated quantity (which will then become additional authorized seats under this Order Form), prorated for the remainder of the Order Form Term, and payment will be made as set forth herein.
- In the event Company cancels its Ramp Account or terminates the Agreement, Company shall not be entitled to a refund of any prepaid Fees and, if applicable, Ramp will bill Company for any Fees due for the remainder of the Order Form Term.
- The Fees hereunder do not supersede any transaction, currency conversion or other Fees otherwise associated with the Services.

- Quote Expiration
  - The Fees specified in this Order Form are only valid if this Order Form is fully executed by the parties before the Quote Expiration Date specified above.
- Confidentiality
  - This Order Form is the Confidential Information of both parties.

Upon signature by Company and submission to Ramp, this Order Form shall become legally binding.

The City of Waterloo

By

Title

Signature

Date

EXHIBIT A

IMPLEMENTATION PACKAGE

Overview

Ramp will support the projects as specified below, or as further mutually agreed upon by the parties

Proposed Timelines: Start date and timelines to be mutually agreed upon by the parties, with committed timelines (if any) indicated below

Implementation Billing Date: 90 days following the Implementation Start Date

Committed Monthly Card Spend (the average monthly amount Company commits to spend on its Ramp Cards): $30,000

I. Description of Implementation Package

During the Implementation Period, Ramp will provide the following implementation services to assist Company with the implementation of Ramp:

A. Conduct an introductory call to review the Implementation Package, scope the project, and develop mutual action plan for Ramp implementation and roll-out

B. Configure core integrations, which may include:

1. Ramp-supported accounting ERP: Quickbooks, Xero, Netsuite, Sage Intacct, Microsoft Dynamics Business Central, Acumatica
2. Ramp-supported HRIS or IdP
3. Ramp-supported SSO or IdP
4. Other Ramp-supported 3rd-party integrations
5. Migrate list data into Ramp via CSV tools:
    . Chart of accounts and additional custom fields
    a. Employees
    b. Vendors
6. Enable Ramp-supported custom fields and dimensions
7. Additional integrations assistance with technical account manager

B. Support configuration of Ramp for multiple entities and international users, which may include:

1. Multi-currency card limits and spend programs
2. Multi-currency reimbursements
3. International bill vendors set up

C. Support configuration of the core Ramp Cards & expense management module

1. Employee invites with appropriate User roles
2. Expense policies
3. Up to 5 spend approval workflows (Card requests, transaction review, flags & alerts) configured on behalf of Company

4. Reimbursements approval workflows
5. Issue physical and virtual Cards
6. Up to 10 Ramp accounting rules configured on behalf of Company
7. Up to 5 spend programs configured on behalf of Company

D. Support configuration of Ramp bill pay module, if applicable

1. Review of bill pay workflows and features, provided a supported ERP is used, including
    a. Amortization
    b. Recurring bills
    c. Purchase orders
2. Bill pay vendor migration
3. Up to 5 bill pay approval workflows configured on behalf of Company

E. Set up assistance with additional Ramp products, which may include:

1. Ramp Procurement
2. Ramp Travel
3. Ramp Flex

F. Support up to 3 weeks of testing, including:

1. Defining test scenarios with up to 10 test users
2. 10 transactions synced to accounting ERP (production environment)
3. If Ramp Reimbursements is applicable, 5 test reimbursements
4. If Ramp Bill Pay is applicable, 10 test bills

G. Conduct live training and support post go-live transition

1. Up to 3-hours live & recorded administrator, manager and employee training
2. Up to 1 hour impact review & transition to account manager
3. Manager and employee training guides available on ramp.com/training-resources

II. Company Obligations and Project Assumptions

A. Company Obligations

In addition to any assumptions or other obligations specified herein, Company shall, in a timely manner: (1) provide all Company materials necessary for Ramp's performance of the implementation services; (2) ensure that Company stakeholders are available and responsive during the Implementation Period; (3) ensure that all Company feedback and approvals are provided through a single point of contact; (4) provide any access necessary for Ramp to perform the implementation services; and (5) otherwise comply with its obligations under this Exhibit A.

Company understands and agrees that Ramp will not be responsible for any delay or deficiency in performing the implementation services due to Company's failure to fulfill its obligations or otherwise fully cooperate with Ramp.

1. Required Data

You agree to provide the necessary data for the Ramp team to complete the implementation services, including:

- Provide card transaction history for most recent 12 months (monthly amounts not cumulative over 12-month period), preferably downloaded from ERP with GL coding. Identify material recurring vendors that will not be migrated to Ramp
- Provide bill pay transaction history for most recent 12 months (monthly amounts not cumulative over 12-month period), preferably downloaded from ERP with GL coding (if Ramp Bill Pay is applicable, or if Customer plans to move ACH to card). Identify material recurring vendors that will not be migrated to Ramp
- Provide a list of intended Ramp users
- Supply appropriate access for key integrations required (ERP, HRIS, SSO)

2. Project Management

Company agrees to designate a project manager who shall be responsible for coordinating Company activities under this Order Form. Company shall direct all inquiries concerning the Implementation Package to the Ramp project lead. Ramp's project lead shall have the sole right to exercise direct control and supervision of the work assignments of Ramp resources.

B. Project Assumptions

1. All implementation services will be performed remotely
2. All project documentation, presentations and project communication will be in English
3. Standard functionalities will not be documented
4. Ramp will not be required to work outside its standard local workday hours
5. The implementation services are designed to be delivered within Ramp's production environment (i.e. testing is not offered within Ramp's sandbox environment)
6. Anything not expressly listed in the Description of Implementation Package section above is not included in the scope of the Implementation Package

III. Unused Services

The implementation services must be used prior to the Implementation End Date. Any portion of the implementation services not used prior to the Implementation End Date will be automatically forfeited by Company, with no further action required of either party, and Company will not be entitled to a refund, or any credit toward additional or other services, for any unused portion of the Fees paid for any unused portion of the Implementation Package. Company may not apply any portion of unused implementation services or fees paid, for any services other than the implementation services specified in the above Description of Implementation Package. In order for Ramp to provide services to Company after the Implementation Period, Ramp and Company shall mutually agree, in writing, under a separate Order Form, to the terms and Fees for such services.

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Bridgett Wood, Finance Director
Finance Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving the renewal of a three-year software contract with Fifth Asset, Inc., DBA DebtBook, for the purpose of debt management, lease management, and subscription management, and authorizing the Finance Manager to execute said document.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Waterloo, IA_Renewal_06.03.2026

DebtBook

RENEWAL AMENDMENT & ORDER FORM

This Renewal Amendment & Order Form ("**Renewal Amendment**") to the existing Agreement, as defined below, is entered into between Fifth Asset, Inc. d/b/a DebtBook ("**DebtBook**") and the Customer identified in the signature block below ("**Customer**")(together, the "**Parties**"), is effective as of the date of Customer's signature below and amends the Agreement as set forth below.

RECITALS

WHEREAS, the Parties have previously executed the Agreement dated July 1, 2021 (together, the "**Agreement**"), as amended, which established the rights and obligations of each party with respect to the Services.

WHEREAS, the Parties now wish to amend the Agreement to renew the Agreement and the Services for an additional 3 years.

NOW, THEREFORE, in consideration of the mutual covenants and promises set forth herein and the continuing rights and obligations of the parties as set forth in the Agreement and the Renewal Amendment, the parties agree as follows:

SERVICES & FEES

Treasury
Item & Description
Debt Accounting Annual recurring fee for DebtBook's debt accounting software-as-a-service application provided to Customer through access to the Application Services
Debt Management Core Annual recurring fee for DebtBook's debt management software-as-a-service application provided to Customer through access to the Application Services

Compliance
Item & Description
Lease & SBITA Management Complete Annual recurring fee for DebtBook's Lease and SBITA management software-as-a-service application provided to Customer through access to the Application Services

Annual Summary	**Year 1**	**Year 2**	**Year 3**
Recurring Subscription Fees	$15,000.00	$15,000.00	$15,000.00
One-Time Implementation Fees	$0.00		
Annual Total	**$15,000.00**	**$15,000.00**	**$15,000.00**
TOTAL			**$45,000.00**

TERMS

1. The Parties have agreed to renew and extend the Agreement for an additional 3 years beginning on July 1, 2026 (the "**Renewal Date**") and concluding on June 30, 2029 (the "**Renewal Term**").

2. The definition for "**Application Services**" in the Agreement is hereby amended to mean the Products and other application-based services that DebtBook offers to Customer through access to the DebtBook application. "**Products**" means, collectively, any products DebtBook may offer to Customer from time to time through the Application Services, in each case as established in any Order Form then in effect. The specific Products offered to Customer as part of the Application Services are limited to those Products expressly described in any Order Form then in effect.

3. The Fees for each year of the Renewal Term are set forth above and will be due and payable on the Renewal Date and on each anniversary thereafter, subject in each case to the payment terms in the Agreement.

4. Any reference to the "Agreement" will mean the Agreement as modified by this Renewal Amendment. On the first day of the Renewal Term, this Renewal Amendment will constitute an "Order Form" as defined in the Agreement. Capitalized terms not defined herein will have the same meaning ascribed to them as set forth in the Agreement.

5. The express provisions of this Renewal Amendment constitute the sole amendment and modification of the Agreement by and between the Parties in connection with the Renewal Term. This Renewal Amendment may be executed in counterparts, including facsimile or other electronic counterparts.

6. Each of the undersigned represents that they are authorized to (1) execute and deliver this Renewal Amendment on behalf of their respective party and (2) bind their respective party to the terms of the Agreement, and (3) sufficient funds have been appropriated and are available to pay any Fees due under the Agreement in Customer's current fiscal year.

Fifth Asset, Inc. d/b/a DebtBook	**Waterloo, IA**
By:	By:
Name:	Name:
Title:	Title:
Date:	Date:

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Bridgett Wood, Finance Director
Finance Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution Appointing Paying Agent, Note Registrar, and Transfer Agent, Approving the Paying Agent and Note Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement, for the $3,500,000.00 Sewer Revenue Capital Loan Notes, Series 2026A.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Waterloo (180) - Updated Authorizing Resolution Proceedings 2026 Sewer Revenue CLN

ITEMS TO INCLUDE ON AGENDA
FOR THE COUNCIL MEETING ON JUNE 15, 2026

CITY OF WATERLOO, IOWA

$3,500,000 Sewer Revenue Capital Loan Notes, Series 2026A

- Resolution Appointing Paying Agent, Note Registrar, and Transfer Agent, Approving the Paying Agent and Note Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement.

- Resolution approving and authorizing a form of Loan Agreement and authorizing and providing for the issuance of Sewer Revenue Capital Loan Note and providing for a method of payment of the Notes; Approval of the Tax Exemption Certificate.

NOTICE MUST BE GIVEN PURSUANT TO IOWA CODE
CHAPTER 21 AND THE LOCAL RULES OF THE CITY.

June 15, 2026

The City Council of the City of Waterloo, State of Iowa, met in _____ session, in the Council Chambers, City Hall, 715 Mulberry Street, Waterloo, Iowa, at _____ _____.M., on the above date. There were present Mayor Dave Boesen, in the chair, and the following named Council Members:

_____

Absent: _____

Vacant: _____

* * * * * * *

Council Member _____ introduced the following resolution entitled "RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, NOTE REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND NOTE REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT", and moved that the resolution be adopted. Council Member _____ seconded the motion to adopt. The roll was called and the vote was,

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared the resolution duly adopted as follows:

RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, NOTE REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND NOTE REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT

WHEREAS, $3,500,000 Sewer Revenue Capital Loan Note, Series 2026A, dated June 29, 2026, have been sold and action should be taken to provide for the maintenance of records, registration of certificates and payment of principal and interest in connection with the issuance of the Note; and

WHEREAS, this Council has deemed that the services offered by UMB Bank, N.A. of West Des Moines, Iowa, are necessary for compliance with rules, regulations, and requirements governing the registration, transfer and payment of registered Note; and

WHEREAS, a Paying Agent, Note Registrar and Transfer Agent Agreement (hereafter "Agreement") has been prepared to be entered into between the City and UMB Bank, N.A.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. That UMB Bank, N.A. of West Des Moines, Iowa, is hereby appointed to serve as Paying Agent, Note Registrar and Transfer Agent in connection with the issuance of $3,500,000 Sewer Revenue Capital Loan Note, Series 2026A, dated June 29, 2026.

Section 2. That the Agreement with UMB Bank, N.A. of West Des Moines, Iowa, is hereby approved and that the Mayor and Clerk are authorized to sign the Agreement on behalf of the City.

PASSED AND APPROVED this 15th day of June, 2026.

_____
Mayor

ATTEST:

_____
City Clerk

Council Member _____ introduced the following Resolution entitled "A RESOLUTION APPROVING AND AUTHORIZING A FORM OF LOAN AGREEMENT AND AUTHORIZING AND PROVIDING FOR THE ISSUANCE AND SECURING THE PAYMENT OF $3,500,000 SEWER REVENUE CAPITAL LOAN NOTE, SERIES 2026A, OF THE CITY OF WATERLOO, STATE OF IOWA, UNDER THE PROVISIONS OF THE CODE OF IOWA, AND PROVIDING FOR A METHOD OF PAYMENT OF THE NOTE, WHICH INCLUDES APPROVAL OF TAX EXEMPTION CERTIFICATE ", and moved its adoption. Council Member _____ seconded the motion to adopt. The roll was called and the vote was:

AYES: _____

_____

NAYS: _____

Whereupon the Mayor declared the following Resolution duly adopted:

Resolution No. _____

A RESOLUTION APPROVING AND AUTHORIZING A FORM OF LOAN AGREEMENT AND AUTHORIZING AND PROVIDING FOR THE ISSUANCE AND SECURING THE PAYMENT OF $3,500,000 SEWER REVENUE CAPITAL LOAN NOTE, SERIES 2026A, OF THE CITY OF WATERLOO, STATE OF IOWA, UNDER THE PROVISIONS OF THE CODE OF IOWA, AND PROVIDING FOR A METHOD OF PAYMENT OF THE NOTE; WHICH INCLUDES APPROVAL OF TAX EXEMPTION CERTIFICATE

WHEREAS, the City Council of the City of Waterloo, Iowa, sometimes hereinafter referred to as the "Issuer", has heretofore established charges, rates and rentals for services which are and will continue to be collected as system revenues of the municipal sewer system, sometimes hereinafter referred to as the "System", and said revenues are available for the payment of Sewer Revenue Capital Loan Note, Series 2026A, subject to the following premises; and

WHEREAS, the Issuer proposes to issue its Sewer Revenue Capital Loan Note, Series 2026, to the extent of $3,500,000, for the purpose of defraying the costs of the Project as set forth in Section 3 of this Resolution; and, it is deemed necessary and advisable and in the best interests of the City that a form of Loan Agreement be approved and authorized; and

WHEREAS, there were previously issued $1,600,000 Taxable Sewer Revenue Capital Loan Note, Series 2018, dated May 18, 2018; $2,077,000 Taxable Sewer Revenue Capital Loan Note, Series 2019, dated April 19, 2019; $1,128,000 Taxable Sewer Revenue Capital Loan Note**,** Series 2020A, dated September 4, 2020; $5,138,000 Taxable Sewer Revenue Capital Loan Note, Series 2020B, dated September 4, 2020 (as amended on November 18, 2022 resulting in a $4,861,743.40 Taxable Sewer Revenue Capital Loan Note (Sponsored Project Amendment), Series 2022E); $19,186,000 Taxable Sewer Revenue Capital Loan Note, Series 2020C, dated September 4, 2020; $8,105,000 Taxable Sewer Revenue Capital Loan Note, Series 2022A, dated May 13, 2022 (and amended on May 23, 2025 resulting in a $7,083,748.81 Taxable Sewer Revenue Capital Loan Note, Series 2022A (2025 Rate Reduction)); $4,202,000 Taxable Sewer Revenue Capital Loan Note, Series 2022B, dated May 13, 2022; $1,036,000 Taxable Sewer Revenue Capital Loan Note, Series 2022C, dated May 13, 2022; $1,068,000 Sewer Revenue Capital Loan Note, Series 2022D, dated November 18, 2022 (and amended on May 2, 2025 resulting in a $162,532 Sewer Revenue Capital Loan Note, Series 2025 (Reissuance of Series 2022D Sewer SRF loan)); $4,045,000 Sewer Revenue Capital Loan Note, Series 2023B (and amended on September 26, 2026 resulting in a $2,051,981 Sewer Revenue Capital Loan Note, Series 2025G (2025 Loan Forgiveness)); $1,014,000 Sewer Revenue Capital Loan Note, Series 2023C; $7,948,000 Sewer Revenue Capital Loan Note, Series 2024A (and amended on May 23, 2025 resulting in a $7,354,223.56 Sewer Revenue Capital Loan Note, Series 2024A (2025 Rate Reduction)); $5,500,000 Sewer Revenue Capital Loan Note, Series 2024E, dated August 19, 2024; $517,000 Sewer Revenue Capital Loan Notes, Series 2025F, dated May 23, 2025; and $530,000 Sewer Revenue Capital Loan Notes, Series 2025E, dated May 23, 2025; each of which remains outstanding and are a lien on the Net Revenues of the System (the "Outstanding Obligations").

WHEREAS, in the Prior Note Resolutions (as hereinafter defined) it is provided that additional revenue notes or bonds may be issued on a parity with the outstanding notes or bonds, for the costs of future improvements and extensions to the System, provided that there has been procured and placed on file with the City Clerk, a statement complying with the conditions and limitations therein imposed upon the issuance of said parity notes or bonds; and

WHEREAS, a statement of Speer Financial Inc., an independent financial consultant not in the regular employ of Issuer, has been placed on file in the office of the City Clerk prior to Closing (as hereinafter defined), showing the conditions and limitations of said Prior Note Resolutions, with regard to the sufficiency of the revenues of the System to permit the issuance of additional revenue notes or bonds ranking on a parity with the outstanding notes or bonds to have been met and satisfied as required; and

WHEREAS, the notice of intention of Issuer to take action for the issuance of not to exceed $3,500,000 Sewer Revenue Capital Loan Note, has heretofore been duly published, no objections to such proposed action have been filed, and the Issuer has held a public meeting and hearing upon the proposal to institute proceedings for the issuance of the Note, and is now authorized to proceed with said issuance:

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. Definitions. The following terms shall have the following meanings in this Resolution unless the text expressly or by necessary implication requires otherwise:

- "Additional Obligations" shall mean any sewer revenue bonds or notes or other obligations issued on a parity with the Note in accordance with the provisions of Section 21 hereof.

- "Clerk" shall mean the City Clerk, or such other officer of the successor Governing Body as shall be charged with substantially the same duties and responsibilities.

- "Closing" shall mean the date of delivery of the Note to the Lender and the funding of the Loan.

- "Corporate Seal" shall mean the official seal of Issuer adopted by the Governing Body.

- "Fiscal Year" shall mean the twelve-month period beginning on July 1 of each year and ending on the last day of June of the following year, or any other consecutive twelve-month period adopted by the Governing Body or by law as the official accounting period of the System; provided, that the requirements of a fiscal year as expressed in this Resolution shall exclude any payment of principal or interest falling due on the first day of the fiscal year and include any payment of principal or interest falling due on the first day of the succeeding fiscal year.

- "Governing Body" shall mean the City Council of the City, or its successor in function with respect to the operation and control of the System.

- "Independent Auditor" shall mean an independent firm of certified public accountants or the Auditor of State.

- "Issuer" and "City" shall mean the City of Waterloo, Iowa.

- "Lender" shall mean Regions Capital Advantage, Inc., Birmingham, Alabama, as the purchaser of the Note from the Issuer at the time of their original issuance.

- "Loan Agreement" shall mean a Loan Agreement between the Issuer and the Lender in substantially the form attached to and approved by this Resolution.

- "Net Revenues" shall mean gross earnings of the System after deduction of Current Expenses; "Current Expenses" shall mean and include the reasonable and necessary cost of operating, maintaining, repairing and insuring the System, including purchases at wholesale, if any, salaries, wages, and costs of materials and supplies but

excluding depreciation and principal of and interest on the Note and any Parity Obligations or payments to the various funds established herein; capital costs, depreciation and interest or principal payments are not System expenses.

• "Note" or "Notes" shall mean the $3,500,000 Sewer Revenue Capital Loan Note, Series 2026, authorized to be issued by this Resolution.

• "Outstanding Obligations" shall mean:

- $517,000 Sewer Revenue Capital Loan Notes, Series 2025F, dated May 23, 2025, issued in accordance with a resolution dated May 5, 2025
- $530,000 Sewer Revenue Capital Loan Notes, Series 2025E, dated May 23, 2025, issued in accordance with a resolution dated May 5, 2025
- $5,500,000 Sewer Revenue Capital Loan Note, Series 2024E, dated August 19, 2024, issued in accordance with a resolution dated August 5, 2024;
- $7,948,000 Sewer Revenue Capital Loan Note, Series 2024A, dated March 22, 2024, issued in accordance with a resolution dated March 4, 2024; and amended as a rate reduction on May 23, 2025;
- Sewer Revenue Capital Loan Note, Series 2023C, dated December 22, 2023, issued in accordance with a resolution dated December 4, 2023;
- Sewer Revenue Capital Loan Note, Series 2023B, dated August 25, 2023, issued in accordance with a resolution dated August 7, 2023; and amended as a reissuance/loan forgiveness on September 26, 2025, resulting in a Series 2025G Note;
- Sewer Revenue Capital Loan Note, Series 2022A, dated May 13, 2022, issued in accordance with a resolution dated April 18, 2022; and amended as a rate reduction on May 23, 2025;
- Sewer Revenue Capital Loan Note, Series 2022B, dated May 13, 2022, issued in accordance with a resolution dated April 18, 2022;
- Sewer Revenue Capital Loan Note, Series 2022C, dated May 13, 2022, issued in accordance with a resolution dated April 18, 2022;
- Sewer Revenue Capital Loan Note, Series 2022D, dated December 16, 2022, issued in accordance with a resolution dated November 21, 2022; and reissued/amended on May 2, 2025, resulting in a Series 2025 Note;
- Sewer Revenue Capital Loan Note, Series 2020A, dated September 4, 2020, issued in accordance with a resolution dated August 10, 2020;
- Sewer Revenue Capital Loan Note, Series 2020B, dated September 4, 2020, issued in accordance with a resolution dated August 10, 2020, and amended on November 18, 2022 resulting in a Series 2022E Note;
- Sewer Revenue Capital Loan Note, Series 2020C, dated September 4, 2020, issued in accordance with a resolution dated August 10, 2020;

- Sewer Revenue Capital Loan Note, Series 2019, dated April 19, 2019, issued in accordance with a resolution dated March 25, 2019; and
- Taxable Sewer Revenue Capital Loan Note, Series 2018 dated May 18, 2018, issued in accordance with a resolution dated April 30, 2018.

• "Parity Obligations" shall mean notes or bonds payable solely from the Net Revenues of the System on an equal basis with the Note herein authorized to be issued, and shall include Additional Obligations as authorized to be issued under the terms of this Resolution and the Outstanding Obligations.

• "Paying Agent" shall mean UMB Bank, N.A., of West Des Moines, Iowa or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein as Issuer's Agent to provide for the payment of principal of and interest on the Note as the same shall become due.

• "Permitted Investments" shall mean:

■ direct obligations of (including obligations issued or held in book entry form on the books of) the Department of the Treasury of the United States of America;

▪ cash (insured at all times by the Federal Deposit Insurance Corporation or otherwise collateralized with obligations described in the above paragraph);

■ obligations of any of the following federal agencies which obligations represent full faith and credit of the United States of America, including:

– Export - Import Bank
– Farm Credit System Financial Assistance Corporation
– USDA Rural Development
– General Services Administration
– U.S. Maritime Administration
– Small Business Administration
– Government National Mortgage Association (GNMA)
– U.S. Department of Housing & Urban Development (FHA's)
– Federal Housing Administration

■ repurchase agreements whose underlying collateral consists of the investments set out above if the Issuer takes delivery of the collateral either directly or through an authorized custodian. Repurchase agreements do not include reverse repurchase agreements;

■ senior debt obligations rated "AAA" by Standard & Poor's Corporation (S&P) or "Aaa" by Moody's Investors Service Inc. (Moody's) issued by the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation;

■ U.S. dollar denominated deposit accounts, federal funds and banker's acceptances with domestic commercial banks which have a rating on their short-term certificates of deposit on the date of purchase of "A-1" or "A-1+" by S&P or "P-1" by Moody's and maturing no more than 360 days after the date of purchase (ratings on holding companies are not considered as the rating of the bank);

■ commercial paper which is rated at the time of purchase in the single highest classification, "A-1+" by S&P or "P-1" by Moody's and which matures not more than 270 days after the date of purchase;

■ investments in a money market fund rated "AAAm" or "AAAm-G" or better by S&P, or "AAA" or "AA" by Moody's Investors Services, Inc.;

■ pre-refunded Municipal Obligations, defined as any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state which are not callable at the option of the obligor prior to maturity or as to which irrevocable instructions have been given by the obligor to call on the date specified in the notice; and (a) which are rated, based on an irrevocable escrow account or fund (the "escrow"), in the highest rating category of S&P or Moody's or any successors thereto; or (b)(i) which are fully secured as to principal and interest and redemption premium, if any, by an escrow consisting only of cash or direct obligations of the Department of the Treasury of the United States of America, which escrow may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate; and (ii) which escrow is sufficient, as verified by a nationally recognized independent certified public accountant, to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this paragraph on the maturity date or dates specified in the irrevocable instructions referred to above, as appropriate;

■ tax exempt bonds as defined and permitted by section 148 of the Internal Revenue Code and applicable regulations and only if rated within the two highest classifications as established by at least one of the standard rating services approved by the superintendent of banking by rule adopted pursuant to chapter 17A Code of Iowa;

■ an investment contract rated within the two highest classifications as established by at least one of the standard rating services approved by the superintendent of banking by rule adopted pursuant to chapter 17A Code of Iowa; and

■ Iowa Public Agency Investment Trust.

♦ "Prior Note Resolutions" shall mean the resolution of the City Council adopted on May 5, 2025, authorizing the issuance of the $517,000 Sewer Revenue Capital Loan Note, Series 2025F, dated May 23, 2025; the resolution of the City Council adopted on May 5, 2025, authorizing the issuance of the $530,000 Sewer Revenue Capital Loan Note, Series 2025E, dated May 23, 2025; the resolution of the City Council adopted on August 5, 2024, authorizing the issuance of the $5,500,000 Sewer Revenue Capital Loan Note, Series 2024E, dated August 19, 2024; the resolution of the City Council adopted on March 4, 2024, authorizing the issuance of the $7,948,000 Sewer Revenue Capital Loan Note, Series 2024A, dated March 22, 2024 (and amended as a rate reduction on May 23, 2025); the resolution of the City Council adopted on December 4, 2023, authorizing the issuance of the $1,014,000 Sewer Revenue Capital Loan Note, Series 2023C dated December 22, 2023; the resolution of the City Council adopted on August 7, 2023, authorizing the issuance of the $4,045,000 Sewer Revenue Capital Loan Note, Series 2023B dated August 25, 2023 (and reissued on September 26, 2025); the resolution of the City Council adopted on October 17, 2022, authorizing the issuance of the $4,861,743.40 Taxable Sewer Revenue Capital Loan Note (Sponsored Project Amendment), Series 2022E dated November 18, 2022; the resolution of the City Council adopted on November 21, 2022, authorizing the issuance of the $1,068,000 Sewer Revenue Capital Loan Note, Series 2022D, dated December 16, 2022 (and reissued on May 2, 2025); the resolution of the City Council adopted on April 18, 2022, authorizing the issuance of the $1,036,000 Taxable Sewer Revenue Capital Loan Note, Series 2022C dated May 13, 2022; the resolution of the City Council adopted $4,202,000 Taxable Sewer Revenue Capital Loan Note, Series 2022B dated May 13, 2022; the resolution of the City Council adopted on April 18, 2022, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2022A, dated May 13, 2022 (and amended with rate reduction on May 23, 2025); the resolution of the City Council adopted on April 18, 2022, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2022B, dated May 13, 2022; the resolution of the City Council adopted on April 18, 2022, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2022C, dated May 13, 2022; the resolution of the City Council adopted on August 10, 2020, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2020A, dated September 4, 2020; the resolution of the City Council adopted on August 10, 2020, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2020B, dated September 4, 2020; the resolution of the City Council adopted on August 10, 2020, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2020C, dated September 4, 2020; the resolution of the City Council adopted on April 30, 2018, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2018, dated May 18, 2018; and the resolution of the City Council adopted on March 25, 2019, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2019, dated April 19, 2019.

♦ "Project" shall mean the costs of acquisition, construction, extension, improvement and equipping of all or part of the Municipal Sewer Utility, including the acquisition, construction and installation of all or part of a fiber optic backbone broadband communications system for Municipal Sewer Utility purposes.

• "Project Fund" shall mean the fund established under this Resolution for the deposit of a portion of the proceeds to pay costs of the Project.

♦ "Rebate Fund" shall mean the fund so defined in and established pursuant to the Tax Exemption Certificate.

• "Registrar" shall mean UMB Bank, N.A. of West Des Moines, Iowa, or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein with respect to maintaining a register of the owners of the Note. Unless otherwise specified, the Registrar shall also act as Transfer Agent for the Note.

• "Resolution" shall mean this resolution authorizing the issuance of the Note.

• "System" shall mean the Municipal Sewer System of the Issuer and all properties of every nature hereinafter owned by the Issuer comprising part of or used as a part of the System, including all improvements and extensions made by Issuer while any of the Note or Parity Obligations remain outstanding; all real and personal property; and all appurtenances, contracts, leases, franchises and other intangibles.

• "Tax Exemption Certificate" shall mean the Tax Exemption Certificate executed by the Treasurer and delivered at the time of issuance and delivery of the Note.

• "Treasurer" shall mean the Finance Director or such other officer as shall succeed to the same duties and responsibilities with respect to the recording and payment of the Note issued hereunder.

• "Yield Restricted" shall mean required to be invested at a yield that is not materially higher than the yield on the Note under Section 148 (a) of the Internal Revenue Code or regulations issued thereunder.

Section 2. Authority. The Loan Agreement and the Note authorized by this Resolution shall be issued pursuant to Sections 384.24A and 384.83, of the Code of Iowa, and in compliance with all applicable provisions of the Constitution and laws of the State of Iowa. The Loan Agreement shall be substantially in the form attached to this Resolution and is authorized to be executed and issued on behalf of the Issuer by the Mayor and attested by the City Clerk.

Section 3. Authorization and Purpose. There are hereby authorized to be issued, one negotiable, fully registered Sewer Revenue Term Note of the City of Waterloo, in the County of Black Hawk, Iowa, to be designated as “Sewer Revenue Capital Loan Note, Series 2026”, in the aggregate amount of $3,500,000, for the purpose of paying costs of the Project. The City Council, pursuant to Sections 384.24A and 384.83 of the Code of Iowa, hereby finds and determines that it is necessary and advisable to issue said Note authorized by the Loan Agreement and this Resolution.

Section 4. Source of Payment. The Note herein authorized and Parity Obligations and the interest thereon shall be payable solely and only out of the Net Revenues of the System and

shall be a first lien on the future Net Revenues of the System. The Note shall not be a general obligation of the Issuer nor shall it be payable in any manner by taxation and the Issuer shall be in no manner liable by reason of the failure of the Net Revenues to be sufficient for the payment of the Note.

Section 5. Note Details. Sewer Revenue Capital Loan Note, Series 2026, of the City in the amount of $3,500,000, shall be issued to evidence the obligations of the Issuer under the Agreement pursuant to the provisions of Sections 384.24A and 384.83 of the Code of Iowa for the aforesaid purpose. The Note shall be designated "SEWER REVENUE CAPITAL LOAN NOTE, SERIES 2026A", be dated the date of delivery, and bear interest at the rate of 4.100% per annum from said date, until payment thereof, at the office of the Paying Agent, said interest payable on December 1, 2026, and semi-annually thereafter on the 1st day of June and December in each year until maturity set forth in the Loan Agreement.

The Note shall be executed by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of the City Clerk, and impressed or imprinted with the seal of the City and shall be fully registered as to both principal and interest as provided in this Resolution; principal, interest and premium, if any, shall be payable at the office of the Paying Agent by mailing of a check, wire transfer or automated clearing house system transfer to the registered owner of the Note. The Note shall be in the denomination of $5,000 or multiples thereof and shall be initially issued as a single Term Note in the denomination of $3,500,000 and numbered R-1. Notwithstanding anything contained herein, or in the Note, the Note shall not need to be presented for payment of principal, interest or mandatory redemption, except upon final maturity or redemption in full.

Section 6. Redemption. Notes maturing after June 1, 2033, may be called for redemption by the Issuer and paid before maturity on such date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in inverse order of maturity or sinking fund redemption date. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' notice of redemption shall be given to the registered owner of the Note. Failure to give such notice by mail to any registered owner of the Notes or any defect therein shall not affect the validity of any proceedings for the redemption of the Notes. All Notes or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment.

Section 7. Mandatory Payment and Redemption. The Note is subject to mandatory redemption prior to maturity at a price equal to 100% of the portion of the principal amount thereof to be redeemed plus accrued interest at the redemption date on June 1st of each of the years in the principal amount set opposite each year in the following schedule:

Principal Amount	Interest Rate	Maturity June 1st
$160,000	4.100%	2027
$170,000	4.100%	2028
$175,000	4.100%	2029
$185,000	4.100%	2030
$195,000	4.100%	2031
$205,000	4.100%	2032
$215,000	4.100%	2033
$230,000	4.100%	2034
$240,000	4.100%	2035
$250,000	4.100%	2036
$265,000	4.100%	2037
$280,000	4.100%	2038
$295,000	4.100%	2039
$310,000	4.100%	2040
$325,000	4.100%	2041*

*Final Maturity

Section 8. Registration of Note; Appointment of Registrar; Transfer; Ownership; Delivery; and Cancellation.

(a) Registration. The ownership of Note may be transferred only by the making of an entry upon the books kept for the registration and transfer of ownership of the Note, and in no other way. UMB Bank, N.A. is hereby appointed as Note Registrar under the terms of this Resolution and under the provisions of a separate agreement with the Issuer filed herewith which is made a part hereof by this reference. Registrar shall maintain the books of the Issuer for the registration of ownership of the Note for the payment of principal of and interest on the Note as provided in this Resolution. The Note shall be negotiable as provided in Article 8 of the Uniform Commercial Code subject to the provisions for registration and transfer contained in the Note and in this Resolution.

(b) Transfer. The ownership of any Note may be transferred only upon the Registration Books kept for the registration and transfer of Note and only upon surrender thereof at the office of the Registrar together with an assignment duly executed by the holder or his duly authorized attorney in fact in such form as shall be satisfactory to the Registrar, along with the address and social security number or federal employer identification number of such transferee (or, if registration is to be made in the name of multiple individuals, of all such transferees). In the event that the address of the registered owner of the Note (other than a registered owner which is the nominee of the broker or dealer in question) is that of a broker or dealer, there must be disclosed on the Registration Books the information pertaining to the registered owner required above.

Upon the transfer of any such Note, a new fully registered Note, of any denomination or denominations permitted by this Resolution in aggregate principal amount equal to the unmatured and unredeemed principal amount of such transferred fully registered Note, and bearing interest at the same rate and maturing on the same date or dates shall be delivered by the Registrar.

(c) Registration of Transferred Note. In all cases of the transfer of the Note, the Registrar shall register, at the earliest practicable time, on the Registration Books, the Note, in accordance with the provisions of this Resolution.

(d) Ownership. The person in whose name the ownership of the Note shall be registered on the Registration Books of the Registrar shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of or on account of the principal of any such Note and the premium, if any, and interest thereon shall be made only to or upon the order of the registered owner thereof or his legal representative. All such payments shall be valid and effectual to satisfy and discharge the liability upon such Note, including the interest thereon, to the extent of the sum or sums so paid.

(e) Cancellation. The Note, once redeemed, shall not be reissued but shall be cancelled by the Registrar. Once cancelled by the Registrar the Note shall be destroyed and a Certificate of the destruction thereof shall be furnished promptly to the Issuer; provided that if the Issuer shall so direct, the Registrar shall forward the cancelled Note to the Issuer.

(f) Non-Presentment of Note. In the event any payment check, wire, or electronic transfer of funds representing payment of principal of or interest on the Note is returned to the Paying Agent or if any note is not presented for payment of principal at the maturity or redemption date, if funds sufficient to pay such principal of or interest on Note shall have been made available to the Paying Agent for the benefit of the owner thereof, all liability of the Issuer to the owner thereof for such interest or payment of such Note shall forthwith cease, terminate and be completely discharged, and thereupon it shall be the duty of the Paying Agent to hold such funds, without liability for interest thereon, for the benefit of the owner of such Note who shall thereafter be restricted exclusively to such funds for any claim of whatever nature on his part under this Resolution or on, or with respect to, such interest or Note. The Paying Agent's obligation to hold such funds shall continue for a period equal to two years and six months following the date on which such interest or principal became due, whether at maturity, or at the date fixed for redemption thereof, or otherwise, at which time the Paying Agent shall surrender any remaining funds so held to the Issuer, whereupon any claim under this Resolution by the Owners of such interest or Note of whatever nature shall be made upon the Issuer.

Section 9. Reissuance of Mutilated, Destroyed, Stolen or Lost Note. In case any outstanding Note shall become mutilated or be destroyed, stolen or lost, the Issuer shall at the request of Registrar authenticate and deliver a new Note of like tenor and amount as the Note so mutilated, destroyed, stolen or lost, in exchange and substitution for such mutilated Note to

Registrar, upon surrender of such mutilated Note, or in lieu of and substitution for the Note destroyed, stolen or lost, upon filing with the Registrar evidence satisfactory to the Registrar and Issuer that such Note has been destroyed, stolen or lost and proof of ownership thereof, and upon furnishing the Registrar and Issuer with satisfactory indemnity and complying with such other reasonable regulations as the Issuer or its agent may prescribe and paying such expenses as the Issuer may incur in connection therewith.

Section 10. Record Date. Payments of principal and interest, otherwise than upon full redemption, made in respect of any Note, shall be made to the registered holder thereof or to their designated Agent as the same appear on the books of the Registrar on the 15th day of the month preceding the payment date. All such payments shall fully discharge the obligations of the Issuer in respect of such Note to the extent of the payments so made. Upon receipt of the final payment of principal, the holder of the Note shall surrender the Note to the Paying Agent.

Section 11. Execution, Authentication and Delivery of the Note. Upon the adoption of this Resolution, the Mayor and Clerk shall execute and deliver the Note to the Registrar, who shall authenticate the Note and deliver the same to or upon order of the Lender. No Note shall be valid or obligatory for any purpose or shall be entitled to any right or benefit hereunder unless the Registrar shall duly endorse and execute on such Note a Certificate of Authentication substantially in the form of the Certificate herein set forth. Such Certificate upon any Note executed on behalf of the Issuer shall be conclusive evidence that the Note so authenticated has been duly issued under this Resolution and that the holder thereof is entitled to the benefits of this Resolution.

No Note shall be authenticated and delivered by the Registrar, unless and until there shall have been provided the following:

- A certified copy of the resolution of Issuer approving the execution of a Loan Agreement and a copy of the Loan Agreement;

- A written order of Issuer signed by the Treasurer directing the authentication and delivery of the Note to or upon the order of the Lender upon payment of the purchase price as set forth therein;

- The approving opinion of Ahlers & Cooney, P.C., Bond Counsel, concerning the validity and legality of all the Note proposed to be issued.

Section 12. Right to Name Substitute Paying Agent or Registrar. Issuer reserves the right to name a substitute, successor Registrar or Paying Agent upon giving prompt written notice to each registered Noteholder.

Section 13. Form of Note. The Note shall be printed in substantial compliance with standards proposed by the American Standards Institute substantially in the form as follows:

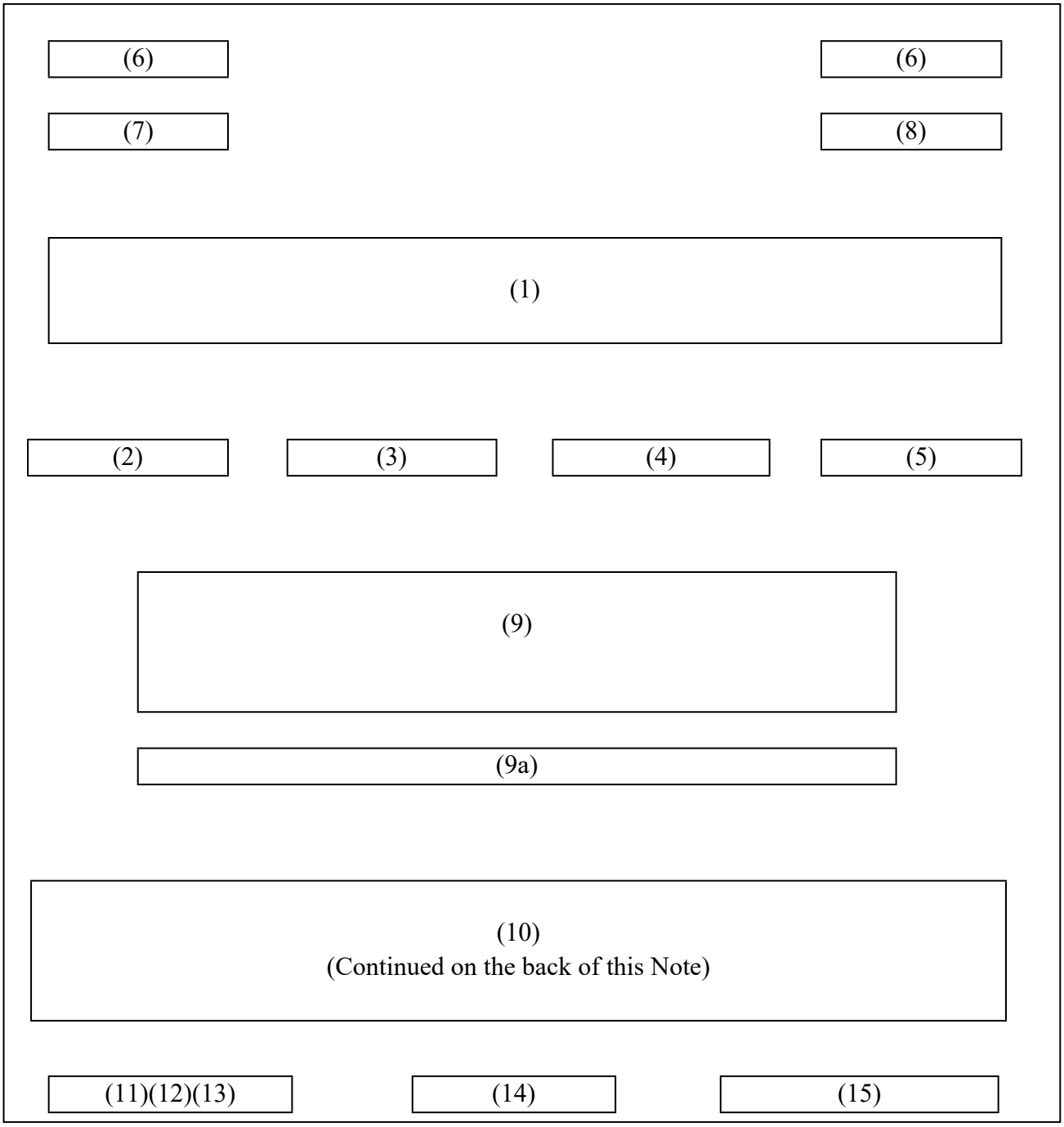


FIGURE 1
(Front)

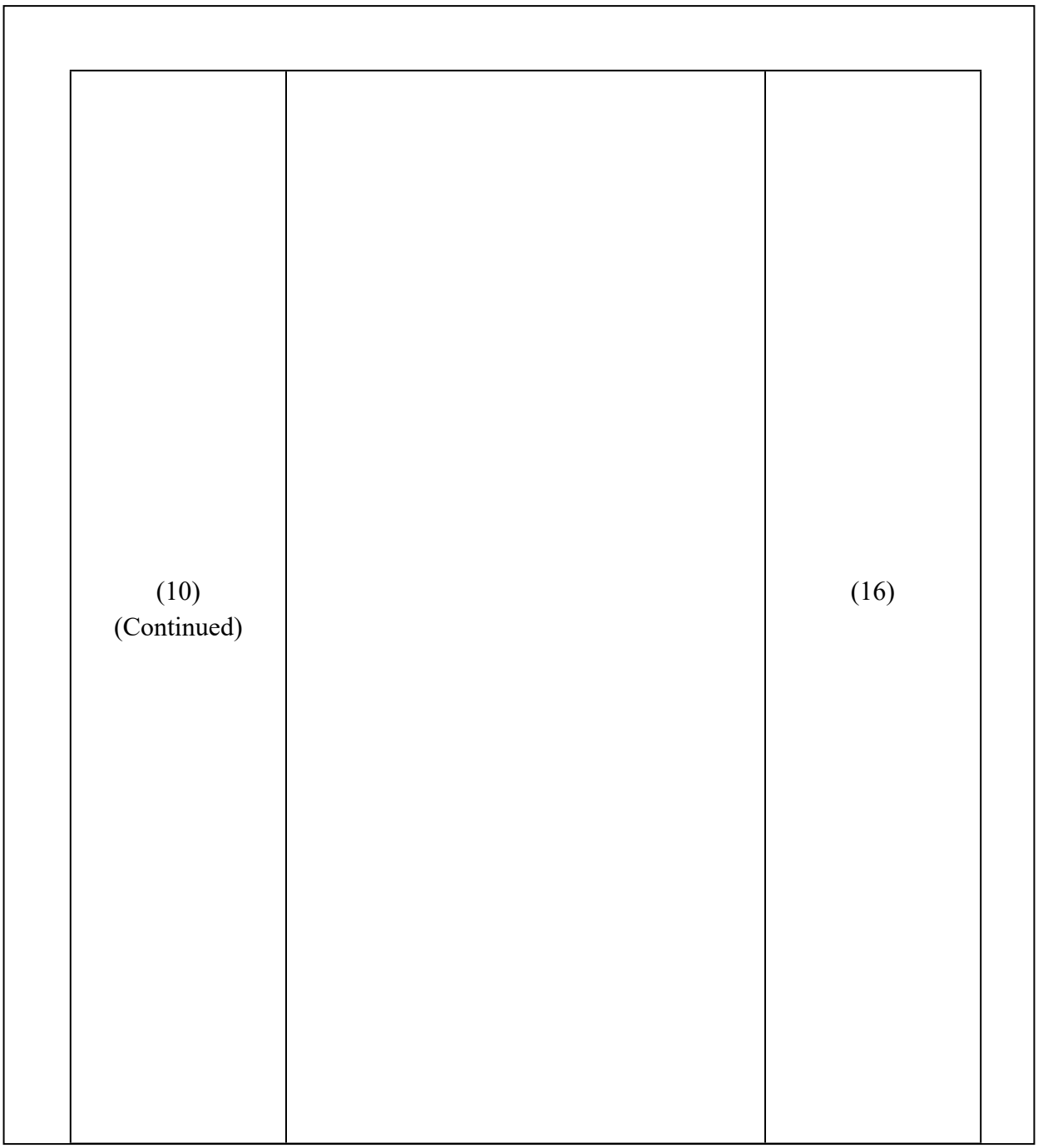


FIGURE 2
(Back)

The text of the Note to be located thereon at the item numbers shown shall be as follows:

Item 1, figure 1= "STATE OF IOWA"
"COUNTY OF BLACK HAWK"
"CITY OF WATERLOO"
"SEWER REVENUE CAPITAL LOAN NOTE"
"SERIES 2026A"

Item 2, figure 1 = Rate: _____ per annum
Item 3, figure 1 = Final Maturity: June 1, 2041
Item 4, figure 1 = Note Date: June 29, 2026
Item 6, figure 1 = "Registered"
Item 7, figure 1 = Certificate No. R-1
Item 8, figure 1 = Principal Amount: $3,500,000

Item 9, figure 1= The City of Waterloo, Iowa, a municipal corporation organized and existing under and by virtue of the Constitution and laws of the State of Iowa (the "Issuer"), for value received, promises to pay from the source and as hereinafter provided, on the maturity date indicated above, to

Item 9A, figure 1 = (Registration panel to be completed by Registrar or Printer with name of Registered Owner).

Item 10, figure 1 = or registered assigns, the principal sum of THREE MILLION FIVE HUNDRED THOUSAND DOLLARS in lawful money of the United States of America, , with interest on said sum from the date of delivery until paid at the rate of 4.100% per annum, payable on December 1, 2026, and semi-annually thereafter on the 1st day of June and December in each year in accordance with debt service schedule attached hereto as Exhibit A.

Interest and principal shall be paid to the registered holder of the Note as shown on the records of ownership maintained by the Registrar as of the 15th day of the month next preceding such interest payment date. Interest shall be computed on the basis of a 360-day year of twelve 30-day months.

This Note is issued pursuant to the provisions of Sections 384.24A and 384.83 of the Code of Iowa, for the purpose of paying costs of the acquisition, construction, extension, improvement and equipping of all or part of the Municipal Sewer Utility, including the acquisition, construction and installation of all or part of a fiber optic backbone broadband communications system for Municipal Sewer Utility purposes, and evidences amounts payable under a certain Loan Agreement dated as of the date hereof, in conformity to a Resolution of the City Council of the City duly passed and approved. For a complete statement of the revenues and funds from which and the conditions under which this Note is payable, a statement of the conditions under which additional Note or bonds of equal standing may be issued, and the general covenants and provisions pursuant to which this Note is issued, reference is made to the above described Loan Agreement and Resolution.

Notes maturing after June 1, 2033, may be called for redemption by the Issuer and paid before maturity on such date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in inverse order of maturity or sinking fund redemption date. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' notice of redemption shall be given to the registered owner of the Note. Failure to give such notice by mail to any registered owner of the Notes or any defect therein shall not affect the validity of any proceedings for the redemption of the Notes. All Notes or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment.

Ownership of this Note may be transferred only by transfer upon the books kept for such purpose by UMB Bank, N.A., West Des Moines, Iowa, the Registrar. Such transfer on the books shall occur only upon presentation and surrender of this Note at the office of the Registrar, together with an assignment duly executed by the owner hereof or his duly authorized attorney in the form as shall be satisfactory to the Registrar. Issuer reserves the right to substitute the Registrar and Paying Agent but shall, however, promptly give notice to registered Noteholders of such change. The Note shall be negotiable as provided in Article 8 of the Uniform Commercial Code and subject to the provisions for registration and transfer contained in the Note Resolution.

This Note and the series of which it forms a part, Outstanding Obligations ranking on a parity therewith, and any Additional Obligations which may be hereafter issued and outstanding from time to time on a parity with said Note, as provided in the Resolution and Loan Agreement of which notice is hereby given and which are hereby made a part hereof, are payable from and secured by a pledge of the Net Revenues of the municipal sewer system utility (the "System"), as defined and provided in said Resolution. There has heretofore been established and the City covenants and agrees that it will maintain just and equitable rates or charges for the use of and service rendered by said System in each year for the payment of the proper and reasonable expenses of operation and maintenance of said System and for the establishment of a sufficient sinking fund to meet the principal of and interest on this series of Note, and other obligations ranking on a parity therewith, as the same become due. This Note is not payable in any manner by taxation and under no circumstances shall the City be in any manner liable by reason of the failure of said Net Revenues to be sufficient for the payment hereof.

And it is hereby represented and certified that all acts, conditions and things requisite, according to the laws and Constitution of the State of Iowa, to exist, to be had, to be done, or to be performed precedent to the lawful issue of this Note, have been existent, had, done and performed as required by law.

IN TESTIMONY WHEREOF, the City by its City Council has caused this Note to be signed by the manual or facsimile signature of its Mayor and attested by the manual or facsimile signature of its City Clerk, with the seal of the City printed or impressed hereon, and authenticated by the manual or facsimile signature of an authorized representative of the Registrar, UMB Bank, N.A., West Des Moines, Iowa, all as of the 29th day of June, 2026.

Item 11, figure 1 = Date of Authentication:
Item 12, figure 1 = This is one of the Note described in the within mentioned Resolution, as registered by UMB Bank, N.A.

UMB BANK, N.A., Registrar

By: _____
Authorized Signature

Item 13, figure 1 = Registrar and Transfer Agent: UMB Bank, N.A.
Paying Agent: UMB Bank, N.A.

SEE REVERSE FOR CERTAIN DEFINITIONS

Item 14, figure 1 = (Seal)
Item 15, figure 1 = (Signature Block)

CITY OF WATERLOO, STATE OF IOWA

By: _____ (manual or facsimile signature)
Mayor
ATTEST:

By: _____ (manual or facsimile signature)
City Clerk

Item 17, figure 1 = (Assignment Block)
(Information Required for Registration)

ASSIGNMENT

For value received, the undersigned hereby sells, assigns and transfers unto _____ (Social Security or Tax Identification No. _____) the within Note and does hereby irrevocably constitute and appoint _____ attorney in fact to transfer the said Note on the books kept for registration of the within Note, with full power of substitution in the premises.

Dated this _____ day of _____, 2026.

_____

_____
(Person(s) executing this Assignment sign(s) here)

SIGNATURE)
GUARANTEED) _____

IMPORTANT - READ CAREFULLY

The signature(s) to this Power must correspond with the name(s) as written upon the face of the Certificate(s) or Note(s) in every particular without alteration or enlargement or any change whatever. Signature guarantee must be provided in accordance with the prevailing standards and procedures of the Registrar and Transfer Agent. Such standards and procedures may require signature to be guaranteed by certain eligible guarantor institutions that participate in a recognized signature guarantee program.

INFORMATION REQUIRED FOR REGISTRATION OF TRANSFER

Name of Transferee(s) _____
Address of Transferee(s) _____
Social Security or Tax Identification Number of Transferee(s) _____
Transferee is a(n):
Individual* _____ Corporation _____
Partnership _____ Trust _____

* If the Note is to be registered in the names of multiple individual owners, the names of all such owners and one address and social security number must be provided.

The following abbreviations, when used in the inscription on the face of this Note, shall be construed as though written out in full according to applicable laws or regulations:

TEN COM - as tenants in common

TEN ENT - as tenants by the entireties
JT TEN - as joint tenants with rights of survivorship and not as tenants in common
IA UNIF TRANS MIN ACT - ..... Custodian .....
(Cust) (Minor)
Under Iowa Uniform Transfers to Minors Act.....
(State)

ADDITIONAL ABBREVIATIONS MAY ALSO BE USED
THOUGH NOT IN THE ABOVE LIST

Section 14. Equality of Lien. The timely payment of principal of and interest on the Note and Parity Obligations shall be secured equally and ratably by the Net Revenues of the System without priority by reason of number or time of sale or delivery; and the Net Revenues of the System are hereby irrevocably pledged to the timely payment of both principal and interest as the same become due.

Section 15. Application of Note Proceeds. Proceeds of the Note shall be applied as follows:

- $3,449,055.00 shall be deposited to the Project Construction Fund
- $50,945.00 shall be used to pay costs of issuance.

The Project Fund shall be invested in accordance with this Resolution. Earnings on investments of the Project Fund shall be deposited in and expended from the Project Fund. Any amounts on hand in the Project Fund shall be available for the payment of the principal of or interest on the Note at any time that other funds of the System shall be insufficient to the purpose, in which event such funds shall be repaid to the Project Fund at the earliest opportunity. Any balance on hand in the Project Fund and not immediately required for its purposes may be invested not inconsistent with limitations provided by law, the Internal Revenue Code and this Resolution.

Section 16. User Rates. There has heretofore been established and published as required by law, just and equitable rates or charges for the use of the service rendered by the System. The rates or charges shall be paid by the owner of each and every lot, parcel of real estate, or building that is connected with and uses the System, by or through any part of the System or that in any way uses or is served by the System. So long as the Note is outstanding and unpaid the rates or charges to consumers of services of the System shall be sufficient in each year for the payment of the proper and reasonable expenses of operation and maintenance of the System and for the payment of principal and interest on the Note and Parity Obligations as the same fall due.

Section 17. Application of Revenues. From and after the delivery of any Note, and as long as any of the Note or Parity Obligations shall be outstanding and unpaid either as to principal or as to interest, or until all of the Note and Parity Obligations then outstanding shall have been discharged and satisfied in the manner provided in this Resolution, the entire income and

revenues of the System shall be deposited as collected in a fund to be known as the Sewer Revenue Fund (the "Revenue Fund"), and shall be disbursed only as follows:

The provisions in the Prior Note Resolutions, whereby there was created and is to be maintained a Sewer Revenue Note Principal and Interest Sinking Fund, and for the monthly payment into said fund from the future Net Revenues of the System such portion thereof as will be sufficient to meet the principal and interest of the Outstanding Obligations, are hereby ratified and confirmed, and all such provisions inure to and constitute the security for the payment of the principal and interest on Note hereby authorized to be issued; provided, however, that the amounts to be set aside and paid into the Sewer Revenue Note Principal and Interest Sinking Fund in equal monthly installments from the earnings shall be sufficient to pay the principal and interest due each year, not only on the Outstanding Obligations, but also the principal and interest of the Note herein authorized to be issued. Sections 17, 19 and 21 of the Prior Note Resolutions are hereby ratified, confirmed, adopted and incorporated herein as a part of this Resolution. Except as may be otherwise provided in the above Prior Note Resolutions, proceeds of the Note or other funds may be invested in Permitted Investments.

Nothing in this Resolution shall be construed to impair the rights vested in the Outstanding Obligations. The amounts herein required to be paid into the various funds named in this Section shall be inclusive of payments required in respect to the Outstanding Obligations. The provisions of the legislation authorizing the Outstanding Obligations and the provisions of this Resolution are to be construed wherever possible so that the same will not be in conflict. In the event such construction is not possible, the provisions of the resolution first adopted shall prevail until such time as the Note or bonds authorized by said resolution have been paid in full or otherwise satisfied as therein provided at which time the provisions of this Resolution shall again prevail.

At such time as the Outstanding Obligations are paid and so long as the Note or Parity Obligations remain outstanding and unpaid the same are discharged and satisfied in the manner provided in this Resolution, the entire income and revenues of the system shall be deposited and collected in a fund to be known as the Revenue Fund, and shall be disbursed only as follows:

- Operation and Maintenance Fund. Money in the Revenue Fund shall first be disbursed to make deposits into a separate and special fund to pay current expenses. The fund shall be known as the Sewer Utility Operation and Maintenance Fund (the "Operation and Maintenance Fund"). There shall be deposited in the Operation and Maintenance Fund each month an amount sufficient to meet the current expenses of the month plus an amount equal to 1/12th of expenses payable on an annual basis such as insurance. After the first day of the month, further deposits may be made to this account from the Revenue Fund to the extent necessary to pay current expenses accrued and payable to the extent that funds are not available in the Surplus Fund.

- Sinking Fund. Money in the Revenue Fund shall next be disbursed to make deposits into a separate and special fund to pay principal of and interest on the Note and Parity Obligations. The fund shall be known as the Sewer Revenue Note Principal and Interest Sinking Fund (the "Sinking Fund"). The required amount to be deposited in

the Sinking Fund in any month shall be an amount equal to 1/6th of the installment of interest coming due on the next interest payment date on the then outstanding Note and Parity Obligations, plus 1/12th of the installment of principal coming due on such Note on the next succeeding principal payment date until the full amount of such installment is on hand. If for any reason the amount on hand in the Sinking Fund exceeds the required amount, the excess shall forthwith be withdrawn and paid into the Revenue Fund. Money in the Sinking Fund shall be used solely for the purpose of paying principal of and interest on the Note and Parity Obligations as the same shall become due and payable.

- Subordinate Obligations. Money in the Revenue Fund may next be used to pay principal of and interest on any other obligations which by their terms shall be payable from the revenues of the System, but subordinate to the Note and Parity Obligations, and which have been issued for the purposes of extensions and improvements to the System or to retire the Note or Parity Obligations in advance of maturity, or to pay for extraordinary repairs or replacements to the System.

- Surplus Revenue. All money thereafter remaining in the Revenue Fund at the close of each month may be deposited in any of the funds created by this Resolution, to pay for extraordinary repairs or replacements to the System, or may be used to pay or redeem the Note or Parity Obligations, any of them, or for any lawful purpose.

Money in the Revenue Fund shall be allotted and paid into the various funds and accounts hereinbefore referred to in the order in which said funds are listed, on a cumulative basis on the l0th day of each month, or on the next succeeding business day when the l0th shall not be a business day; and if in any month the money in the Revenue Fund shall be insufficient to deposit or transfer the required amount in any of said funds or accounts, the deficiency shall be made up in the following month or months after payments into all funds and accounts enjoying a prior claim to the revenues shall have been met in full.

Section 18. Investments. Moneys on hand in the Project Fund and all of the funds provided by this Resolution may be invested only in Permitted Investments or deposited in financial institutions which are members of the Federal Deposit Insurance Corporation or its equivalent successor, and the deposits of which are insured thereby and all such deposits exceeding the maximum amount insured from time to time by FDIC or its equivalent successor in any one financial institution shall be continuously secured in compliance with Iowa Code chapter 12C, or otherwise by a valid pledge of direct obligations of the United States Government having an equivalent market value. All investments shall mature before the date on which the moneys are required for the purposes for which the fund was created or otherwise as herein provided. The provisions of this Section shall not be construed to require the Issuer to maintain separate accounts for the funds created by this Resolution.

The Sinking Fund shall be segregated in a separate account but may be invested in the same manner as other funds of the Issuer but designated as a trust fund on the books and records of the Issuer. The Sinking Fund shall not be available for any other purposes other than those specified in this Resolution.

All income derived from such investments shall be deposited in the Revenue Fund and shall be regarded as revenues of the System. Investments shall at any time necessary be liquidated and the proceeds thereof applied to the purpose for which the respective fund was created.

Section 19. Covenants Regarding the Operation of the System. The Issuer hereby covenants and agrees with each and every holder of the Note and Parity Obligations:

(a) Maintenance and Efficiency. The Issuer will maintain the System in good condition and operate it in an efficient manner and at reasonable cost.

(b) Sufficiency of Rates. On or before the beginning of each Fiscal Year the Governing Body will adopt or continue in effect rates for all services rendered by the System determined to be sufficient to produce Net Revenues for the next succeeding Fiscal Year which are (i) adequate to pay the principal and interest requirements thereof and to create or maintain the reserves as provided in this Resolution, and (ii) not less than 110 percent of the principal and interest requirements of the next succeeding Fiscal Year. No free use of the System by the Issuer or any department, agency or instrumentality of the Issuer shall be permitted except upon the determination of the Governing Body that the rates and changes otherwise in effect are sufficient to provide Net Revenues at least equal to the requirements of this subsection.

(c) Insurance. The Issuer shall maintain insurance for the benefit of the Noteholders on the insurable portions of the System of a kind and in an amount which normally would be carried by private companies engaged in a similar kind of business. The proceeds of any insurance, except public liability insurance, shall be used to repair or replace the part or parts of the System damaged or destroyed, or if not so used shall be placed in an improvement fund for the benefit of the System.

(d) Accounting and Audits. The Issuer will cause to be kept proper books and accounts adapted to the System and in accordance with generally accepted accounting practices, and will diligently act to cause the books and accounts to be audited and reported upon by an Independent Auditor. The Lender and holders of any of the Note and Parity Obligations shall have at all reasonable times the right to inspect the System and the records, accounts and data of the Issuer relating thereto.

(e) State Laws. The Issuer will faithfully and punctually perform all duties with reference to the System required by the Constitution and laws of the State of Iowa, including the making and collecting of reasonable and sufficient rates for services rendered by the System as above provided, and will segregate the revenues of the System and apply said revenues to the funds specified in this Resolution.

(f) Property. The Issuer will not sell, lease, mortgage or in any manner dispose of the System, or any capital part thereof, including any and all extensions and additions that may be made thereto, until satisfaction and discharge of all of the Note and Parity Obligations shall have been provided for in the manner provided in this

Resolution; provided, however, this covenant shall not be construed to prevent the disposal by the Issuer of property which in the judgment of its Governing Body has become inexpedient or unprofitable to use in connection with the System, or if it is to the advantage of the System that other property of equal or higher value be substituted therefor, and provided further that the proceeds of the disposition of such property shall be placed in a revolving fund to be used in preference to other sources for capital improvements to the System. Any such proceeds of the disposition of property acquired with the proceeds of the Note or Parity Obligations shall not be used to pay principal or interest on the Note and Parity Obligations or for payments into the Sinking Fund.

(g) Fidelity Bond. That the Issuer shall maintain fidelity bond coverage in amounts which normally would be carried by private companies engaged in a similar kind of business on each officer or employee having custody of funds of the System.

(h) Additional Charges. The Issuer will require proper connecting charges and/or other security for the payment of service charges.

(i) Budget. The Governing Body of the Issuer shall approve and conduct operations pursuant to a system budget of revenues and current expenses for each Fiscal Year. Such budget shall take into account revenues and current expenses during the current and last preceding Fiscal Years. Copies of such budget and any amendments thereto shall be mailed to the Lender and to the Noteholders upon request.

Section 20. Remedies of Noteholders. Except as herein expressly limited the holder or holders of the Note and Parity Obligations shall have and possess all the rights of action and remedies afforded by the common law, the Constitution and statutes of the State of Iowa, and of the United States of America, for the enforcement of payment of their Note and interest thereon, and of the pledge of the Net Revenues made hereunder, and of all covenants of the Issuer hereunder.

Section 21. Prior Lien and Parity Obligations. The Issuer will issue no other notes, bonds or obligations of any kind or nature payable from or enjoying a lien or claim on the property or Net Revenues of the System having priority over the Note or Parity Obligations.

Additional Obligations may be issued on a parity and equality of rank with the Note with respect to the lien and claim of such Additional Obligations to the Net Revenues of the System and the money on deposit in the funds adopted by this Resolution, for the following purposes and under the following conditions, but not otherwise:

(a) For the purpose of refunding any of the Note or Parity Obligations which shall have matured or which shall mature not later than three months after the date of delivery of such refunding obligation and for the payment of which there shall be insufficient money in the Sinking Fund;

(b) For the purpose of making extensions, additions, improvements or replacements to the System, or refunding any Outstanding Obligations, Parity Obligations or other

obligations issued for such extensions, additions and improvements, if all of the following conditions shall have been met:

(i) before any such Additional Obligations ranking on a parity are issued, there will have been procured and filed with the City Clerk, a statement of an Independent Auditor, or independent municipal advisor, not a regular employee of the Issuer, reciting the opinion based upon necessary investigations that the Net Revenues of the System for the preceding Fiscal Year (with adjustments as hereinafter provided) were equal to at least 1.10 times the maximum amount that will be required in any Fiscal Year prior to the longest maturity of any of the then outstanding Note or Parity Obligations for both principal of and interest on all Note or Parity Obligations then outstanding which are payable from the Net Revenues of the System and the Additional Obligations then proposed to be issued.

For the purpose of determining the Net Revenues of the System for the preceding Fiscal Year as aforesaid, the amount of the gross revenues for such year may be adjusted by an independent consulting engineer, or by the Independent Auditor or Municipal Advisor, so as to reflect any changes in the amount of such revenues which would have resulted had any revision of the schedule of rates or charges imposed at or prior to the time of the issuance of any such Additional Obligations been in effect during all of such preceding Fiscal Year.

(ii) the Additional Obligations must be payable as to principal and as to interest on the same month and day as the Note herein authorized.

(iii) for the purposes of this Section, principal and interest falling due on the first day of a Fiscal Year shall be deemed a requirement of the immediately preceding Fiscal Year.

(iv) for the purposes of this Section, general obligation bonds or notes shall be refunded only upon a finding of necessity by the Governing Body and only to the extent the general obligation bonds or notes were issued or the proceeds thereof were expended for the System.

(v) for purposes of this Section, "preceding Fiscal Year" shall be the most recently completed Fiscal Year for which audited financial statements prepared by a certified public accountant are issued and available, but in no event a Fiscal Year which ended more than eighteen months prior to the date of issuance of the Additional Obligations.

Section 22. Disposition of Proceeds; Arbitrage Not Permitted. The Issuer reasonably expects and covenants that no use will be made of the proceeds from the issuance and sale of the

Note issued hereunder which will cause the Note to be classified as an arbitrage bond within the meaning of Section 148(a) and (b) of the Internal Revenue Code of the United States, and that throughout the term of said Note it will comply with the requirements of said statute and regulations issued thereunder.

To the best knowledge and belief of the Issuer, there are no facts or circumstances that would materially change the foregoing statements or the conclusion that it is not expected that the proceeds of the Note will be used in a manner that would cause the Note to be an arbitrage bond. Without limiting the generality of the foregoing, the Issuer hereby agrees to comply with the provisions of the Tax Exemption Certificate and the provisions of the Tax Exemption Certificate are hereby incorporated by reference as part of this Resolution. The Treasurer is hereby directed to make and insert all calculations and determinations necessary to complete the Tax Exemption Certificate in all respects and to execute and deliver the Tax Exemption Certificate at issuance of the Note to certify as to the reasonable expectations and covenants of the Issuer at that date.

The Issuer covenants that it will treat as Yield Restricted any proceeds of the Note remaining unexpended after three years from the issuance and any other funds required by the Tax Exemption Certificate to be so treated. If any investments are held with respect to the Note and Parity Obligations, the Issuer shall treat the same for the purpose of restricted yield as held in proportion to the original principal amounts of each issue.

The Issuer covenants that it will exceed any investment yield restriction provided in this Resolution only in the event that it shall first obtain an opinion of recognized bond counsel that the proposed investment action will not cause the Note to be classified as an arbitrage bond under Section 148(a) and (b) the Internal Revenue Code or regulations issued thereunder.

The Issuer covenants that it will proceed with due diligence to spend the proceeds of the Note for the purpose set forth in this Resolution. The Issuer further covenants that it will make no change in the use of the proceeds available for the construction of facilities or change in the use of any portion of the facilities constructed therefrom by persons other than the Issuer or the general public unless it has obtained an opinion of bond counsel or a revenue ruling that the proposed project or use will not be of such character as to cause interest on the Note not to be exempt from federal income taxes in the hands of holders other than substantial users of the project, under the provisions of Section 142(a) of the Internal Revenue Code of the United States, related statutes and regulations.

Section 23. Additional Covenants, Representations and Warranties of the Issuer. The Issuer certifies and covenants with the purchasers and holders of the Note from time to time outstanding that the Issuer through its officers, (a) will make such further specific covenants, representations and assurances as may be necessary or advisable; (b) comply with all representations, covenants and assurances contained in the Tax Exemption Certificate, which Tax Exemption Certificate shall constitute a part of the contract between the Issuer and the owners of the Note; (c) consult with bond counsel (as defined in the Tax Exemption Certificate); (d) pay to the United States, as necessary, such sums of money representing required rebates of excess arbitrage profits relating to the Note; (e) file such forms, statements and supporting

documents as may be required and in a timely manner; and (f) if deemed necessary or advisable by its officers, to employ and pay fiscal agents, financial advisors, attorneys and other persons to assist the Issuer in such compliance.

Section 24. Amendment of Resolution to Maintain Tax Exemption. This Resolution may be amended without the consent of any owner of the Note if, in the opinion of bond counsel, such amendment is necessary to maintain tax exemption with respect to the Note under applicable Federal law or regulations.

Section 25. Discharge and Satisfaction of Note. The covenants, liens and pledges entered into, created or imposed pursuant to this Resolution may be fully discharged and satisfied with respect to the Note and Parity Obligations, or any of them, in any one or more of the following ways:

(a) By paying the Note or Parity Obligations when the same shall become due and payable; and

(b) By depositing in trust with the Treasurer, or with a corporate trustee designated by the Governing Body for the payment of said obligations and irrevocably appropriated exclusively to that purpose an amount in cash or direct obligations of the United States the maturities and income of which shall be sufficient to retire at maturity, or by redemption prior to maturity on a designated date upon which said obligations may be redeemed, all of such obligations outstanding at the time, together with the interest thereon to maturity or to the designated redemption date, premiums thereon, if any, that may be payable on the redemption of the same; provided that proper notice of redemption of all such obligations to be redeemed shall have been previously published or provisions shall have been made for such publication.

Upon such payment or deposit of money or securities, or both, in the amount and manner provided by this Section, all liability of the Issuer with respect to the Note or Obligations shall cease, determine and be completely discharged, and the holders thereof shall be entitled only to payment out of the money or securities so deposited.

Section 26. Resolution a Contract. The provisions of this Resolution shall constitute a contract between the Issuer and the holder or holders of the Note and Parity Obligations, and after the issuance of any of the Note no change, variation or alteration of any kind in the provisions of this Resolution shall be made in any manner, except as provided in the next succeeding Section, until such time as all of the Note and Parity Obligations, and interest due thereon, shall have been satisfied and discharged as provided in this Resolution.

Section 27. Amendment of Resolution Without Consent. The Issuer may, without the consent of or notice to any of the holders of the Note and Parity Obligations, amend or supplement this Resolution for any one or more of the following purposes:

(a) to cure any ambiguity, defect, omission or inconsistent provision in this Resolution or in the Note or Parity Obligations; or to comply with any applicable

provision of law or regulation of federal or state agencies; provided, however, that such action shall not materially adversely affect the interests of the holders of the Notes or Parity Obligations;

(b) to change the terms or provisions of this Resolution to the extent necessary to prevent the interest on the Notes or Parity Obligations from being includable within the gross income of the holders thereof for federal income tax purposes;

(c) to grant to or confer upon the holders of the Note or Parity Obligations any additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon the holders of the Note;

(d) to add to the covenants and agreements of the Issuer contained in this Resolution other covenants and agreements of, or conditions or restrictions upon, the Issuer or to surrender or eliminate any right or power reserved to or conferred upon the Issuer in this Resolution; or

(e) to subject to the lien and pledge of this Resolution additional pledged revenues as may be permitted by law.

Section 28. Amendment of Resolution Requiring Consent. This Resolution may be amended from time to time if such amendment shall have been consented to by holders of not less than two-thirds in principal amount of the Note and Parity Obligations at any time outstanding (not including in any case any Note which may then be held or owned by or for the account of the Issuer, but including such Refunding Obligations as may have been issued for the purpose of refunding any of such Note if such Refunding Obligations shall not then be owned by the Issuer); but this Resolution may not be so amended in such manner as to:

(a) Make any change in the maturity or interest rate of the Note, or modify the terms of payment of principal of or interest on the Note or make a change to the mandatory redemption provisions of the Note, or impose any conditions with respect to such payment;

(b) Materially affect the rights of the holders of less than all of the Note and Parity Obligations then outstanding; and

(c) Reduce the percentage of the principal amount of Note, the consent of the holders of which is required to effect a further amendment.

Whenever the Issuer shall propose to amend this Resolution under the provisions of this Section, it shall cause notice of the proposed amendment to be filed with the Lender and to be mailed by certified mail to each registered owner of any Note as shown by the records of the Registrar. Such notice shall set forth the nature of the proposed amendment and shall state that a copy of the proposed amendatory Resolution is on file in the office of the City Clerk.

Whenever at any time within one year from the date of the mailing of said notice there shall be filed with the City Clerk an instrument or instruments executed by the holders of at least two-thirds in aggregate principal amount of the Note then outstanding as in this Section defined, which instrument or instruments shall refer to the proposed amendatory Resolution described in said notice and shall specifically consent to and approve the adoption thereof, thereupon, but not otherwise, the Governing Body of the Issuer may adopt such amendatory Resolution and such Resolution shall become effective and binding upon the holders of all of the Note and Parity Obligations.

Any consent given by the holder of the Note pursuant to the provisions of this Section shall be irrevocable for a period of six months from the date of the instrument evidencing such consent and shall be conclusive and binding upon all future holders of the same Note during such period. Such consent may be revoked at any time after six months from the date of such instrument by the holder who gave such consent or by a successor in title by filing notice of such revocation with the City Clerk.

The fact and date of the execution of any instrument under the provisions of this Section may be proved by the certificate of any officer in any jurisdiction who by the laws thereof is authorized to take acknowledgments of deeds within such jurisdiction that the person signing such instrument acknowledged before him the execution thereof, or may be proved by an affidavit of a witness to such execution sworn to before such officer.

The amount and numbers of the Note held by any person executing such instrument and the date of his holding the same may be proved by an affidavit by such person or by a certificate executed by an officer of a bank or trust company showing that on the date therein mentioned such person had on deposit with such bank or trust company the Note described in such certificate.

Notwithstanding anything in this Section to the contrary, the holder or holders of 100% of the Note and Parity Obligations may consent to any amendment of this Resolution, or waive any notices required hereunder, on such terms and under such conditions as said holders shall determine to be appropriate.

Section 29. Severability. If any section, paragraph, or provision of this Resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions.

Section 30. Repeal of Conflicting Ordinances or Resolutions and Effective Date. All other Ordinances, Resolutions and orders, or parts thereof, in conflict with the provisions of this Resolution are, to the extent of such conflict, hereby repealed; and this Resolution shall be in effect from and after its adoption.

ADOPTED AND APPROVED this 15th day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

CERTIFICATE

STATE OF IOWA)
) SS
COUNTY OF BLACK HAWK)

I, the undersigned City Clerk of the City of Waterloo, State of Iowa, do hereby certify that attached is a true and complete copy of the portion of the records of the City showing proceedings of the Council, and the same is a true and complete copy of the action taken by the Council with respect to the matter at the meeting held on the date indicated in the attachment, which proceedings remain in full force and effect, and have not been amended or rescinded in any way; that meeting and all action thereat was duly and publicly held in accordance with a notice of meeting and tentative agenda, a copy of which was timely served on each member of the Council and posted on a bulletin board or other prominent place easily accessible to the public and clearly designated for that purpose at the principal office of the Council pursuant to the local rules of the Council and the provisions of Chapter 21, Code of Iowa, upon reasonable advance notice to the public and media at least twenty-four hours prior to the commencement of the meeting as required by law and with members of the public present in attendance; I further certify that the individuals named therein were on the date thereof duly and lawfully possessed of their respective City offices as indicated therein, that no Council vacancy existed except as may be stated in the proceedings, and that no controversy or litigation is pending, prayed or threatened involving the incorporation, organization, existence or boundaries of the City or the right of the individuals named therein as officers to their respective positions.

WITNESS my hand and the seal of the Council hereto affixed this _____ day of _____, 2026.

_____
Kelley Felchle, City Clerk, City of Waterloo, State of Iowa

(SEAL)

4927-9471-6078-1\11310-180

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Bridgett Wood, Finance Director
Finance Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving and authorizing a form of Loan Agreement and authorizing and providing for the issuance of Sewer Revenue Capital Loan Note 2026A $3,500,000.00 and providing for a method of payment of the Notes; Approval of the Tax Exemption Certificate.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Waterloo (180) - Updated Authorizing Resolution Proceedings 2026 Sewer Revenue CLN

ITEMS TO INCLUDE ON AGENDA
FOR THE COUNCIL MEETING ON JUNE 15, 2026

CITY OF WATERLOO, IOWA

$3,500,000 Sewer Revenue Capital Loan Notes, Series 2026A

- Resolution Appointing Paying Agent, Note Registrar, and Transfer Agent, Approving the Paying Agent and Note Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement.

- Resolution approving and authorizing a form of Loan Agreement and authorizing and providing for the issuance of Sewer Revenue Capital Loan Note and providing for a method of payment of the Notes; Approval of the Tax Exemption Certificate.

NOTICE MUST BE GIVEN PURSUANT TO IOWA CODE
CHAPTER 21 AND THE LOCAL RULES OF THE CITY.

June 15, 2026

The City Council of the City of Waterloo, State of Iowa, met in _____ session, in the Council Chambers, City Hall, 715 Mulberry Street, Waterloo, Iowa, at _____ _____.M., on the above date. There were present Mayor Dave Boesen, in the chair, and the following named Council Members:

_____

Absent: _____

Vacant: _____

* * * * * * *

Council Member _____ introduced the following resolution entitled "RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, NOTE REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND NOTE REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT", and moved that the resolution be adopted. Council Member _____ seconded the motion to adopt. The roll was called and the vote was,

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared the resolution duly adopted as follows:

RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, NOTE REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND NOTE REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT

WHEREAS, $3,500,000 Sewer Revenue Capital Loan Note, Series 2026A, dated June 29, 2026, have been sold and action should be taken to provide for the maintenance of records, registration of certificates and payment of principal and interest in connection with the issuance of the Note; and

WHEREAS, this Council has deemed that the services offered by UMB Bank, N.A. of West Des Moines, Iowa, are necessary for compliance with rules, regulations, and requirements governing the registration, transfer and payment of registered Note; and

WHEREAS, a Paying Agent, Note Registrar and Transfer Agent Agreement (hereafter "Agreement") has been prepared to be entered into between the City and UMB Bank, N.A.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. That UMB Bank, N.A. of West Des Moines, Iowa, is hereby appointed to serve as Paying Agent, Note Registrar and Transfer Agent in connection with the issuance of $3,500,000 Sewer Revenue Capital Loan Note, Series 2026A, dated June 29, 2026.

Section 2. That the Agreement with UMB Bank, N.A. of West Des Moines, Iowa, is hereby approved and that the Mayor and Clerk are authorized to sign the Agreement on behalf of the City.

PASSED AND APPROVED this 15th day of June, 2026.

_____
Mayor

ATTEST:

_____
City Clerk

Council Member _____ introduced the following Resolution entitled "A RESOLUTION APPROVING AND AUTHORIZING A FORM OF LOAN AGREEMENT AND AUTHORIZING AND PROVIDING FOR THE ISSUANCE AND SECURING THE PAYMENT OF $3,500,000 SEWER REVENUE CAPITAL LOAN NOTE, SERIES 2026A, OF THE CITY OF WATERLOO, STATE OF IOWA, UNDER THE PROVISIONS OF THE CODE OF IOWA, AND PROVIDING FOR A METHOD OF PAYMENT OF THE NOTE, WHICH INCLUDES APPROVAL OF TAX EXEMPTION CERTIFICATE ", and moved its adoption. Council Member _____ seconded the motion to adopt. The roll was called and the vote was:

AYES: _____

_____

NAYS: _____

Whereupon the Mayor declared the following Resolution duly adopted:

Resolution No. _____

A RESOLUTION APPROVING AND AUTHORIZING A FORM OF LOAN AGREEMENT AND AUTHORIZING AND PROVIDING FOR THE ISSUANCE AND SECURING THE PAYMENT OF $3,500,000 SEWER REVENUE CAPITAL LOAN NOTE, SERIES 2026A, OF THE CITY OF WATERLOO, STATE OF IOWA, UNDER THE PROVISIONS OF THE CODE OF IOWA, AND PROVIDING FOR A METHOD OF PAYMENT OF THE NOTE; WHICH INCLUDES APPROVAL OF TAX EXEMPTION CERTIFICATE

WHEREAS, the City Council of the City of Waterloo, Iowa, sometimes hereinafter referred to as the "Issuer", has heretofore established charges, rates and rentals for services which are and will continue to be collected as system revenues of the municipal sewer system, sometimes hereinafter referred to as the "System", and said revenues are available for the payment of Sewer Revenue Capital Loan Note, Series 2026A, subject to the following premises; and

WHEREAS, the Issuer proposes to issue its Sewer Revenue Capital Loan Note, Series 2026, to the extent of $3,500,000, for the purpose of defraying the costs of the Project as set forth in Section 3 of this Resolution; and, it is deemed necessary and advisable and in the best interests of the City that a form of Loan Agreement be approved and authorized; and

WHEREAS, there were previously issued $1,600,000 Taxable Sewer Revenue Capital Loan Note, Series 2018, dated May 18, 2018; $2,077,000 Taxable Sewer Revenue Capital Loan Note, Series 2019, dated April 19, 2019; $1,128,000 Taxable Sewer Revenue Capital Loan Note**,** Series 2020A, dated September 4, 2020; $5,138,000 Taxable Sewer Revenue Capital Loan Note, Series 2020B, dated September 4, 2020 (as amended on November 18, 2022 resulting in a $4,861,743.40 Taxable Sewer Revenue Capital Loan Note (Sponsored Project Amendment), Series 2022E); $19,186,000 Taxable Sewer Revenue Capital Loan Note, Series 2020C, dated September 4, 2020; $8,105,000 Taxable Sewer Revenue Capital Loan Note, Series 2022A, dated May 13, 2022 (and amended on May 23, 2025 resulting in a $7,083,748.81 Taxable Sewer Revenue Capital Loan Note, Series 2022A (2025 Rate Reduction)); $4,202,000 Taxable Sewer Revenue Capital Loan Note, Series 2022B, dated May 13, 2022; $1,036,000 Taxable Sewer Revenue Capital Loan Note, Series 2022C, dated May 13, 2022; $1,068,000 Sewer Revenue Capital Loan Note, Series 2022D, dated November 18, 2022 (and amended on May 2, 2025 resulting in a $162,532 Sewer Revenue Capital Loan Note, Series 2025 (Reissuance of Series 2022D Sewer SRF loan)); $4,045,000 Sewer Revenue Capital Loan Note, Series 2023B (and amended on September 26, 2026 resulting in a $2,051,981 Sewer Revenue Capital Loan Note, Series 2025G (2025 Loan Forgiveness)); $1,014,000 Sewer Revenue Capital Loan Note, Series 2023C; $7,948,000 Sewer Revenue Capital Loan Note, Series 2024A (and amended on May 23, 2025 resulting in a $7,354,223.56 Sewer Revenue Capital Loan Note, Series 2024A (2025 Rate Reduction)); $5,500,000 Sewer Revenue Capital Loan Note, Series 2024E, dated August 19, 2024; $517,000 Sewer Revenue Capital Loan Notes, Series 2025F, dated May 23, 2025; and $530,000 Sewer Revenue Capital Loan Notes, Series 2025E, dated May 23, 2025; each of which remains outstanding and are a lien on the Net Revenues of the System (the "Outstanding Obligations").

WHEREAS, in the Prior Note Resolutions (as hereinafter defined) it is provided that additional revenue notes or bonds may be issued on a parity with the outstanding notes or bonds, for the costs of future improvements and extensions to the System, provided that there has been procured and placed on file with the City Clerk, a statement complying with the conditions and limitations therein imposed upon the issuance of said parity notes or bonds; and

WHEREAS, a statement of Speer Financial Inc., an independent financial consultant not in the regular employ of Issuer, has been placed on file in the office of the City Clerk prior to Closing (as hereinafter defined), showing the conditions and limitations of said Prior Note Resolutions, with regard to the sufficiency of the revenues of the System to permit the issuance of additional revenue notes or bonds ranking on a parity with the outstanding notes or bonds to have been met and satisfied as required; and

WHEREAS, the notice of intention of Issuer to take action for the issuance of not to exceed $3,500,000 Sewer Revenue Capital Loan Note, has heretofore been duly published, no objections to such proposed action have been filed, and the Issuer has held a public meeting and hearing upon the proposal to institute proceedings for the issuance of the Note, and is now authorized to proceed with said issuance:

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. Definitions. The following terms shall have the following meanings in this Resolution unless the text expressly or by necessary implication requires otherwise:

- "Additional Obligations" shall mean any sewer revenue bonds or notes or other obligations issued on a parity with the Note in accordance with the provisions of Section 21 hereof.

- "Clerk" shall mean the City Clerk, or such other officer of the successor Governing Body as shall be charged with substantially the same duties and responsibilities.

- "Closing" shall mean the date of delivery of the Note to the Lender and the funding of the Loan.

- "Corporate Seal" shall mean the official seal of Issuer adopted by the Governing Body.

- "Fiscal Year" shall mean the twelve-month period beginning on July 1 of each year and ending on the last day of June of the following year, or any other consecutive twelve-month period adopted by the Governing Body or by law as the official accounting period of the System; provided, that the requirements of a fiscal year as expressed in this Resolution shall exclude any payment of principal or interest falling due on the first day of the fiscal year and include any payment of principal or interest falling due on the first day of the succeeding fiscal year.

- "Governing Body" shall mean the City Council of the City, or its successor in function with respect to the operation and control of the System.

- "Independent Auditor" shall mean an independent firm of certified public accountants or the Auditor of State.

- "Issuer" and "City" shall mean the City of Waterloo, Iowa.

- "Lender" shall mean Regions Capital Advantage, Inc., Birmingham, Alabama, as the purchaser of the Note from the Issuer at the time of their original issuance.

- "Loan Agreement" shall mean a Loan Agreement between the Issuer and the Lender in substantially the form attached to and approved by this Resolution.

- "Net Revenues" shall mean gross earnings of the System after deduction of Current Expenses; "Current Expenses" shall mean and include the reasonable and necessary cost of operating, maintaining, repairing and insuring the System, including purchases at wholesale, if any, salaries, wages, and costs of materials and supplies but

excluding depreciation and principal of and interest on the Note and any Parity Obligations or payments to the various funds established herein; capital costs, depreciation and interest or principal payments are not System expenses.

• "Note" or "Notes" shall mean the $3,500,000 Sewer Revenue Capital Loan Note, Series 2026, authorized to be issued by this Resolution.

• "Outstanding Obligations" shall mean:

- $517,000 Sewer Revenue Capital Loan Notes, Series 2025F, dated May 23, 2025, issued in accordance with a resolution dated May 5, 2025
- $530,000 Sewer Revenue Capital Loan Notes, Series 2025E, dated May 23, 2025, issued in accordance with a resolution dated May 5, 2025
- $5,500,000 Sewer Revenue Capital Loan Note, Series 2024E, dated August 19, 2024, issued in accordance with a resolution dated August 5, 2024;
- $7,948,000 Sewer Revenue Capital Loan Note, Series 2024A, dated March 22, 2024, issued in accordance with a resolution dated March 4, 2024; and amended as a rate reduction on May 23, 2025;
- Sewer Revenue Capital Loan Note, Series 2023C, dated December 22, 2023, issued in accordance with a resolution dated December 4, 2023;
- Sewer Revenue Capital Loan Note, Series 2023B, dated August 25, 2023, issued in accordance with a resolution dated August 7, 2023; and amended as a reissuance/loan forgiveness on September 26, 2025, resulting in a Series 2025G Note;
- Sewer Revenue Capital Loan Note, Series 2022A, dated May 13, 2022, issued in accordance with a resolution dated April 18, 2022; and amended as a rate reduction on May 23, 2025;
- Sewer Revenue Capital Loan Note, Series 2022B, dated May 13, 2022, issued in accordance with a resolution dated April 18, 2022;
- Sewer Revenue Capital Loan Note, Series 2022C, dated May 13, 2022, issued in accordance with a resolution dated April 18, 2022;
- Sewer Revenue Capital Loan Note, Series 2022D, dated December 16, 2022, issued in accordance with a resolution dated November 21, 2022; and reissued/amended on May 2, 2025, resulting in a Series 2025 Note;
- Sewer Revenue Capital Loan Note, Series 2020A, dated September 4, 2020, issued in accordance with a resolution dated August 10, 2020;
- Sewer Revenue Capital Loan Note, Series 2020B, dated September 4, 2020, issued in accordance with a resolution dated August 10, 2020, and amended on November 18, 2022 resulting in a Series 2022E Note;
- Sewer Revenue Capital Loan Note, Series 2020C, dated September 4, 2020, issued in accordance with a resolution dated August 10, 2020;

- Sewer Revenue Capital Loan Note, Series 2019, dated April 19, 2019, issued in accordance with a resolution dated March 25, 2019; and
- Taxable Sewer Revenue Capital Loan Note, Series 2018 dated May 18, 2018, issued in accordance with a resolution dated April 30, 2018.

• "Parity Obligations" shall mean notes or bonds payable solely from the Net Revenues of the System on an equal basis with the Note herein authorized to be issued, and shall include Additional Obligations as authorized to be issued under the terms of this Resolution and the Outstanding Obligations.

• "Paying Agent" shall mean UMB Bank, N.A., of West Des Moines, Iowa or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein as Issuer's Agent to provide for the payment of principal of and interest on the Note as the same shall become due.

• "Permitted Investments" shall mean:

■ direct obligations of (including obligations issued or held in book entry form on the books of) the Department of the Treasury of the United States of America;

▪ cash (insured at all times by the Federal Deposit Insurance Corporation or otherwise collateralized with obligations described in the above paragraph);

■ obligations of any of the following federal agencies which obligations represent full faith and credit of the United States of America, including:

– Export - Import Bank
– Farm Credit System Financial Assistance Corporation
– USDA Rural Development
– General Services Administration
– U.S. Maritime Administration
– Small Business Administration
– Government National Mortgage Association (GNMA)
– U.S. Department of Housing & Urban Development (FHA's)
– Federal Housing Administration

■ repurchase agreements whose underlying collateral consists of the investments set out above if the Issuer takes delivery of the collateral either directly or through an authorized custodian. Repurchase agreements do not include reverse repurchase agreements;

■ senior debt obligations rated "AAA" by Standard & Poor's Corporation (S&P) or "Aaa" by Moody's Investors Service Inc. (Moody's) issued by the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation;

■ U.S. dollar denominated deposit accounts, federal funds and banker's acceptances with domestic commercial banks which have a rating on their short-term certificates of deposit on the date of purchase of "A-1" or "A-1+" by S&P or "P-1" by Moody's and maturing no more than 360 days after the date of purchase (ratings on holding companies are not considered as the rating of the bank);

■ commercial paper which is rated at the time of purchase in the single highest classification, "A-1+" by S&P or "P-1" by Moody's and which matures not more than 270 days after the date of purchase;

■ investments in a money market fund rated "AAAm" or "AAAm-G" or better by S&P, or "AAA" or "AA" by Moody's Investors Services, Inc.;

■ pre-refunded Municipal Obligations, defined as any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state which are not callable at the option of the obligor prior to maturity or as to which irrevocable instructions have been given by the obligor to call on the date specified in the notice; and (a) which are rated, based on an irrevocable escrow account or fund (the "escrow"), in the highest rating category of S&P or Moody's or any successors thereto; or (b)(i) which are fully secured as to principal and interest and redemption premium, if any, by an escrow consisting only of cash or direct obligations of the Department of the Treasury of the United States of America, which escrow may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate; and (ii) which escrow is sufficient, as verified by a nationally recognized independent certified public accountant, to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this paragraph on the maturity date or dates specified in the irrevocable instructions referred to above, as appropriate;

■ tax exempt bonds as defined and permitted by section 148 of the Internal Revenue Code and applicable regulations and only if rated within the two highest classifications as established by at least one of the standard rating services approved by the superintendent of banking by rule adopted pursuant to chapter 17A Code of Iowa;

■ an investment contract rated within the two highest classifications as established by at least one of the standard rating services approved by the superintendent of banking by rule adopted pursuant to chapter 17A Code of Iowa; and

■ Iowa Public Agency Investment Trust.

♦ "Prior Note Resolutions" shall mean the resolution of the City Council adopted on May 5, 2025, authorizing the issuance of the $517,000 Sewer Revenue Capital Loan Note, Series 2025F, dated May 23, 2025; the resolution of the City Council adopted on May 5, 2025, authorizing the issuance of the $530,000 Sewer Revenue Capital Loan Note, Series 2025E, dated May 23, 2025; the resolution of the City Council adopted on August 5, 2024, authorizing the issuance of the $5,500,000 Sewer Revenue Capital Loan Note, Series 2024E, dated August 19, 2024; the resolution of the City Council adopted on March 4, 2024, authorizing the issuance of the $7,948,000 Sewer Revenue Capital Loan Note, Series 2024A, dated March 22, 2024 (and amended as a rate reduction on May 23, 2025); the resolution of the City Council adopted on December 4, 2023, authorizing the issuance of the $1,014,000 Sewer Revenue Capital Loan Note, Series 2023C dated December 22, 2023; the resolution of the City Council adopted on August 7, 2023, authorizing the issuance of the $4,045,000 Sewer Revenue Capital Loan Note, Series 2023B dated August 25, 2023 (and reissued on September 26, 2025); the resolution of the City Council adopted on October 17, 2022, authorizing the issuance of the $4,861,743.40 Taxable Sewer Revenue Capital Loan Note (Sponsored Project Amendment), Series 2022E dated November 18, 2022; the resolution of the City Council adopted on November 21, 2022, authorizing the issuance of the $1,068,000 Sewer Revenue Capital Loan Note, Series 2022D, dated December 16, 2022 (and reissued on May 2, 2025); the resolution of the City Council adopted on April 18, 2022, authorizing the issuance of the $1,036,000 Taxable Sewer Revenue Capital Loan Note, Series 2022C dated May 13, 2022; the resolution of the City Council adopted $4,202,000 Taxable Sewer Revenue Capital Loan Note, Series 2022B dated May 13, 2022; the resolution of the City Council adopted on April 18, 2022, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2022A, dated May 13, 2022 (and amended with rate reduction on May 23, 2025); the resolution of the City Council adopted on April 18, 2022, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2022B, dated May 13, 2022; the resolution of the City Council adopted on April 18, 2022, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2022C, dated May 13, 2022; the resolution of the City Council adopted on August 10, 2020, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2020A, dated September 4, 2020; the resolution of the City Council adopted on August 10, 2020, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2020B, dated September 4, 2020; the resolution of the City Council adopted on August 10, 2020, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2020C, dated September 4, 2020; the resolution of the City Council adopted on April 30, 2018, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2018, dated May 18, 2018; and the resolution of the City Council adopted on March 25, 2019, authorizing the issuance of the Sewer Revenue Capital Loan Note, Series 2019, dated April 19, 2019.

♦ "Project" shall mean the costs of acquisition, construction, extension, improvement and equipping of all or part of the Municipal Sewer Utility, including the acquisition, construction and installation of all or part of a fiber optic backbone broadband communications system for Municipal Sewer Utility purposes.

• "Project Fund" shall mean the fund established under this Resolution for the deposit of a portion of the proceeds to pay costs of the Project.

♦ "Rebate Fund" shall mean the fund so defined in and established pursuant to the Tax Exemption Certificate.

• "Registrar" shall mean UMB Bank, N.A. of West Des Moines, Iowa, or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein with respect to maintaining a register of the owners of the Note. Unless otherwise specified, the Registrar shall also act as Transfer Agent for the Note.

• "Resolution" shall mean this resolution authorizing the issuance of the Note.

• "System" shall mean the Municipal Sewer System of the Issuer and all properties of every nature hereinafter owned by the Issuer comprising part of or used as a part of the System, including all improvements and extensions made by Issuer while any of the Note or Parity Obligations remain outstanding; all real and personal property; and all appurtenances, contracts, leases, franchises and other intangibles.

• "Tax Exemption Certificate" shall mean the Tax Exemption Certificate executed by the Treasurer and delivered at the time of issuance and delivery of the Note.

• "Treasurer" shall mean the Finance Director or such other officer as shall succeed to the same duties and responsibilities with respect to the recording and payment of the Note issued hereunder.

• "Yield Restricted" shall mean required to be invested at a yield that is not materially higher than the yield on the Note under Section 148 (a) of the Internal Revenue Code or regulations issued thereunder.

Section 2. Authority. The Loan Agreement and the Note authorized by this Resolution shall be issued pursuant to Sections 384.24A and 384.83, of the Code of Iowa, and in compliance with all applicable provisions of the Constitution and laws of the State of Iowa. The Loan Agreement shall be substantially in the form attached to this Resolution and is authorized to be executed and issued on behalf of the Issuer by the Mayor and attested by the City Clerk.

Section 3. Authorization and Purpose. There are hereby authorized to be issued, one negotiable, fully registered Sewer Revenue Term Note of the City of Waterloo, in the County of Black Hawk, Iowa, to be designated as “Sewer Revenue Capital Loan Note, Series 2026”, in the aggregate amount of $3,500,000, for the purpose of paying costs of the Project. The City Council, pursuant to Sections 384.24A and 384.83 of the Code of Iowa, hereby finds and determines that it is necessary and advisable to issue said Note authorized by the Loan Agreement and this Resolution.

Section 4. Source of Payment. The Note herein authorized and Parity Obligations and the interest thereon shall be payable solely and only out of the Net Revenues of the System and

shall be a first lien on the future Net Revenues of the System. The Note shall not be a general obligation of the Issuer nor shall it be payable in any manner by taxation and the Issuer shall be in no manner liable by reason of the failure of the Net Revenues to be sufficient for the payment of the Note.

Section 5. Note Details. Sewer Revenue Capital Loan Note, Series 2026, of the City in the amount of $3,500,000, shall be issued to evidence the obligations of the Issuer under the Agreement pursuant to the provisions of Sections 384.24A and 384.83 of the Code of Iowa for the aforesaid purpose. The Note shall be designated "SEWER REVENUE CAPITAL LOAN NOTE, SERIES 2026A", be dated the date of delivery, and bear interest at the rate of 4.100% per annum from said date, until payment thereof, at the office of the Paying Agent, said interest payable on December 1, 2026, and semi-annually thereafter on the 1st day of June and December in each year until maturity set forth in the Loan Agreement.

The Note shall be executed by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of the City Clerk, and impressed or imprinted with the seal of the City and shall be fully registered as to both principal and interest as provided in this Resolution; principal, interest and premium, if any, shall be payable at the office of the Paying Agent by mailing of a check, wire transfer or automated clearing house system transfer to the registered owner of the Note. The Note shall be in the denomination of $5,000 or multiples thereof and shall be initially issued as a single Term Note in the denomination of $3,500,000 and numbered R-1. Notwithstanding anything contained herein, or in the Note, the Note shall not need to be presented for payment of principal, interest or mandatory redemption, except upon final maturity or redemption in full.

Section 6. Redemption. Notes maturing after June 1, 2033, may be called for redemption by the Issuer and paid before maturity on such date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in inverse order of maturity or sinking fund redemption date. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' notice of redemption shall be given to the registered owner of the Note. Failure to give such notice by mail to any registered owner of the Notes or any defect therein shall not affect the validity of any proceedings for the redemption of the Notes. All Notes or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment.

Section 7. Mandatory Payment and Redemption. The Note is subject to mandatory redemption prior to maturity at a price equal to 100% of the portion of the principal amount thereof to be redeemed plus accrued interest at the redemption date on June 1st of each of the years in the principal amount set opposite each year in the following schedule:

Principal Amount	Interest Rate	Maturity June 1st
$160,000	4.100%	2027
$170,000	4.100%	2028
$175,000	4.100%	2029
$185,000	4.100%	2030
$195,000	4.100%	2031
$205,000	4.100%	2032
$215,000	4.100%	2033
$230,000	4.100%	2034
$240,000	4.100%	2035
$250,000	4.100%	2036
$265,000	4.100%	2037
$280,000	4.100%	2038
$295,000	4.100%	2039
$310,000	4.100%	2040
$325,000	4.100%	2041*

*Final Maturity

Section 8. Registration of Note; Appointment of Registrar; Transfer; Ownership; Delivery; and Cancellation.

(a) Registration. The ownership of Note may be transferred only by the making of an entry upon the books kept for the registration and transfer of ownership of the Note, and in no other way. UMB Bank, N.A. is hereby appointed as Note Registrar under the terms of this Resolution and under the provisions of a separate agreement with the Issuer filed herewith which is made a part hereof by this reference. Registrar shall maintain the books of the Issuer for the registration of ownership of the Note for the payment of principal of and interest on the Note as provided in this Resolution. The Note shall be negotiable as provided in Article 8 of the Uniform Commercial Code subject to the provisions for registration and transfer contained in the Note and in this Resolution.

(b) Transfer. The ownership of any Note may be transferred only upon the Registration Books kept for the registration and transfer of Note and only upon surrender thereof at the office of the Registrar together with an assignment duly executed by the holder or his duly authorized attorney in fact in such form as shall be satisfactory to the Registrar, along with the address and social security number or federal employer identification number of such transferee (or, if registration is to be made in the name of multiple individuals, of all such transferees). In the event that the address of the registered owner of the Note (other than a registered owner which is the nominee of the broker or dealer in question) is that of a broker or dealer, there must be disclosed on the Registration Books the information pertaining to the registered owner required above.

Upon the transfer of any such Note, a new fully registered Note, of any denomination or denominations permitted by this Resolution in aggregate principal amount equal to the unmatured and unredeemed principal amount of such transferred fully registered Note, and bearing interest at the same rate and maturing on the same date or dates shall be delivered by the Registrar.

(c) Registration of Transferred Note. In all cases of the transfer of the Note, the Registrar shall register, at the earliest practicable time, on the Registration Books, the Note, in accordance with the provisions of this Resolution.

(d) Ownership. The person in whose name the ownership of the Note shall be registered on the Registration Books of the Registrar shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of or on account of the principal of any such Note and the premium, if any, and interest thereon shall be made only to or upon the order of the registered owner thereof or his legal representative. All such payments shall be valid and effectual to satisfy and discharge the liability upon such Note, including the interest thereon, to the extent of the sum or sums so paid.

(e) Cancellation. The Note, once redeemed, shall not be reissued but shall be cancelled by the Registrar. Once cancelled by the Registrar the Note shall be destroyed and a Certificate of the destruction thereof shall be furnished promptly to the Issuer; provided that if the Issuer shall so direct, the Registrar shall forward the cancelled Note to the Issuer.

(f) Non-Presentment of Note. In the event any payment check, wire, or electronic transfer of funds representing payment of principal of or interest on the Note is returned to the Paying Agent or if any note is not presented for payment of principal at the maturity or redemption date, if funds sufficient to pay such principal of or interest on Note shall have been made available to the Paying Agent for the benefit of the owner thereof, all liability of the Issuer to the owner thereof for such interest or payment of such Note shall forthwith cease, terminate and be completely discharged, and thereupon it shall be the duty of the Paying Agent to hold such funds, without liability for interest thereon, for the benefit of the owner of such Note who shall thereafter be restricted exclusively to such funds for any claim of whatever nature on his part under this Resolution or on, or with respect to, such interest or Note. The Paying Agent's obligation to hold such funds shall continue for a period equal to two years and six months following the date on which such interest or principal became due, whether at maturity, or at the date fixed for redemption thereof, or otherwise, at which time the Paying Agent shall surrender any remaining funds so held to the Issuer, whereupon any claim under this Resolution by the Owners of such interest or Note of whatever nature shall be made upon the Issuer.

Section 9. Reissuance of Mutilated, Destroyed, Stolen or Lost Note. In case any outstanding Note shall become mutilated or be destroyed, stolen or lost, the Issuer shall at the request of Registrar authenticate and deliver a new Note of like tenor and amount as the Note so mutilated, destroyed, stolen or lost, in exchange and substitution for such mutilated Note to

Registrar, upon surrender of such mutilated Note, or in lieu of and substitution for the Note destroyed, stolen or lost, upon filing with the Registrar evidence satisfactory to the Registrar and Issuer that such Note has been destroyed, stolen or lost and proof of ownership thereof, and upon furnishing the Registrar and Issuer with satisfactory indemnity and complying with such other reasonable regulations as the Issuer or its agent may prescribe and paying such expenses as the Issuer may incur in connection therewith.

Section 10. Record Date. Payments of principal and interest, otherwise than upon full redemption, made in respect of any Note, shall be made to the registered holder thereof or to their designated Agent as the same appear on the books of the Registrar on the 15th day of the month preceding the payment date. All such payments shall fully discharge the obligations of the Issuer in respect of such Note to the extent of the payments so made. Upon receipt of the final payment of principal, the holder of the Note shall surrender the Note to the Paying Agent.

Section 11. Execution, Authentication and Delivery of the Note. Upon the adoption of this Resolution, the Mayor and Clerk shall execute and deliver the Note to the Registrar, who shall authenticate the Note and deliver the same to or upon order of the Lender. No Note shall be valid or obligatory for any purpose or shall be entitled to any right or benefit hereunder unless the Registrar shall duly endorse and execute on such Note a Certificate of Authentication substantially in the form of the Certificate herein set forth. Such Certificate upon any Note executed on behalf of the Issuer shall be conclusive evidence that the Note so authenticated has been duly issued under this Resolution and that the holder thereof is entitled to the benefits of this Resolution.

No Note shall be authenticated and delivered by the Registrar, unless and until there shall have been provided the following:

- A certified copy of the resolution of Issuer approving the execution of a Loan Agreement and a copy of the Loan Agreement;

- A written order of Issuer signed by the Treasurer directing the authentication and delivery of the Note to or upon the order of the Lender upon payment of the purchase price as set forth therein;

- The approving opinion of Ahlers & Cooney, P.C., Bond Counsel, concerning the validity and legality of all the Note proposed to be issued.

Section 12. Right to Name Substitute Paying Agent or Registrar. Issuer reserves the right to name a substitute, successor Registrar or Paying Agent upon giving prompt written notice to each registered Noteholder.

Section 13. Form of Note. The Note shall be printed in substantial compliance with standards proposed by the American Standards Institute substantially in the form as follows:

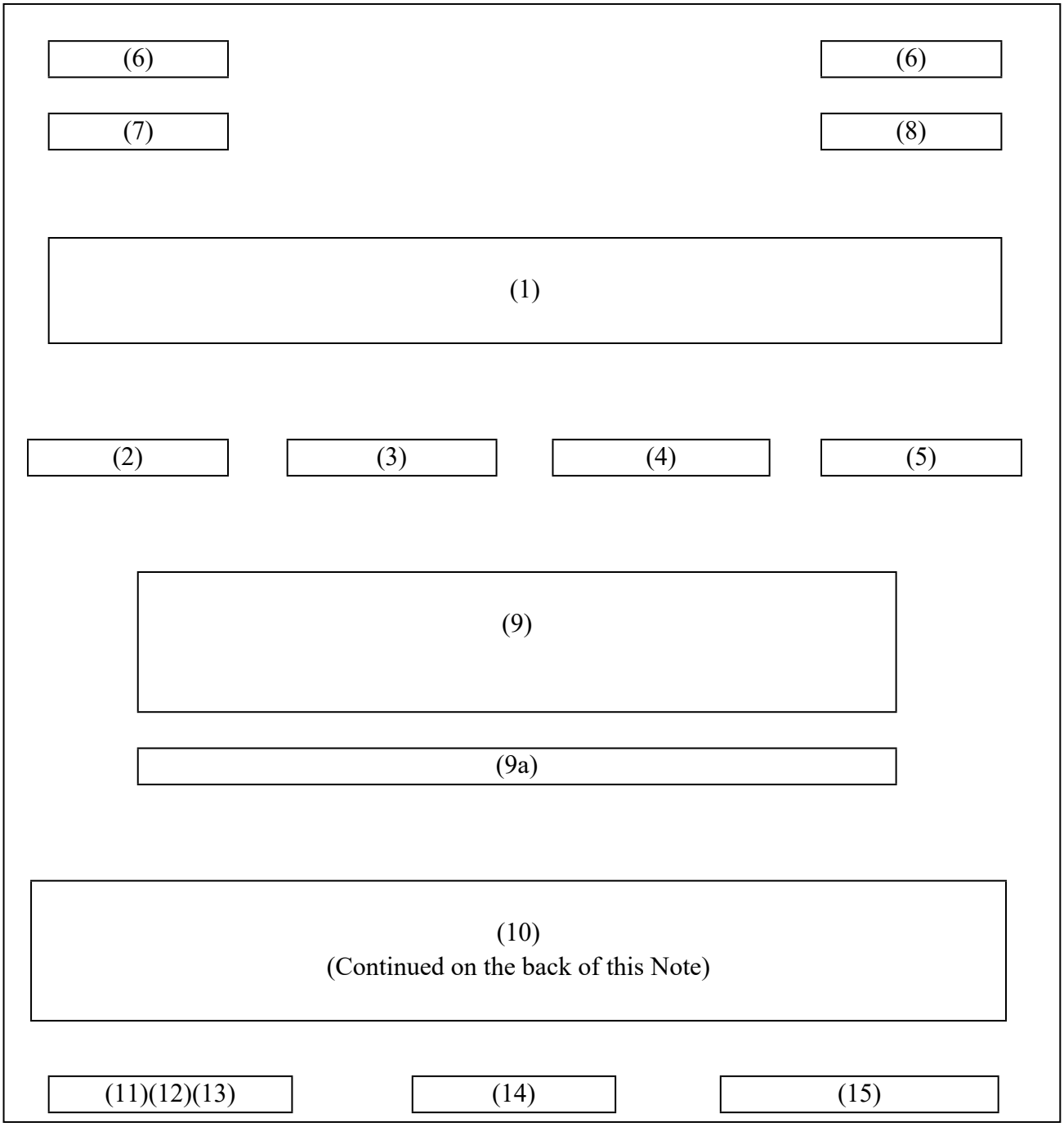


FIGURE 1
(Front)

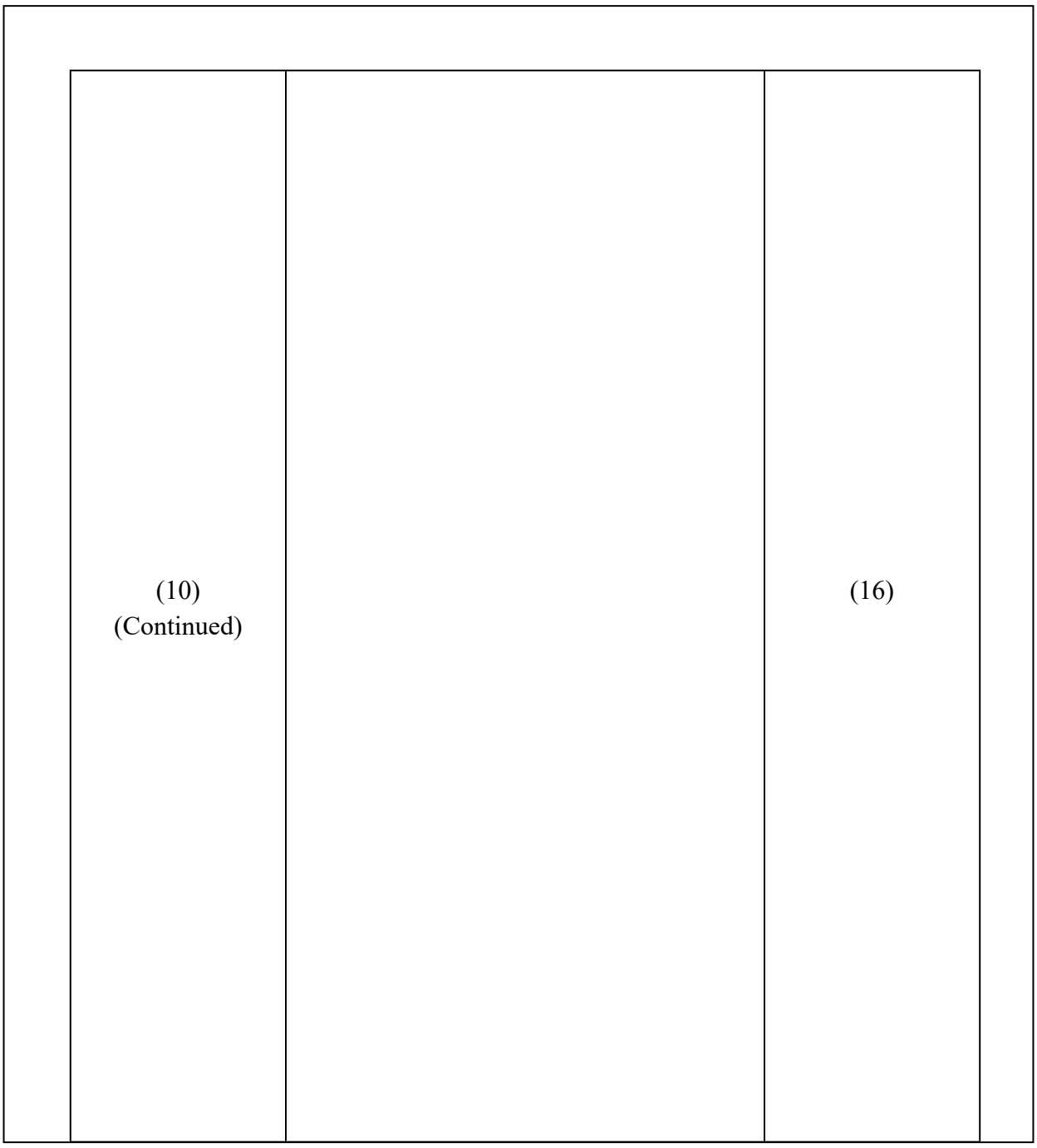


FIGURE 2
(Back)

The text of the Note to be located thereon at the item numbers shown shall be as follows:

Item 1, figure 1= "STATE OF IOWA"
"COUNTY OF BLACK HAWK"
"CITY OF WATERLOO"
"SEWER REVENUE CAPITAL LOAN NOTE"
"SERIES 2026A"

Item 2, figure 1 = Rate: _____ per annum
Item 3, figure 1 = Final Maturity: June 1, 2041
Item 4, figure 1 = Note Date: June 29, 2026
Item 6, figure 1 = "Registered"
Item 7, figure 1 = Certificate No. R-1
Item 8, figure 1 = Principal Amount: $3,500,000

Item 9, figure 1= The City of Waterloo, Iowa, a municipal corporation organized and existing under and by virtue of the Constitution and laws of the State of Iowa (the "Issuer"), for value received, promises to pay from the source and as hereinafter provided, on the maturity date indicated above, to

Item 9A, figure 1 = (Registration panel to be completed by Registrar or Printer with name of Registered Owner).

Item 10, figure 1 = or registered assigns, the principal sum of THREE MILLION FIVE HUNDRED THOUSAND DOLLARS in lawful money of the United States of America, , with interest on said sum from the date of delivery until paid at the rate of 4.100% per annum, payable on December 1, 2026, and semi-annually thereafter on the 1st day of June and December in each year in accordance with debt service schedule attached hereto as Exhibit A.

Interest and principal shall be paid to the registered holder of the Note as shown on the records of ownership maintained by the Registrar as of the 15th day of the month next preceding such interest payment date. Interest shall be computed on the basis of a 360-day year of twelve 30-day months.

This Note is issued pursuant to the provisions of Sections 384.24A and 384.83 of the Code of Iowa, for the purpose of paying costs of the acquisition, construction, extension, improvement and equipping of all or part of the Municipal Sewer Utility, including the acquisition, construction and installation of all or part of a fiber optic backbone broadband communications system for Municipal Sewer Utility purposes, and evidences amounts payable under a certain Loan Agreement dated as of the date hereof, in conformity to a Resolution of the City Council of the City duly passed and approved. For a complete statement of the revenues and funds from which and the conditions under which this Note is payable, a statement of the conditions under which additional Note or bonds of equal standing may be issued, and the general covenants and provisions pursuant to which this Note is issued, reference is made to the above described Loan Agreement and Resolution.

Notes maturing after June 1, 2033, may be called for redemption by the Issuer and paid before maturity on such date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in inverse order of maturity or sinking fund redemption date. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' notice of redemption shall be given to the registered owner of the Note. Failure to give such notice by mail to any registered owner of the Notes or any defect therein shall not affect the validity of any proceedings for the redemption of the Notes. All Notes or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment.

Ownership of this Note may be transferred only by transfer upon the books kept for such purpose by UMB Bank, N.A., West Des Moines, Iowa, the Registrar. Such transfer on the books shall occur only upon presentation and surrender of this Note at the office of the Registrar, together with an assignment duly executed by the owner hereof or his duly authorized attorney in the form as shall be satisfactory to the Registrar. Issuer reserves the right to substitute the Registrar and Paying Agent but shall, however, promptly give notice to registered Noteholders of such change. The Note shall be negotiable as provided in Article 8 of the Uniform Commercial Code and subject to the provisions for registration and transfer contained in the Note Resolution.

This Note and the series of which it forms a part, Outstanding Obligations ranking on a parity therewith, and any Additional Obligations which may be hereafter issued and outstanding from time to time on a parity with said Note, as provided in the Resolution and Loan Agreement of which notice is hereby given and which are hereby made a part hereof, are payable from and secured by a pledge of the Net Revenues of the municipal sewer system utility (the "System"), as defined and provided in said Resolution. There has heretofore been established and the City covenants and agrees that it will maintain just and equitable rates or charges for the use of and service rendered by said System in each year for the payment of the proper and reasonable expenses of operation and maintenance of said System and for the establishment of a sufficient sinking fund to meet the principal of and interest on this series of Note, and other obligations ranking on a parity therewith, as the same become due. This Note is not payable in any manner by taxation and under no circumstances shall the City be in any manner liable by reason of the failure of said Net Revenues to be sufficient for the payment hereof.

And it is hereby represented and certified that all acts, conditions and things requisite, according to the laws and Constitution of the State of Iowa, to exist, to be had, to be done, or to be performed precedent to the lawful issue of this Note, have been existent, had, done and performed as required by law.

IN TESTIMONY WHEREOF, the City by its City Council has caused this Note to be signed by the manual or facsimile signature of its Mayor and attested by the manual or facsimile signature of its City Clerk, with the seal of the City printed or impressed hereon, and authenticated by the manual or facsimile signature of an authorized representative of the Registrar, UMB Bank, N.A., West Des Moines, Iowa, all as of the 29th day of June, 2026.

Item 11, figure 1 = Date of Authentication:
Item 12, figure 1 = This is one of the Note described in the within mentioned Resolution, as registered by UMB Bank, N.A.

UMB BANK, N.A., Registrar

By: _____
Authorized Signature

Item 13, figure 1 = Registrar and Transfer Agent: UMB Bank, N.A.
Paying Agent: UMB Bank, N.A.

SEE REVERSE FOR CERTAIN DEFINITIONS

Item 14, figure 1 = (Seal)
Item 15, figure 1 = (Signature Block)

CITY OF WATERLOO, STATE OF IOWA

By: _____ (manual or facsimile signature)
Mayor
ATTEST:

By: _____ (manual or facsimile signature)
City Clerk

Item 17, figure 1 = (Assignment Block)
(Information Required for Registration)

ASSIGNMENT

For value received, the undersigned hereby sells, assigns and transfers unto _____ (Social Security or Tax Identification No. _____) the within Note and does hereby irrevocably constitute and appoint _____ attorney in fact to transfer the said Note on the books kept for registration of the within Note, with full power of substitution in the premises.

Dated this _____ day of _____, 2026.

_____

_____
(Person(s) executing this Assignment sign(s) here)

SIGNATURE)
GUARANTEED) _____

IMPORTANT - READ CAREFULLY

The signature(s) to this Power must correspond with the name(s) as written upon the face of the Certificate(s) or Note(s) in every particular without alteration or enlargement or any change whatever. Signature guarantee must be provided in accordance with the prevailing standards and procedures of the Registrar and Transfer Agent. Such standards and procedures may require signature to be guaranteed by certain eligible guarantor institutions that participate in a recognized signature guarantee program.

INFORMATION REQUIRED FOR REGISTRATION OF TRANSFER

Name of Transferee(s) _____
Address of Transferee(s) _____
Social Security or Tax Identification Number of Transferee(s) _____
Transferee is a(n):
Individual* _____ Corporation _____
Partnership _____ Trust _____

* If the Note is to be registered in the names of multiple individual owners, the names of all such owners and one address and social security number must be provided.

The following abbreviations, when used in the inscription on the face of this Note, shall be construed as though written out in full according to applicable laws or regulations:

TEN COM - as tenants in common

TEN ENT - as tenants by the entireties
JT TEN - as joint tenants with rights of survivorship and not as tenants in common
IA UNIF TRANS MIN ACT - ..... Custodian .....
(Cust) (Minor)
Under Iowa Uniform Transfers to Minors Act.....
(State)

ADDITIONAL ABBREVIATIONS MAY ALSO BE USED
THOUGH NOT IN THE ABOVE LIST

Section 14. Equality of Lien. The timely payment of principal of and interest on the Note and Parity Obligations shall be secured equally and ratably by the Net Revenues of the System without priority by reason of number or time of sale or delivery; and the Net Revenues of the System are hereby irrevocably pledged to the timely payment of both principal and interest as the same become due.

Section 15. Application of Note Proceeds. Proceeds of the Note shall be applied as follows:

- $3,449,055.00 shall be deposited to the Project Construction Fund
- $50,945.00 shall be used to pay costs of issuance.

The Project Fund shall be invested in accordance with this Resolution. Earnings on investments of the Project Fund shall be deposited in and expended from the Project Fund. Any amounts on hand in the Project Fund shall be available for the payment of the principal of or interest on the Note at any time that other funds of the System shall be insufficient to the purpose, in which event such funds shall be repaid to the Project Fund at the earliest opportunity. Any balance on hand in the Project Fund and not immediately required for its purposes may be invested not inconsistent with limitations provided by law, the Internal Revenue Code and this Resolution.

Section 16. User Rates. There has heretofore been established and published as required by law, just and equitable rates or charges for the use of the service rendered by the System. The rates or charges shall be paid by the owner of each and every lot, parcel of real estate, or building that is connected with and uses the System, by or through any part of the System or that in any way uses or is served by the System. So long as the Note is outstanding and unpaid the rates or charges to consumers of services of the System shall be sufficient in each year for the payment of the proper and reasonable expenses of operation and maintenance of the System and for the payment of principal and interest on the Note and Parity Obligations as the same fall due.

Section 17. Application of Revenues. From and after the delivery of any Note, and as long as any of the Note or Parity Obligations shall be outstanding and unpaid either as to principal or as to interest, or until all of the Note and Parity Obligations then outstanding shall have been discharged and satisfied in the manner provided in this Resolution, the entire income and

revenues of the System shall be deposited as collected in a fund to be known as the Sewer Revenue Fund (the "Revenue Fund"), and shall be disbursed only as follows:

The provisions in the Prior Note Resolutions, whereby there was created and is to be maintained a Sewer Revenue Note Principal and Interest Sinking Fund, and for the monthly payment into said fund from the future Net Revenues of the System such portion thereof as will be sufficient to meet the principal and interest of the Outstanding Obligations, are hereby ratified and confirmed, and all such provisions inure to and constitute the security for the payment of the principal and interest on Note hereby authorized to be issued; provided, however, that the amounts to be set aside and paid into the Sewer Revenue Note Principal and Interest Sinking Fund in equal monthly installments from the earnings shall be sufficient to pay the principal and interest due each year, not only on the Outstanding Obligations, but also the principal and interest of the Note herein authorized to be issued. Sections 17, 19 and 21 of the Prior Note Resolutions are hereby ratified, confirmed, adopted and incorporated herein as a part of this Resolution. Except as may be otherwise provided in the above Prior Note Resolutions, proceeds of the Note or other funds may be invested in Permitted Investments.

Nothing in this Resolution shall be construed to impair the rights vested in the Outstanding Obligations. The amounts herein required to be paid into the various funds named in this Section shall be inclusive of payments required in respect to the Outstanding Obligations. The provisions of the legislation authorizing the Outstanding Obligations and the provisions of this Resolution are to be construed wherever possible so that the same will not be in conflict. In the event such construction is not possible, the provisions of the resolution first adopted shall prevail until such time as the Note or bonds authorized by said resolution have been paid in full or otherwise satisfied as therein provided at which time the provisions of this Resolution shall again prevail.

At such time as the Outstanding Obligations are paid and so long as the Note or Parity Obligations remain outstanding and unpaid the same are discharged and satisfied in the manner provided in this Resolution, the entire income and revenues of the system shall be deposited and collected in a fund to be known as the Revenue Fund, and shall be disbursed only as follows:

- Operation and Maintenance Fund. Money in the Revenue Fund shall first be disbursed to make deposits into a separate and special fund to pay current expenses. The fund shall be known as the Sewer Utility Operation and Maintenance Fund (the "Operation and Maintenance Fund"). There shall be deposited in the Operation and Maintenance Fund each month an amount sufficient to meet the current expenses of the month plus an amount equal to 1/12th of expenses payable on an annual basis such as insurance. After the first day of the month, further deposits may be made to this account from the Revenue Fund to the extent necessary to pay current expenses accrued and payable to the extent that funds are not available in the Surplus Fund.

- Sinking Fund. Money in the Revenue Fund shall next be disbursed to make deposits into a separate and special fund to pay principal of and interest on the Note and Parity Obligations. The fund shall be known as the Sewer Revenue Note Principal and Interest Sinking Fund (the "Sinking Fund"). The required amount to be deposited in

the Sinking Fund in any month shall be an amount equal to 1/6th of the installment of interest coming due on the next interest payment date on the then outstanding Note and Parity Obligations, plus 1/12th of the installment of principal coming due on such Note on the next succeeding principal payment date until the full amount of such installment is on hand. If for any reason the amount on hand in the Sinking Fund exceeds the required amount, the excess shall forthwith be withdrawn and paid into the Revenue Fund. Money in the Sinking Fund shall be used solely for the purpose of paying principal of and interest on the Note and Parity Obligations as the same shall become due and payable.

- Subordinate Obligations. Money in the Revenue Fund may next be used to pay principal of and interest on any other obligations which by their terms shall be payable from the revenues of the System, but subordinate to the Note and Parity Obligations, and which have been issued for the purposes of extensions and improvements to the System or to retire the Note or Parity Obligations in advance of maturity, or to pay for extraordinary repairs or replacements to the System.

- Surplus Revenue. All money thereafter remaining in the Revenue Fund at the close of each month may be deposited in any of the funds created by this Resolution, to pay for extraordinary repairs or replacements to the System, or may be used to pay or redeem the Note or Parity Obligations, any of them, or for any lawful purpose.

Money in the Revenue Fund shall be allotted and paid into the various funds and accounts hereinbefore referred to in the order in which said funds are listed, on a cumulative basis on the l0th day of each month, or on the next succeeding business day when the l0th shall not be a business day; and if in any month the money in the Revenue Fund shall be insufficient to deposit or transfer the required amount in any of said funds or accounts, the deficiency shall be made up in the following month or months after payments into all funds and accounts enjoying a prior claim to the revenues shall have been met in full.

Section 18. Investments. Moneys on hand in the Project Fund and all of the funds provided by this Resolution may be invested only in Permitted Investments or deposited in financial institutions which are members of the Federal Deposit Insurance Corporation or its equivalent successor, and the deposits of which are insured thereby and all such deposits exceeding the maximum amount insured from time to time by FDIC or its equivalent successor in any one financial institution shall be continuously secured in compliance with Iowa Code chapter 12C, or otherwise by a valid pledge of direct obligations of the United States Government having an equivalent market value. All investments shall mature before the date on which the moneys are required for the purposes for which the fund was created or otherwise as herein provided. The provisions of this Section shall not be construed to require the Issuer to maintain separate accounts for the funds created by this Resolution.

The Sinking Fund shall be segregated in a separate account but may be invested in the same manner as other funds of the Issuer but designated as a trust fund on the books and records of the Issuer. The Sinking Fund shall not be available for any other purposes other than those specified in this Resolution.

All income derived from such investments shall be deposited in the Revenue Fund and shall be regarded as revenues of the System. Investments shall at any time necessary be liquidated and the proceeds thereof applied to the purpose for which the respective fund was created.

Section 19. Covenants Regarding the Operation of the System. The Issuer hereby covenants and agrees with each and every holder of the Note and Parity Obligations:

(a) Maintenance and Efficiency. The Issuer will maintain the System in good condition and operate it in an efficient manner and at reasonable cost.

(b) Sufficiency of Rates. On or before the beginning of each Fiscal Year the Governing Body will adopt or continue in effect rates for all services rendered by the System determined to be sufficient to produce Net Revenues for the next succeeding Fiscal Year which are (i) adequate to pay the principal and interest requirements thereof and to create or maintain the reserves as provided in this Resolution, and (ii) not less than 110 percent of the principal and interest requirements of the next succeeding Fiscal Year. No free use of the System by the Issuer or any department, agency or instrumentality of the Issuer shall be permitted except upon the determination of the Governing Body that the rates and changes otherwise in effect are sufficient to provide Net Revenues at least equal to the requirements of this subsection.

(c) Insurance. The Issuer shall maintain insurance for the benefit of the Noteholders on the insurable portions of the System of a kind and in an amount which normally would be carried by private companies engaged in a similar kind of business. The proceeds of any insurance, except public liability insurance, shall be used to repair or replace the part or parts of the System damaged or destroyed, or if not so used shall be placed in an improvement fund for the benefit of the System.

(d) Accounting and Audits. The Issuer will cause to be kept proper books and accounts adapted to the System and in accordance with generally accepted accounting practices, and will diligently act to cause the books and accounts to be audited and reported upon by an Independent Auditor. The Lender and holders of any of the Note and Parity Obligations shall have at all reasonable times the right to inspect the System and the records, accounts and data of the Issuer relating thereto.

(e) State Laws. The Issuer will faithfully and punctually perform all duties with reference to the System required by the Constitution and laws of the State of Iowa, including the making and collecting of reasonable and sufficient rates for services rendered by the System as above provided, and will segregate the revenues of the System and apply said revenues to the funds specified in this Resolution.

(f) Property. The Issuer will not sell, lease, mortgage or in any manner dispose of the System, or any capital part thereof, including any and all extensions and additions that may be made thereto, until satisfaction and discharge of all of the Note and Parity Obligations shall have been provided for in the manner provided in this

Resolution; provided, however, this covenant shall not be construed to prevent the disposal by the Issuer of property which in the judgment of its Governing Body has become inexpedient or unprofitable to use in connection with the System, or if it is to the advantage of the System that other property of equal or higher value be substituted therefor, and provided further that the proceeds of the disposition of such property shall be placed in a revolving fund to be used in preference to other sources for capital improvements to the System. Any such proceeds of the disposition of property acquired with the proceeds of the Note or Parity Obligations shall not be used to pay principal or interest on the Note and Parity Obligations or for payments into the Sinking Fund.

(g) Fidelity Bond. That the Issuer shall maintain fidelity bond coverage in amounts which normally would be carried by private companies engaged in a similar kind of business on each officer or employee having custody of funds of the System.

(h) Additional Charges. The Issuer will require proper connecting charges and/or other security for the payment of service charges.

(i) Budget. The Governing Body of the Issuer shall approve and conduct operations pursuant to a system budget of revenues and current expenses for each Fiscal Year. Such budget shall take into account revenues and current expenses during the current and last preceding Fiscal Years. Copies of such budget and any amendments thereto shall be mailed to the Lender and to the Noteholders upon request.

Section 20. Remedies of Noteholders. Except as herein expressly limited the holder or holders of the Note and Parity Obligations shall have and possess all the rights of action and remedies afforded by the common law, the Constitution and statutes of the State of Iowa, and of the United States of America, for the enforcement of payment of their Note and interest thereon, and of the pledge of the Net Revenues made hereunder, and of all covenants of the Issuer hereunder.

Section 21. Prior Lien and Parity Obligations. The Issuer will issue no other notes, bonds or obligations of any kind or nature payable from or enjoying a lien or claim on the property or Net Revenues of the System having priority over the Note or Parity Obligations.

Additional Obligations may be issued on a parity and equality of rank with the Note with respect to the lien and claim of such Additional Obligations to the Net Revenues of the System and the money on deposit in the funds adopted by this Resolution, for the following purposes and under the following conditions, but not otherwise:

(a) For the purpose of refunding any of the Note or Parity Obligations which shall have matured or which shall mature not later than three months after the date of delivery of such refunding obligation and for the payment of which there shall be insufficient money in the Sinking Fund;

(b) For the purpose of making extensions, additions, improvements or replacements to the System, or refunding any Outstanding Obligations, Parity Obligations or other

obligations issued for such extensions, additions and improvements, if all of the following conditions shall have been met:

(i) before any such Additional Obligations ranking on a parity are issued, there will have been procured and filed with the City Clerk, a statement of an Independent Auditor, or independent municipal advisor, not a regular employee of the Issuer, reciting the opinion based upon necessary investigations that the Net Revenues of the System for the preceding Fiscal Year (with adjustments as hereinafter provided) were equal to at least 1.10 times the maximum amount that will be required in any Fiscal Year prior to the longest maturity of any of the then outstanding Note or Parity Obligations for both principal of and interest on all Note or Parity Obligations then outstanding which are payable from the Net Revenues of the System and the Additional Obligations then proposed to be issued.

For the purpose of determining the Net Revenues of the System for the preceding Fiscal Year as aforesaid, the amount of the gross revenues for such year may be adjusted by an independent consulting engineer, or by the Independent Auditor or Municipal Advisor, so as to reflect any changes in the amount of such revenues which would have resulted had any revision of the schedule of rates or charges imposed at or prior to the time of the issuance of any such Additional Obligations been in effect during all of such preceding Fiscal Year.

(ii) the Additional Obligations must be payable as to principal and as to interest on the same month and day as the Note herein authorized.

(iii) for the purposes of this Section, principal and interest falling due on the first day of a Fiscal Year shall be deemed a requirement of the immediately preceding Fiscal Year.

(iv) for the purposes of this Section, general obligation bonds or notes shall be refunded only upon a finding of necessity by the Governing Body and only to the extent the general obligation bonds or notes were issued or the proceeds thereof were expended for the System.

(v) for purposes of this Section, "preceding Fiscal Year" shall be the most recently completed Fiscal Year for which audited financial statements prepared by a certified public accountant are issued and available, but in no event a Fiscal Year which ended more than eighteen months prior to the date of issuance of the Additional Obligations.

Section 22. Disposition of Proceeds; Arbitrage Not Permitted. The Issuer reasonably expects and covenants that no use will be made of the proceeds from the issuance and sale of the

Note issued hereunder which will cause the Note to be classified as an arbitrage bond within the meaning of Section 148(a) and (b) of the Internal Revenue Code of the United States, and that throughout the term of said Note it will comply with the requirements of said statute and regulations issued thereunder.

To the best knowledge and belief of the Issuer, there are no facts or circumstances that would materially change the foregoing statements or the conclusion that it is not expected that the proceeds of the Note will be used in a manner that would cause the Note to be an arbitrage bond. Without limiting the generality of the foregoing, the Issuer hereby agrees to comply with the provisions of the Tax Exemption Certificate and the provisions of the Tax Exemption Certificate are hereby incorporated by reference as part of this Resolution. The Treasurer is hereby directed to make and insert all calculations and determinations necessary to complete the Tax Exemption Certificate in all respects and to execute and deliver the Tax Exemption Certificate at issuance of the Note to certify as to the reasonable expectations and covenants of the Issuer at that date.

The Issuer covenants that it will treat as Yield Restricted any proceeds of the Note remaining unexpended after three years from the issuance and any other funds required by the Tax Exemption Certificate to be so treated. If any investments are held with respect to the Note and Parity Obligations, the Issuer shall treat the same for the purpose of restricted yield as held in proportion to the original principal amounts of each issue.

The Issuer covenants that it will exceed any investment yield restriction provided in this Resolution only in the event that it shall first obtain an opinion of recognized bond counsel that the proposed investment action will not cause the Note to be classified as an arbitrage bond under Section 148(a) and (b) the Internal Revenue Code or regulations issued thereunder.

The Issuer covenants that it will proceed with due diligence to spend the proceeds of the Note for the purpose set forth in this Resolution. The Issuer further covenants that it will make no change in the use of the proceeds available for the construction of facilities or change in the use of any portion of the facilities constructed therefrom by persons other than the Issuer or the general public unless it has obtained an opinion of bond counsel or a revenue ruling that the proposed project or use will not be of such character as to cause interest on the Note not to be exempt from federal income taxes in the hands of holders other than substantial users of the project, under the provisions of Section 142(a) of the Internal Revenue Code of the United States, related statutes and regulations.

Section 23. Additional Covenants, Representations and Warranties of the Issuer. The Issuer certifies and covenants with the purchasers and holders of the Note from time to time outstanding that the Issuer through its officers, (a) will make such further specific covenants, representations and assurances as may be necessary or advisable; (b) comply with all representations, covenants and assurances contained in the Tax Exemption Certificate, which Tax Exemption Certificate shall constitute a part of the contract between the Issuer and the owners of the Note; (c) consult with bond counsel (as defined in the Tax Exemption Certificate); (d) pay to the United States, as necessary, such sums of money representing required rebates of excess arbitrage profits relating to the Note; (e) file such forms, statements and supporting

documents as may be required and in a timely manner; and (f) if deemed necessary or advisable by its officers, to employ and pay fiscal agents, financial advisors, attorneys and other persons to assist the Issuer in such compliance.

Section 24. Amendment of Resolution to Maintain Tax Exemption. This Resolution may be amended without the consent of any owner of the Note if, in the opinion of bond counsel, such amendment is necessary to maintain tax exemption with respect to the Note under applicable Federal law or regulations.

Section 25. Discharge and Satisfaction of Note. The covenants, liens and pledges entered into, created or imposed pursuant to this Resolution may be fully discharged and satisfied with respect to the Note and Parity Obligations, or any of them, in any one or more of the following ways:

(a) By paying the Note or Parity Obligations when the same shall become due and payable; and

(b) By depositing in trust with the Treasurer, or with a corporate trustee designated by the Governing Body for the payment of said obligations and irrevocably appropriated exclusively to that purpose an amount in cash or direct obligations of the United States the maturities and income of which shall be sufficient to retire at maturity, or by redemption prior to maturity on a designated date upon which said obligations may be redeemed, all of such obligations outstanding at the time, together with the interest thereon to maturity or to the designated redemption date, premiums thereon, if any, that may be payable on the redemption of the same; provided that proper notice of redemption of all such obligations to be redeemed shall have been previously published or provisions shall have been made for such publication.

Upon such payment or deposit of money or securities, or both, in the amount and manner provided by this Section, all liability of the Issuer with respect to the Note or Obligations shall cease, determine and be completely discharged, and the holders thereof shall be entitled only to payment out of the money or securities so deposited.

Section 26. Resolution a Contract. The provisions of this Resolution shall constitute a contract between the Issuer and the holder or holders of the Note and Parity Obligations, and after the issuance of any of the Note no change, variation or alteration of any kind in the provisions of this Resolution shall be made in any manner, except as provided in the next succeeding Section, until such time as all of the Note and Parity Obligations, and interest due thereon, shall have been satisfied and discharged as provided in this Resolution.

Section 27. Amendment of Resolution Without Consent. The Issuer may, without the consent of or notice to any of the holders of the Note and Parity Obligations, amend or supplement this Resolution for any one or more of the following purposes:

(a) to cure any ambiguity, defect, omission or inconsistent provision in this Resolution or in the Note or Parity Obligations; or to comply with any applicable

provision of law or regulation of federal or state agencies; provided, however, that such action shall not materially adversely affect the interests of the holders of the Notes or Parity Obligations;

(b) to change the terms or provisions of this Resolution to the extent necessary to prevent the interest on the Notes or Parity Obligations from being includable within the gross income of the holders thereof for federal income tax purposes;

(c) to grant to or confer upon the holders of the Note or Parity Obligations any additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon the holders of the Note;

(d) to add to the covenants and agreements of the Issuer contained in this Resolution other covenants and agreements of, or conditions or restrictions upon, the Issuer or to surrender or eliminate any right or power reserved to or conferred upon the Issuer in this Resolution; or

(e) to subject to the lien and pledge of this Resolution additional pledged revenues as may be permitted by law.

Section 28. Amendment of Resolution Requiring Consent. This Resolution may be amended from time to time if such amendment shall have been consented to by holders of not less than two-thirds in principal amount of the Note and Parity Obligations at any time outstanding (not including in any case any Note which may then be held or owned by or for the account of the Issuer, but including such Refunding Obligations as may have been issued for the purpose of refunding any of such Note if such Refunding Obligations shall not then be owned by the Issuer); but this Resolution may not be so amended in such manner as to:

(a) Make any change in the maturity or interest rate of the Note, or modify the terms of payment of principal of or interest on the Note or make a change to the mandatory redemption provisions of the Note, or impose any conditions with respect to such payment;

(b) Materially affect the rights of the holders of less than all of the Note and Parity Obligations then outstanding; and

(c) Reduce the percentage of the principal amount of Note, the consent of the holders of which is required to effect a further amendment.

Whenever the Issuer shall propose to amend this Resolution under the provisions of this Section, it shall cause notice of the proposed amendment to be filed with the Lender and to be mailed by certified mail to each registered owner of any Note as shown by the records of the Registrar. Such notice shall set forth the nature of the proposed amendment and shall state that a copy of the proposed amendatory Resolution is on file in the office of the City Clerk.

Whenever at any time within one year from the date of the mailing of said notice there shall be filed with the City Clerk an instrument or instruments executed by the holders of at least two-thirds in aggregate principal amount of the Note then outstanding as in this Section defined, which instrument or instruments shall refer to the proposed amendatory Resolution described in said notice and shall specifically consent to and approve the adoption thereof, thereupon, but not otherwise, the Governing Body of the Issuer may adopt such amendatory Resolution and such Resolution shall become effective and binding upon the holders of all of the Note and Parity Obligations.

Any consent given by the holder of the Note pursuant to the provisions of this Section shall be irrevocable for a period of six months from the date of the instrument evidencing such consent and shall be conclusive and binding upon all future holders of the same Note during such period. Such consent may be revoked at any time after six months from the date of such instrument by the holder who gave such consent or by a successor in title by filing notice of such revocation with the City Clerk.

The fact and date of the execution of any instrument under the provisions of this Section may be proved by the certificate of any officer in any jurisdiction who by the laws thereof is authorized to take acknowledgments of deeds within such jurisdiction that the person signing such instrument acknowledged before him the execution thereof, or may be proved by an affidavit of a witness to such execution sworn to before such officer.

The amount and numbers of the Note held by any person executing such instrument and the date of his holding the same may be proved by an affidavit by such person or by a certificate executed by an officer of a bank or trust company showing that on the date therein mentioned such person had on deposit with such bank or trust company the Note described in such certificate.

Notwithstanding anything in this Section to the contrary, the holder or holders of 100% of the Note and Parity Obligations may consent to any amendment of this Resolution, or waive any notices required hereunder, on such terms and under such conditions as said holders shall determine to be appropriate.

Section 29. Severability. If any section, paragraph, or provision of this Resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions.

Section 30. Repeal of Conflicting Ordinances or Resolutions and Effective Date. All other Ordinances, Resolutions and orders, or parts thereof, in conflict with the provisions of this Resolution are, to the extent of such conflict, hereby repealed; and this Resolution shall be in effect from and after its adoption.

ADOPTED AND APPROVED this 15th day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

CERTIFICATE

STATE OF IOWA)
) SS
COUNTY OF BLACK HAWK)

I, the undersigned City Clerk of the City of Waterloo, State of Iowa, do hereby certify that attached is a true and complete copy of the portion of the records of the City showing proceedings of the Council, and the same is a true and complete copy of the action taken by the Council with respect to the matter at the meeting held on the date indicated in the attachment, which proceedings remain in full force and effect, and have not been amended or rescinded in any way; that meeting and all action thereat was duly and publicly held in accordance with a notice of meeting and tentative agenda, a copy of which was timely served on each member of the Council and posted on a bulletin board or other prominent place easily accessible to the public and clearly designated for that purpose at the principal office of the Council pursuant to the local rules of the Council and the provisions of Chapter 21, Code of Iowa, upon reasonable advance notice to the public and media at least twenty-four hours prior to the commencement of the meeting as required by law and with members of the public present in attendance; I further certify that the individuals named therein were on the date thereof duly and lawfully possessed of their respective City offices as indicated therein, that no Council vacancy existed except as may be stated in the proceedings, and that no controversy or litigation is pending, prayed or threatened involving the incorporation, organization, existence or boundaries of the City or the right of the individuals named therein as officers to their respective positions.

WITNESS my hand and the seal of the Council hereto affixed this _____ day of _____, 2026.

_____
Kelley Felchle, City Clerk, City of Waterloo, State of Iowa

(SEAL)

4927-9471-6078-1\11310-180

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Bridgett Wood, Finance Director
Finance Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution Appointing Paying Agent, Note Registrar, and Transfer Agent, Approving the Paying Agent and Note Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement, for the $10,300,000 General Obligation Bonds, Series 2026B.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Waterloo (181) - Authorizing Resolution 2026B GO Bonds

ITEMS TO INCLUDE ON AGENDA
FOR THE COUNCIL MEETING ON JUNE 15, 2026

CITY OF WATERLOO, IOWA

$10,300,000 General Obligation Bonds, Series 2026B

- Resolution Appointing Paying Agent, Bond Registrar, and Transfer Agent, Approving the Paying Agent and Bond Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement.
- Resolution authorizing and providing for the issuance, and levying a tax to pay the Bonds; Approval of the Tax Exemption Certificate and Continuing Disclosure Certificate.

NOTICE MUST BE GIVEN PURSUANT TO IOWA CODE CHAPTER 21 AND THE LOCAL RULES OF THE CITY.

June 15, 2026

The City Council of the City of Waterloo, State of Iowa, met in _____ session, in the Council Chambers, City Hall, 715 Mulberry Street, Waterloo, Iowa, at _____ _____.M., on the above date. There were present Mayor Dave Boesen, in the chair, and the following named Council Members:

_____

Absent: _____

Vacant: _____

* * * * * * *

Council Member _____ introduced the following resolution entitled "RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, BOND REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND BOND REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT", and moved that the resolution be adopted. Council Member _____ seconded the motion to adopt. The roll was called and the vote was,

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared said Resolution duly adopted as follows:

RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, BOND REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND BOND REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT

WHEREAS, $10,300,000 General Obligation Bonds, Series 2026B, dated June 29, 2026, have been sold and action should now be taken to provide for the maintenance of records, registration of certificates and payment of principal and interest in connection with the issuance of the Bonds; and

WHEREAS, this Council has deemed that the services offered by UMB Bank, N.A. of West Des Moines, Iowa, are necessary for compliance with rules, regulations, and requirements governing the registration, transfer and payment of registered bonds; and

WHEREAS, a Paying Agent, Bond Registrar and Transfer Agent Agreement (hereafter "Agreement") has been prepared to be entered into between the City and UMB Bank, N.A.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

1. That UMB Bank, N.A. of West Des Moines, Iowa, is hereby appointed to serve as Paying Agent, Bond Registrar and Transfer Agent in connection with the issuance of $10,300,000 General Obligation Bonds, Series 2026B, dated June 29, 2026.

2. That the Agreement with UMB Bank, N.A. of West Des Moines, Iowa, is hereby approved and that the Mayor and Clerk are authorized to sign the Agreement on behalf of the City.

PASSED AND APPROVED this 15th day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

Council Member _____ introduced the following Resolution entitled "RESOLUTION AUTHORIZING AND PROVIDING FOR THE ISSUANCE OF $10,300,000 GENERAL OBLIGATION BONDS, SERIES 2026B, AND LEVYING A TAX TO PAY SAID BONDS; APPROVAL OF THE TAX EXEMPTION CERTIFICATE AND CONTINUING DISCLOSURE CERTIFICATE" and moved that it be adopted. Council Member _____ seconded the motion to adopt, and the roll being called thereon, the vote was as follows:

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared said Resolution duly adopted as follows:

RESOLUTION AUTHORIZING AND PROVIDING FOR THE ISSUANCE OF $10,300,000 GENERAL OBLIGATION BONDS, SERIES 2026B, AND LEVYING A TAX TO PAY SAID BONDS; APPROVAL OF THE TAX EXEMPTION CERTIFICATE AND CONTINUING DISCLOSURE CERTIFICATE

WHEREAS, the Issuer is duly incorporated, organized and exists under and by virtue of the laws and Constitution of the State of Iowa; and

WHEREAS, the Issuer is in need of funds to pay costs of the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams; the acquisition of peace officer communication equipment and other emergency services communication equipment and systems; the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing; the acquiring, developing,

and improving of a geographic computer data base system suitable for automated mapping and facilities management; the rehabilitation and improvement of parks already owned, including the removal, replacement and planting of trees in the parks, and facilities, equipment, and improvements commonly found in city parks; the equipping of fire, police and street departments; the acquisition, construction, reconstruction, and improvement of all waterways, and real and personal property, useful for the protection or reclamation of property situated within the corporate limits of cities from floods or high waters, and for the protection of property in cities from the effects of flood waters, including the construction and improvement of levees, essential corporate purpose(s), and it is deemed necessary and advisable that General Obligation Bonds, to the amount of Not to Exceed $4,000,000 be authorized for said purpose(s); and

WHEREAS, pursuant to notice published as required by Section 384.25 of the Code of Iowa, this Council has held a public meeting and hearing upon the proposal to institute proceedings for the issuance of the Bonds, and the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the City is in need of funds to pay costs of the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages; the equipping of city utilities, public improvements and city buildings, including the acquisition of vehicles, general corporate purpose(s), and it is deemed necessary and advisable that General Obligation Bonds, to the amount of Not to Exceed $969,149 be authorized for said purpose(s); and

WHEREAS, the Issuer has a population of more than 5,000 but not more than 75,000, and the Bonds for these purposes do not exceed $969,149; and

WHEREAS, pursuant to notice published as required by Section 384.26 of the Code of Iowa, the Council of the City has held public meeting and hearing upon the proposal to institute proceedings for the issuance of Bonds for general corporate purpose(s) in the amounts as above set forth, and, no petition for referendum having been received, the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the City is in need of funds to pay costs of the construction, reconstruction, enlargement, improvement and equipping of city hall, recreational buildings, fire stations, police stations, downtown parking ramps, libraries and other public buildings, including security and technology upgrades; the construction, reconstruction, improvement, renovation and equipping of public works garages and facilities, general corporate purpose(s), and it is deemed necessary and advisable that General Obligation Bonds, to the amount of Not to Exceed $969,149 be authorized for said purpose(s); and

WHEREAS, the Issuer has a population of more than 5,000 but not more than 75,000, and the Bonds for these purposes do not exceed $969,149; and

WHEREAS, pursuant to notice published as required by Section 384.26 of the Code of Iowa, the Council of the City has held public meeting and hearing upon the proposal to institute proceedings for the issuance of Bonds for general corporate purpose(s) in the amounts as above set forth, and, no petition for referendum having been received, the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the City is in need of funds to pay costs of the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings, general corporate purpose(s), and it is deemed necessary and advisable that General Obligation Bonds, to the amount of Not to Exceed $969,149 be authorized for said purpose(s); and

WHEREAS, the Issuer has a population of more than 5,000 but not more than 75,000, and the Bonds for these purposes do not exceed $969,149; and

WHEREAS, pursuant to notice published as required by Section 384.26 of the Code of Iowa, the Council of the City has held public meeting and hearing upon the proposal to institute proceedings for the issuance of Bonds for general corporate purpose(s) in the amounts as above set forth, and, no petition for referendum having been received, the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the Issuer is in need of funds to pay costs of the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams, including infrastructure improvements at the South Waterloo Business Park, essential corporate purpose(s), and it is deemed necessary and advisable that General Obligation Bonds, to the amount of Not to Exceed $6,000,000 be authorized for said purpose(s); and

WHEREAS, pursuant to notice published as required by Section 384.25 of the Code of Iowa, this Council has held a public meeting and hearing upon the proposal to institute proceedings for the issuance of the Bonds, and the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, pursuant to Section 384.28 of the Code of Iowa, it is hereby found and determined that the various general obligation Bonds authorized as hereinabove described shall be combined for the purpose of issuance in a single issue of $10,300,000 General Obligation Bonds as hereinafter set forth; and

WHEREAS, pursuant to the provisions of Chapter 75 of the Code of Iowa, the above mentioned Bonds were heretofore sold at public sale and action should now be taken to issue said Bonds conforming to the terms and conditions of the best bid received at the advertised public sale.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. Definitions. The following terms shall have the following meanings in this Resolution unless the text expressly or by necessary implication requires otherwise:

- "Authorized Denominations" shall mean $5,000 or any integral multiple thereof.

- "Beneficial Owner" shall mean, whenever used with respect to a Bond, the person in whose name such Bond is recorded as the beneficial owner of such Bond by a Participant on the records of such Participant or such person's subrogee.

- "Blanket Issuer Letter of Representations" shall mean the Representation Letter from the Issuer to DTC, with respect to the Bonds.

- "Bond Fund" shall mean the fund created in Section 3 of this Resolution.

- "Bonds" shall mean $10,300,000 General Obligation Bonds, Series 2026B, authorized to be issued by this Resolution.

- "Cede & Co." shall mean Cede & Co., the nominee of DTC, and any successor nominee of DTC with respect to the Bonds.

- "Continuing Disclosure Certificate" shall mean that certain Continuing Disclosure Certificate approved under the terms of this Resolution and to be executed by the Issuer and dated the date of issuance and delivery of the Bonds, as originally executed and as it may be amended from time to time in accordance with the terms thereof.

- "Depository Bonds " shall mean the Bonds as issued in the form of one global certificate for each maturity, registered in the Registration Books maintained by the Registrar in the name of DTC or its nominee.

- "DTC" shall mean The Depository Trust Company, New York, New York, which will act as security depository for the Bond pursuant to the Representation Letter.

- "Issuer" and "City" shall mean the City of Waterloo, State of Iowa.

- "Participants" shall mean those broker-dealers, banks and other financial institutions for which DTC holds Bonds as securities depository.

- "Paying Agent" shall mean UMB Bank, N.A., or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein as Issuer's agent to provide for the payment of principal of and interest on the Bonds as the same shall become due.

• "Project" shall mean the costs of the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams; the acquisition of peace officer communication equipment and other emergency services communication equipment and systems; the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing; the acquiring, developing, and improving of a geographic computer data base system suitable for automated mapping and facilities management; the rehabilitation and improvement of parks already owned, including the removal, replacement and planting of trees in the parks, and facilities, equipment, and improvements commonly found in city parks; the equipping of fire, police and street departments; the acquisition, construction, reconstruction, and improvement of all waterways, and real and personal property, useful for the protection or reclamation of property situated within the corporate limits of cities from floods or high waters, and for the protection of property in cities from the effects of flood waters, including the construction and improvement of levees; the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages; the equipping of city utilities, public improvements and city buildings, including the acquisition of vehicles; the construction, reconstruction, enlargement, improvement and equipping of city hall, recreational buildings, fire stations, police stations, downtown parking ramps, libraries and other public buildings, including security and technology upgrades; the construction, reconstruction, improvement, renovation and equipping of public works garages and facilities; the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings; and the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams, including infrastructure improvements at the South Waterloo Business Park.

- "Project Fund" shall mean the fund required to be established by this Resolution for the deposit of the proceeds of the Bonds.

- "Rebate Fund" shall mean the fund so defined in and established pursuant to the Tax Exemption Certificate.

- "Registrar" shall mean UMB Bank, N.A. of West Des Moines, Iowa, or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein with respect to maintaining a register of the owners of the Bonds. Unless otherwise specified, the Registrar shall also act as Transfer Agent for the Bonds.

- "Resolution" shall mean this resolution authorizing the Bonds.

- "Tax Exemption Certificate" shall mean the Tax Exemption Certificate approved under the terms of this Resolution and to be executed by the Treasurer and delivered at the time of issuance and delivery of the Bonds.

- "Treasurer" shall mean the Finance Director or such other officer as shall succeed to the same duties and responsibilities with respect to the recording and payment of the Bonds issued hereunder.

Section 2. Levy and Certification of Annual Tax; Other Funds to be Used.

a) Levy of Annual Tax. That for the purpose of providing funds to pay the principal and interest of the Bonds hereinafter authorized to be issued, there is hereby levied for each future year the following direct annual tax on all of the taxable property in the City of Waterloo, State of Iowa, to-wit:

AMOUNT	FISCAL YEAR (JULY 1 TO JUNE 30) YEAR OF COLLECTION
$589,955.56	2026/2027*
$1,018,600.00	2027/2028
$1,044,000.00	2028/2029
$1,047,400.00	2029/2030
$1,044,600.00	2030/2031
$1,045,800.00	2031/2032
$1,040,800.00	2032/2033
$1,044,800.00	2033/2034
$1,047,400.00	2034/2035
$1,048,600.00	2035/2036
$1,048,400.00	2036/2037
$1,046,800.00	2037/2038
$548,800.00	2038/2039
$529,200.00	2039/2040
$509,600.00	2040/2041

*A levy in the amount of $1,448,000 has been included in the budget previously certified and a portion of said levy will be used to pay the principal and interest of the Bond coming due in fiscal year 2026/2027, with the remaining amount being used to pay principal and interest on the Taxable General Obligation Bonds, Series 2026C, and any amount leftover being utilized to pay debt service in fiscal year 2027/2028.

(NOTE: For example the levy to be made and certified against the taxable valuations of January 1, 2026 will be collected during the fiscal year commencing July 1, 2027.)

b) Resolution to be Filed With County Auditor. A certified copy of this Resolution, which amends the resolution authorizing the issuance and levying a tax for the payment thereof dated March 16, 2026 (pre-levy resolution) shall be filed with the Auditor of Black Hawk County, Iowa and the Auditor is hereby instructed in and for each of the years as provided, to levy and assess the tax hereby authorized in Section 2 of this Resolution, in like manner as other taxes are levied and assessed, and such taxes so levied in and for each of the years aforesaid be collected in like manner as other taxes of the City are collected, and when collected be used for the purpose of paying principal and interest on said Bonds issued in anticipation of the tax, and for no other purpose whatsoever.

c) Additional City Funds Available. Principal and interest coming due at any time when the proceeds of said tax on hand shall be insufficient to pay the same shall be promptly paid when due from current funds of the City available for that purpose and reimbursement shall be made from such special fund in the amounts thus advanced.

Section 3. Bond Fund. Said tax shall be assessed and collected each year at the same time and in the same manner as, and in addition to, all other taxes in and for the City, and when collected they shall be converted into a special fund within the Debt Service Fund to be known as the "2026B GENERAL OBLIGATION BOND FUND NO. 1" (the "Bond Fund"), which is hereby pledged for and shall be used only for the payment of the principal of and interest on the Bonds hereinafter authorized to be issued; and also there shall be apportioned to said fund its proportion of taxes received by the City from property that is centrally assessed by the State of Iowa.

Section 4. Application of Bond Proceeds. Proceeds of the Bonds, other than accrued interest except as may be provided below, shall be credited to the Project Fund and expended therefrom for the purposes of issuance. Any amounts on hand in the Project Fund shall be available for the payment of the principal of or interest on the Bonds at any time that other funds shall be insufficient to the purpose, in which event such funds shall be repaid to the Project Fund at the earliest opportunity. Any balance on hand in the Project Fund and not immediately required for its purposes may be invested not inconsistent with limitations provided by law or this Resolution.

Section 5. Investment of Bond Fund Proceeds. All moneys held in the Bond Fund, provided for by Section 3 of this Resolution shall be invested in investments permitted by Chapter 12B, Code of Iowa, 2025, as amended, or deposited in financial institutions which are members of the Federal Deposit Insurance Corporation and the deposits in which are insured thereby and all such deposits exceeding the maximum amount insured from time to time by FDIC or its equivalent successor in any one financial institution shall be continuously secured in compliance with Chapter 12C of the Code of Iowa, 2025, as amended, or otherwise by a valid pledge of direct obligations of the United States Government having an equivalent market value. All such interim investments shall mature before the date on which the moneys are required for payment of principal of or interest on the Bonds as herein provided.

Section 6. Bond Details, Execution and Redemption.

a) Bond Details. General Obligation Bonds of the City in the amount of $10,300,000, shall be issued pursuant to the provisions of Sections 384.25, 384.26 and 384.28 of the Code of Iowa for the aforesaid purposes. The Bonds shall be designated "GENERAL OBLIGATION BOND, SERIES 2026B", be dated June 29, 2026, and bear interest from the date thereof, until payment thereof, at the office of the Paying Agent, said interest payable on December 1, 2026, and semiannually thereafter on the 1st day of June and December in each year until maturity at the rates hereinafter provided.

The Bonds shall be executed by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of the Clerk, and impressed or printed with the seal of the City and shall be fully registered as to both principal and interest as provided in this Resolution; principal, interest and premium, if any, shall be payable at the office of the Paying Agent by mailing of a check to the registered owner of the Bond. The Bonds shall be in the denomination of $5,000 or multiples thereof. The Bonds shall mature and bear interest as follows:

Principal Amount	Interest Rate	Maturity June 1st
$210,000.00	4.000%	2027
$615,000.00	4.000%	2028
$665,000.00	4.000%	2029
$695,000.00	4.000%	2030
$720,000.00	4.000%	2031
$750,000.00	4.000%	2032
$775,000.00	4.000%	2033
$810,000.00	4.000%	2034
$845,000.00	4.000%	2035
$880,000.00	4.000%	2036
$915,000.00	4.000%	2037
$950,000.00	4.000%	2038
$490,000.00	4.000%	2039
$490,000.00	4.000%	2040
$490,000.00	4.000%	2041

b) Redemption.

i. Optional Redemption. Bonds maturing after June 1, 2034, may be called for optional redemption by the Issuer on that date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in any order of maturity and within an annual maturity by lot. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' written notice of redemption shall be given to the registered owner of the Bond. Failure to give written notice to any registered owner of the Bonds or any defect therein shall not affect the validity of any proceedings for the redemption of the Bonds. All Bonds or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment. Written notice will be deemed completed upon transmission to the owner of record.

If selection by lot within a maturity is required, the Registrar shall designate the Bonds to be redeemed by random selection of the names of the registered owners of the entire annual maturity until the total amount of Bonds to be called has been reached.

If less than all of a maturity is called for redemption, the Issuer will notify DTC of the particular amount of such maturity to be redeemed prior to maturity. DTC will determine by lot the amount of each Participant's interest in such maturity to be redeemed and each Participant will then select by lot the beneficial ownership interests in such maturity to be redeemed. All prepayments shall be at a price of par plus accrued interest.

Section 7. Issuance of Bonds in Book-Entry Form; Replacement Bonds.

a) Notwithstanding the other provisions of this Resolution regarding registration, ownership, transfer, payment and exchange of the Bonds, unless the Issuer determines to permit the exchange of Depository Bonds for Bonds in Authorized Denominations, the Bonds shall be issued as Depository Bonds in denominations of the entire principal amount of each maturity of Bonds (or, if a portion of said principal amount is prepaid, said principal amount less the prepaid amount). The Bonds must be registered in the name of Cede & Co., as nominee for DTC. Payment of semiannual interest for any Bonds registered in the name of Cede & Co. will be made by wire transfer or New York Clearing House or equivalent next day funds to the account of Cede & Co. on the interest payment date for the Bonds at the address indicated or in the Representation Letter.

b) The Bonds will be initially issued in the form of separate single authenticated fully registered bonds in the amount of each stated maturity of the Bonds. Upon initial issuance, the ownership of the Bonds will be registered in the registry books of the UMB Bank, N.A. kept by the Paying Agent and Registrar in the name of Cede & Co., as

nominee of DTC. The Paying Agent and Registrar and the Issuer may treat DTC (or its nominee) as the sole and exclusive owner of the Bonds registered in its name for the purposes of payment of the principal or redemption price of or interest on the Bonds, selecting the Bonds or portions to be redeemed, giving any notice permitted or required to be given to registered owners of Bonds under the Resolution of the Issuer, registering the transfer of Bonds, obtaining any consent or other action to be taken by registered owners of the Bonds and for other purposes. The Paying Agent, Registrar and the Issuer have no responsibility or obligation to any Participant or Beneficial Owner of the Bonds under or through DTC with respect to the accuracy of records maintained by DTC or any Participant; with respect to the payment by DTC or Participant of an amount of principal or redemption price of or interest on the Bonds; with respect to any notice given to owners of Bonds under the Resolution; with respect to the Participant(s) selected to receive payment in the event of a partial redemption of the Bonds, or a consent given or other action taken by DTC as registered owner of the Bonds. The Paying Agent and Registrar shall pay all principal of and premium, if any, and interest on the Bonds only to Cede & Co. in accordance with the Representation Letter, and all payments are valid and effective to fully satisfy and discharge the Issuer's obligations with respect to the principal of and premium, if any, and interest on the Bonds to the extent of the sum paid. DTC must receive an authenticated Bond for each separate stated maturity evidencing the obligation of the Issuer to make payments of principal of and premium, if any, and interest. Upon delivery by DTC to the Paying Agent and Registrar of written notice that DTC has determined to substitute a new nominee in place of Cede & Co., the Bonds will be transferable to the new nominee in accordance with this Section.

c) In the event the Issuer determines that it is in the best interest of the Beneficial Owners that they be able to obtain Bonds certificates, the Issuer may notify DTC and the Paying Agent and Registrar, whereupon DTC will notify the Participants, of the availability through DTC of Bonds certificates. The Bonds will be transferable in accordance with this Section. DTC may determine to discontinue providing its services with respect to the Bonds at any time by giving notice to the Issuer and the Paying Agent and Registrar and discharging its responsibilities under applicable law. In this event, the Bonds will be transferable in accordance with this Section.

d) Notwithstanding any other provision of the Resolution to the contrary, so long as any Bond is registered in the name of Cede & Co., as nominee of DTC, all payments with respect to the principal of and premium, if any, and interest on the Bond and all notices must be made and given, respectively to DTC as provided in the Representation letter.

e) In connection with any notice or other communication to be provided to Bondholders by the Issuer or the Paying Agent and Registrar with respect to a consent or other action to be taken by Bondholders, the Issuer or the Paying Agent and Registrar, as the case may be, shall establish a record date for the consent or other action and give DTC notice of the record date not less than 15 calendar days in advance of the record date to the extent possible. Notice to DTC must be given only when DTC is the sole Bondholder.

f) The Representation Letter is on file with DTC and sets forth certain matters with respect to, among other things, notices, consents and approvals by Bondholders and payments on the Bonds. The execution and delivery of the Representation Letter to DTC by the Issuer is ratified and confirmed.

g) In the event that a transfer or exchange of the Bonds is permitted under this Section, the transfer or exchange may be accomplished upon receipt by the Registrar from the registered owners of the Bonds to be transferred or exchanged and appropriate instruments of transfer. In the event Bond certificates are issued to holders other than Cede & Co., its successor as nominee for DTC as holder of all the Bonds, or other securities depository as holder of all the Bonds, the provisions of the Resolution apply to, among other things, the printing of certificates and the method or payment of principal of and interest on the certificates. Any substitute depository shall be designated in writing by the Issuer to the Paying Agent. Any such substitute depository shall be a qualified and registered "clearing agency" as provided in Section 17A of the Securities Exchange Act of 1934, as amended. The substitute depository shall provide for (i) immobilization of the Depository Bonds, (ii) registration and transfer of interests in Depository Bonds by book entries made on records of the depository or its nominee and (iii) payment of principal of, premium, if any, and interest on the Bonds in accordance with and as such interests may appear with respect to such book entries.

h) The officers of the Issuer are authorized and directed to prepare and furnish to the purchaser, and to the attorneys approving the legality of Bonds, certified copies of proceedings, ordinances, resolutions and records and all certificates and affidavits and other instruments as may be required to evidence the legality and marketability of the Bonds, and all certified copies, certificates, affidavits and other instruments constitute representations of the Issuer as to the correctness of all stated or recited facts.

Section 8. Registration of Bonds; Appointment of Registrar; Transfer; Ownership; Delivery; and Cancellation.

a) Registration. The ownership of Bonds may be transferred only by the making of an entry upon the books kept for the registration and transfer of ownership of the Bonds, and in no other way. UMB Bank, N.A. is hereby appointed as Bond Registrar under the terms of this Resolution and under the provisions of a separate agreement with the Issuer filed herewith which is made a part hereof by this reference. Registrar shall maintain the books of the Issuer for the registration of ownership of the Bonds for the payment of principal of and interest on the Bonds as provided in this Resolution. All Bonds shall be negotiable as provided in Article 8 of the Uniform Commercial Code and Section 384.31 of the Code of Iowa, subject to the provisions for registration and transfer contained in the Bonds and in this Resolution.

b) Transfer. The ownership of any Bond may be transferred only upon the Registration Books kept for the registration and transfer of Bonds and only upon surrender thereof at the office of the Registrar together with an assignment duly executed by the holder or his duly authorized attorney in fact in such form as shall be satisfactory to the Registrar, along with the address and social security number or federal employer

identification number of such transferee (or, if registration is to be made in the name of multiple individuals, of all such transferees). In the event that the address of the registered owner of a Bond (other than a registered owner which is the nominee of the broker or dealer in question) is that of a broker or dealer, there must be disclosed on the Registration Books the information pertaining to the registered owner required above. Upon the transfer of any such Bond, a new fully registered Bond, of any denomination or denominations permitted by this Resolution in aggregate principal amount equal to the unmatured and unredeemed principal amount of such transferred fully registered Bond, and bearing interest at the same rate and maturing on the same date or dates shall be delivered by the Registrar.

c) Registration of Transferred Bonds. In all cases of the transfer of the Bonds, the Registrar shall register, at the earliest practicable time, on the Registration Books, the Bonds, in accordance with the provisions of this Resolution.

d) Ownership. As to any Bond, the person in whose name the ownership of the same shall be registered on the Registration Books of the Registrar shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of or on account of the principal of any such Bonds and the premium, if any, and interest thereon shall be made only to or upon the order of the registered owner thereof or his legal representative. All such payments shall be valid and effectual to satisfy and discharge the liability upon such Bond, including the interest thereon, to the extent of the sum or sums so paid.

e) Cancellation. All Bonds which have been redeemed shall not be reissued but shall be cancelled by the Registrar. All Bonds which are cancelled by the Registrar shall be destroyed and a certificate of the destruction thereof shall be furnished promptly to the Issuer; provided that if the Issuer shall so direct, the Registrar shall forward the cancelled Bonds to the Issuer.

f) Non-Presentment of Bonds. In the event any payment check, wire, or electronic transfer of funds representing payment of principal of or interest on the Bonds is returned to the Paying Agent or if any bond is not presented for payment of principal at the maturity or redemption date, if funds sufficient to pay such principal of or interest on Bonds shall have been made available to the Paying Agent for the benefit of the owner thereof, all liability of the Issuer to the owner thereof for such interest or payment of such Bonds shall forthwith cease, terminate and be completely discharged, and thereupon it shall be the duty of the Paying Agent to hold such funds, without liability for interest thereon, for the benefit of the owner of such Bonds who shall thereafter be restricted exclusively to such funds for any claim of whatever nature on his part under this Resolution or on, or with respect to, such interest or Bonds. The Paying Agent's obligation to hold such funds shall continue for a period equal to two years and six months following the date on which such interest or principal became due, whether at maturity, or at the date fixed for redemption thereof, or otherwise, at which time the Paying Agent shall surrender any remaining funds so held to the Issuer, whereupon any claim under this Resolution by the Owners of such interest or Bonds of whatever nature shall be made upon the Issuer.

g) Registration and Transfer Fees. The Registrar may furnish to each owner, at the Issuer's expense, one bond for each annual maturity. The Registrar shall furnish additional Bonds in lesser denominations (but not less than the minimum denomination) to an owner who so requests.

Section 9. Reissuance of Mutilated, Destroyed, Stolen or Lost Bonds. In case any outstanding Bond shall become mutilated or be destroyed, stolen or lost, the Issuer shall at the request of Registrar authenticate and deliver a new Bond of like tenor and amount as the Bond so mutilated, destroyed, stolen or lost, in exchange and substitution for such mutilated Bond to Registrar, upon surrender of such mutilated Bond, or in lieu of and substitution for the Bond destroyed, stolen or lost, upon filing with the Registrar evidence satisfactory to the Registrar and Issuer that such Bond has been destroyed, stolen or lost and proof of ownership thereof, and upon furnishing the Registrar and Issuer with satisfactory indemnity and complying with such other reasonable regulations as the Issuer or its agent may prescribe and paying such expenses as the Issuer may incur in connection therewith.

Section 10. Record Date. Payments of principal and interest, otherwise than upon full redemption, made in respect of any Bond, shall be made to the registered holder thereof or to their designated agent as the same appear on the books of the Registrar on the 15th day of the month preceding the payment date. All such payments shall fully discharge the obligations of the Issuer in respect of such Bonds to the extent of the payments so made. Upon receipt of the final payment of principal, the holder of the Bond shall surrender the Bond to the Paying Agent.

Section 11. Execution, Authentication and Delivery of the Bonds. Upon the adoption of this Resolution, the Mayor and Clerk shall execute the Bonds by their manual or authorized signature and deliver the Bonds to the Registrar, who shall authenticate the Bonds and deliver the same to or upon order of the Purchaser. No Bond shall be valid or obligatory for any purpose or shall be entitled to any right or benefit hereunder unless the Registrar shall duly endorse and execute on such Bond a Certificate of Authentication substantially in the form of the Certificate herein set forth. Such Certificate upon any Bond executed on behalf of the Issuer shall be conclusive evidence that the Bond so authenticated has been duly issued under this Resolution and that the holder thereof is entitled to the benefits of this Resolution.

No Bonds shall be authenticated and delivered by the Registrar unless and until there shall have been provided the following:

1. A certified copy of the Resolution of Issuer authorizing the issuance of the Bonds;

2. A written order of Issuer signed by the Treasurer of the Issuer directing the authentication and delivery of the Bonds to or upon the order of the Purchaser upon payment of the purchase price as set forth therein;

3. The approving opinion of Ahlers & Cooney, P.C., Bond Counsel, concerning the validity and legality of all the Bonds proposed to be issued.

Section 12. Right to Name Substitute Paying Agent or Registrar. Issuer reserves the right to name a substitute, successor Registrar or Paying Agent upon giving prompt written notice to each registered bondholder.

Section 13. Form of Bond. Bonds shall be printed substantially in the form as follows:

"STATE OF IOWA"
"COUNTY OF BLACK HAWK"
"CITY OF WATERLOO"
"GENERAL OBLIGATION BOND"
"SERIES 2026B"
CORPORATE PURPOSE

Rate: _____
Maturity: _____
Bond Date: June 29, 2026
CUSIP No.: _____
"Registered"
Certificate No. _____
Principal Amount: $_____

The City of Waterloo, State of Iowa, a municipal corporation organized and existing under and by virtue of the Constitution and laws of the State of Iowa (the "Issuer"), for value received, promises to pay from the source and as hereinafter provided, on the maturity date indicated above, to

(Registration panel to be completed by Registrar or Printer with name of Registered Owner).

or registered assigns, the principal sum of (enter principal amount in long form) THOUSAND DOLLARS in lawful money of the United States of America, on the maturity date shown above, only upon presentation and surrender hereof at the office of UMB Bank, N.A., Paying Agent of this issue, or its successor, with interest on the sum from the date hereof until paid at the rate per annum specified above, payable on December 1, 2026, and semiannually thereafter on the 1st day of June and December in each year.

Interest and principal shall be paid to the registered holder of the Bond as shown on the records of ownership maintained by the Registrar as of the 15th day of the month preceding such interest payment date. Interest shall be computed on the basis of a 360-day year of twelve 30-day months.

This Bond is issued pursuant to the provisions of Sections 384.25, 384.26 and 384.28 of the Code of Iowa, for the purpose of paying costs of the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control

devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams; the acquisition of peace officer communication equipment and other emergency services communication equipment and systems; the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing; the acquiring, developing, and improving of a geographic computer data base system suitable for automated mapping and facilities management; the rehabilitation and improvement of parks already owned, including the removal, replacement and planting of trees in the parks, and facilities, equipment, and improvements commonly found in city parks; the equipping of fire, police and street departments; the acquisition, construction, reconstruction, and improvement of all waterways, and real and personal property, useful for the protection or reclamation of property situated within the corporate limits of cities from floods or high waters, and for the protection of property in cities from the effects of flood waters, including the construction and improvement of levees; the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages; the equipping of city utilities, public improvements and city buildings, including the acquisition of vehicles; the construction, reconstruction, enlargement, improvement and equipping of city hall, recreational buildings, fire stations, police stations, downtown parking ramps, libraries and other public buildings, including security and technology upgrades; the construction, reconstruction, improvement, renovation and equipping of public works garages and facilities; the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings; and the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams, including infrastructure improvements at the South Waterloo Business Park, in conformity to a Resolution of the Council of said City duly passed and approved.

Unless this certificate is presented by an authorized representative of The Depository Trust Company, a limited purpose trust company ("DTC"), to the Issuer or its agent for registration of transfer, exchange or payment, and any certificate issued is registered in the name of Cede & Co. or such other name as requested by an authorized representative of DTC (and any

payment is made to Cede & Co. or to such other Issuer as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

Bonds maturing after June 1, 2034, may be called for optional redemption by the Issuer and paid before maturity on said date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in any order of maturity and within an annual maturity by lot. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' written notice of redemption shall be given to the registered owner of the Bond. Failure to give written notice to any registered owner of the Bonds or any defect therein shall not affect the validity of any proceedings for the redemption of the Bonds. All bonds or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment. Written notice will be deemed completed upon transmission to the owner of record.

If selection by lot within a maturity is required, the Registrar shall designate the Bonds to be redeemed by random selection of the names of the registered owners of the entire annual maturity until the total amount of Bonds to be called has been reached.

If less than all of a maturity is called for redemption, the Issuer will notify DTC of the particular amount of such maturity to be redeemed prior to maturity. DTC will determine by lot the amount of each Participant's interest in such maturity to be redeemed and each Participant will then select by lot the beneficial ownership interests in such maturity to be redeemed. All prepayments shall be at a price of par plus accrued interest.

Ownership of this Bond may be transferred only by transfer upon the books kept for such purpose by UMB Bank, N.A., the Registrar. Such transfer on the books shall occur only upon presentation and surrender of this Bond at the office of the Registrar as designated below, together with an assignment duly executed by the owner hereof or his duly authorized attorney in the form as shall be satisfactory to the Registrar. Issuer reserves the right to substitute the Registrar and Paying Agent but shall, however, promptly give notice to registered Bondholders of such change. All bonds shall be negotiable as provided in Article 8 of the Uniform Commercial Code and Section 384.31 of the Code of Iowa, subject to the provisions for registration and transfer contained in the Bond Resolution.

And it is hereby represented and certified that all acts, conditions and things requisite, according to the laws and Constitution of the State of Iowa, to exist, to be had, to be done, or to be performed precedent to the lawful issue of this Bond, have been existent, had, done and performed as required by law; that provision has been made for the levy of a sufficient continuing annual tax on all the taxable property within the territory of the Issuer for the payment of the principal and interest of this Bond as the same will respectively become due; that such taxes have been irrevocably pledged for the prompt payment hereof, both principal and interest; and the total indebtedness of the Issuer including this Bond, does not exceed the constitutional or statutory limitations.

IN TESTIMONY WHEREOF, the Issuer by its Council, has caused this Bond to be signed by the manual or facsimile signature of its Mayor and attested by the manual or facsimile signature of its City Clerk, with the seal of the City printed or impressed hereon, and to be authenticated by the manual signature of an authorized representative of the Registrar, UMB Bank, N.A., West Des Moines, Iowa.

Date of authentication:_____
This is one of the Bonds described in the within mentioned Resolution, as registered by UMB Bank, N.A.

UMB BANK, N.A., Registrar

By: _____
Authorized Signature

Registrar and Transfer Agent: UMB Bank, N.A.
Paying Agent: UMB Bank, N.A.

SEE REVERSE FOR CERTAIN DEFINITIONS

(Seal)
(Signature Block)

CITY OF WATERLOO, STATE OF IOWA

By: _____(manual or facsimile signature)_____
Mayor

ATTEST:

By: _____(manual or facsimile signature)_____
City Clerk

(Information Required for Registration)

ASSIGNMENT

For value received, the undersigned hereby sells, assigns and transfers unto _____ (Social Security or Tax Identification No. _____) the within Bond and does hereby irrevocably constitute and appoint _____ attorney in fact to transfer the said Bond on the books kept for registration of the within Bond, with full power of substitution in the premises.

Dated: _____

_____

_____
(Person(s) executing this Assignment sign(s) here)

SIGNATURE)
GUARANTEED)_____

IMPORTANT - READ CAREFULLY

The signature(s) to this Power must correspond with the name(s) as written upon the face of the certificate(s) or bond(s) in every particular without alteration or enlargement or any change whatever. Signature guarantee must be provided in accordance with the prevailing standards and procedures of the Registrar and Transfer Agent. Such standards and procedures may require signature to be guaranteed by certain eligible guarantor institutions that participate in a recognized signature guarantee program.

INFORMATION REQUIRED FOR REGISTRATION OF TRANSFER

Name of Transferee(s) _____
Address of Transferee(s) _____
Social Security or Tax Identification
Number of Transferee(s) _____
Transferee is a(n):

Individual*	_____	Corporation	_____
Partnership	_____	Trust	_____

*If the Bond is to be registered in the names of multiple individual owners, the names of all such owners and one address and social security number must be provided.

The following abbreviations, when used in the inscription on the face of this Bond, shall be construed as though written out in full according to applicable laws or regulations:

TEN COM - as tenants in common
TEN ENT - as tenants by the entireties
JT TEN - as joint tenants with rights of survivorship and not as tenants in common

IA UNIF TRANS MIN ACT - ..... Custodian .....
(Cust) (Minor)
Under Iowa Uniform Transfers to Minors Act.....
(State)

ADDITIONAL ABBREVIATIONS MAY
ALSO BE USED THOUGH NOT IN THE ABOVE LIST

(End of form of Bond)

Section 14. Closing Documents. The Mayor and City Clerk are authorized and directed to execute, attest, seal and deliver for and on behalf of the City any other additional certificates, documents, or other papers and perform all other acts, including without limitation the execution of all closing documents, as they may deem necessary or appropriate in order to implement and carry out the intent and purposes of this Resolution.

Section 15. Contract Between Issuer and Purchaser. This Resolution constitutes a contract between said City and the purchaser of the Bonds.

Section 16. Non-Arbitrage Covenants. The Issuer reasonably expects and covenants that no use will be made of the proceeds from the issuance and sale of the Bonds issued hereunder which will cause any of the Bonds to be classified as arbitrage bonds within the meaning of Sections 148(a) and (b) of the Internal Revenue Code of the United States, as amended, and that throughout the term of the Bonds it will comply with the requirements of statutes and regulations issued thereunder.

To the best knowledge and belief of the Issuer, there are no facts or circumstances that would materially change the foregoing statements or the conclusion that it is not expected that the proceeds of the Bonds will be used in a manner that would cause the Bonds to be arbitrage bonds.

Section 17. Approval of Tax Exemption Certificate. Attached hereto is a form of Tax Exemption Certificate stating the Issuer's reasonable expectations as to the use of the proceeds of the Bonds. The form of Tax Exemption Certificate is approved. The Issuer hereby agrees to comply with the provisions of the Tax Exemption Certificate and the provisions of the Tax Exemption Certificate are hereby incorporated by reference as part of this Resolution. The Finance Director is hereby directed to make and insert all calculations and determinations necessary to complete the Tax Exemption Certificate at issuance of the Bonds to certify as to the reasonable expectations and covenants of the Issuer at that date.

Section 18. Continuing Disclosure. The Issuer hereby covenants and agrees that it will comply with and carry out all of the provisions of the Continuing Disclosure Certificate, and the provisions of the Continuing Disclosure Certificate are hereby incorporated by reference as part of this Resolution and made a part hereof. Notwithstanding any other provision of this Resolution, failure of the Issuer to comply with the Continuing Disclosure Certificate shall not be considered an event of default under this Resolution; however, any holder of the Bonds or

Beneficial Owner may take such actions as may be necessary and appropriate, including seeking specific performance by court order, to cause the Issuer to comply with its obligations under the Continuing Disclosure Certificate. For purposes of this section, "Beneficial Owner" means any person which (a) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bond (including persons holding Bonds through nominees, depositories or other intermediaries), or (b) is treated as the owner of any Bonds for federal income tax purposes.

Section 19. Additional Covenants, Representations and Warranties of the Issuer. The Issuer certifies and covenants with the purchasers and holders of the Bonds from time to time outstanding that the Issuer through its officers, (a) will make such further specific covenants, representations and assurances as may be necessary or advisable; (b) comply with all representations, covenants and assurances contained in the Tax Exemption Certificate, which Tax Exemption Certificate shall constitute a part of the contract between the Issuer and the owners of the Bonds;(c) consult with Bond Counsel (as defined in the Tax Exemption Certificate); (d) pay to the United States, as necessary, such sums of money representing required rebates of excess arbitrage profits relating to the Bonds;(e) file such forms, statements and supporting documents as may be required and in a timely manner; and (f) if deemed necessary or advisable by its officers, to employ and pay fiscal agents, financial advisors, attorneys and other persons to assist the Issuer in such compliance.

Section 20. Amendment of Resolution to Maintain Tax Exemption. This Resolution may be amended without the consent of any owner of the Bonds if, in the opinion of Bond Counsel, such amendment is necessary to maintain tax exemption with respect to the Bonds under applicable Federal law or regulations.

Section 21. Repeal of Conflicting Resolutions or Ordinances. All ordinances and resolutions and parts of ordinances and resolutions in conflict herewith are hereby repealed.

Section 22. Severability Clause. If any section, paragraph, clause or provision of this Resolution be held invalid, such invalidity shall not affect any of the remaining provisions hereof, and this Resolution shall become effective immediately upon its passage and approval.

PASSED AND APPROVED this 15th day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

CERTIFICATE

STATE OF IOWA)
) SS
COUNTY OF BLACK HAWK)

I, the undersigned City Clerk of the City of Waterloo, State of Iowa, do hereby certify that attached is a true and complete copy of the portion of the records of the City showing proceedings of the Council, and the same is a true and complete copy of the action taken by the Council with respect to the matter at the meeting held on the date indicated in the attachment, which proceedings remain in full force and effect, and have not been amended or rescinded in any way; that meeting and all action thereat was duly and publicly held in accordance with a notice of meeting and tentative agenda, a copy of which was timely served on each member of the Council and posted on a bulletin board or other prominent place easily accessible to the public and clearly designated for that purpose at the principal office of the Council pursuant to the local rules of the Council and the provisions of Chapter 21, Code of Iowa, upon reasonable advance notice to the public and media at least twenty-four hours prior to the commencement of the meeting as required by law and with members of the public present in attendance; I further certify that the individuals named therein were on the date thereof duly and lawfully possessed of their respective City offices as indicated therein, that no Council vacancy existed except as may be stated in the proceedings, and that no controversy or litigation is pending, prayed or threatened involving the incorporation, organization, existence or boundaries of the City or the right of the individuals named therein as officers to their respective positions.

WITNESS my hand and the seal of the Council hereto affixed this _____ day of _____, 2026.

_____
Kelley Felchle, City Clerk, City of Waterloo, State of Iowa

(SEAL)

4922-9376-7345-1\11310-181

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Bridgett Wood, Finance Director
Finance Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution authorizing and providing for the issuance, and levying a tax to pay the $10,300,000 General Obligation Bonds, Series 2026B and approval of the Tax Exemption Certificate and Continuing Disclosure Certificate.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Waterloo (181) - Authorizing Resolution 2026B GO Bonds

ITEMS TO INCLUDE ON AGENDA
FOR THE COUNCIL MEETING ON JUNE 15, 2026

CITY OF WATERLOO, IOWA

$10,300,000 General Obligation Bonds, Series 2026B

- Resolution Appointing Paying Agent, Bond Registrar, and Transfer Agent, Approving the Paying Agent and Bond Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement.
- Resolution authorizing and providing for the issuance, and levying a tax to pay the Bonds; Approval of the Tax Exemption Certificate and Continuing Disclosure Certificate.

NOTICE MUST BE GIVEN PURSUANT TO IOWA CODE CHAPTER 21 AND THE LOCAL RULES OF THE CITY.

June 15, 2026

The City Council of the City of Waterloo, State of Iowa, met in _____ session, in the Council Chambers, City Hall, 715 Mulberry Street, Waterloo, Iowa, at _____ _____.M., on the above date. There were present Mayor Dave Boesen, in the chair, and the following named Council Members:

_____

Absent: _____

Vacant: _____

* * * * * * *

Council Member _____ introduced the following resolution entitled "RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, BOND REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND BOND REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT", and moved that the resolution be adopted. Council Member _____ seconded the motion to adopt. The roll was called and the vote was,

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared said Resolution duly adopted as follows:

RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, BOND REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND BOND REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT

WHEREAS, $10,300,000 General Obligation Bonds, Series 2026B, dated June 29, 2026, have been sold and action should now be taken to provide for the maintenance of records, registration of certificates and payment of principal and interest in connection with the issuance of the Bonds; and

WHEREAS, this Council has deemed that the services offered by UMB Bank, N.A. of West Des Moines, Iowa, are necessary for compliance with rules, regulations, and requirements governing the registration, transfer and payment of registered bonds; and

WHEREAS, a Paying Agent, Bond Registrar and Transfer Agent Agreement (hereafter "Agreement") has been prepared to be entered into between the City and UMB Bank, N.A.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

1. That UMB Bank, N.A. of West Des Moines, Iowa, is hereby appointed to serve as Paying Agent, Bond Registrar and Transfer Agent in connection with the issuance of $10,300,000 General Obligation Bonds, Series 2026B, dated June 29, 2026.

2. That the Agreement with UMB Bank, N.A. of West Des Moines, Iowa, is hereby approved and that the Mayor and Clerk are authorized to sign the Agreement on behalf of the City.

PASSED AND APPROVED this 15th day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

Council Member _____ introduced the following Resolution entitled "RESOLUTION AUTHORIZING AND PROVIDING FOR THE ISSUANCE OF $10,300,000 GENERAL OBLIGATION BONDS, SERIES 2026B, AND LEVYING A TAX TO PAY SAID BONDS; APPROVAL OF THE TAX EXEMPTION CERTIFICATE AND CONTINUING DISCLOSURE CERTIFICATE" and moved that it be adopted. Council Member _____ seconded the motion to adopt, and the roll being called thereon, the vote was as follows:

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared said Resolution duly adopted as follows:

RESOLUTION AUTHORIZING AND PROVIDING FOR THE ISSUANCE OF $10,300,000 GENERAL OBLIGATION BONDS, SERIES 2026B, AND LEVYING A TAX TO PAY SAID BONDS; APPROVAL OF THE TAX EXEMPTION CERTIFICATE AND CONTINUING DISCLOSURE CERTIFICATE

WHEREAS, the Issuer is duly incorporated, organized and exists under and by virtue of the laws and Constitution of the State of Iowa; and

WHEREAS, the Issuer is in need of funds to pay costs of the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams; the acquisition of peace officer communication equipment and other emergency services communication equipment and systems; the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing; the acquiring, developing,

and improving of a geographic computer data base system suitable for automated mapping and facilities management; the rehabilitation and improvement of parks already owned, including the removal, replacement and planting of trees in the parks, and facilities, equipment, and improvements commonly found in city parks; the equipping of fire, police and street departments; the acquisition, construction, reconstruction, and improvement of all waterways, and real and personal property, useful for the protection or reclamation of property situated within the corporate limits of cities from floods or high waters, and for the protection of property in cities from the effects of flood waters, including the construction and improvement of levees, essential corporate purpose(s), and it is deemed necessary and advisable that General Obligation Bonds, to the amount of Not to Exceed $4,000,000 be authorized for said purpose(s); and

WHEREAS, pursuant to notice published as required by Section 384.25 of the Code of Iowa, this Council has held a public meeting and hearing upon the proposal to institute proceedings for the issuance of the Bonds, and the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the City is in need of funds to pay costs of the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages; the equipping of city utilities, public improvements and city buildings, including the acquisition of vehicles, general corporate purpose(s), and it is deemed necessary and advisable that General Obligation Bonds, to the amount of Not to Exceed $969,149 be authorized for said purpose(s); and

WHEREAS, the Issuer has a population of more than 5,000 but not more than 75,000, and the Bonds for these purposes do not exceed $969,149; and

WHEREAS, pursuant to notice published as required by Section 384.26 of the Code of Iowa, the Council of the City has held public meeting and hearing upon the proposal to institute proceedings for the issuance of Bonds for general corporate purpose(s) in the amounts as above set forth, and, no petition for referendum having been received, the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the City is in need of funds to pay costs of the construction, reconstruction, enlargement, improvement and equipping of city hall, recreational buildings, fire stations, police stations, downtown parking ramps, libraries and other public buildings, including security and technology upgrades; the construction, reconstruction, improvement, renovation and equipping of public works garages and facilities, general corporate purpose(s), and it is deemed necessary and advisable that General Obligation Bonds, to the amount of Not to Exceed $969,149 be authorized for said purpose(s); and

WHEREAS, the Issuer has a population of more than 5,000 but not more than 75,000, and the Bonds for these purposes do not exceed $969,149; and

WHEREAS, pursuant to notice published as required by Section 384.26 of the Code of Iowa, the Council of the City has held public meeting and hearing upon the proposal to institute proceedings for the issuance of Bonds for general corporate purpose(s) in the amounts as above set forth, and, no petition for referendum having been received, the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the City is in need of funds to pay costs of the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings, general corporate purpose(s), and it is deemed necessary and advisable that General Obligation Bonds, to the amount of Not to Exceed $969,149 be authorized for said purpose(s); and

WHEREAS, the Issuer has a population of more than 5,000 but not more than 75,000, and the Bonds for these purposes do not exceed $969,149; and

WHEREAS, pursuant to notice published as required by Section 384.26 of the Code of Iowa, the Council of the City has held public meeting and hearing upon the proposal to institute proceedings for the issuance of Bonds for general corporate purpose(s) in the amounts as above set forth, and, no petition for referendum having been received, the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the Issuer is in need of funds to pay costs of the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams, including infrastructure improvements at the South Waterloo Business Park, essential corporate purpose(s), and it is deemed necessary and advisable that General Obligation Bonds, to the amount of Not to Exceed $6,000,000 be authorized for said purpose(s); and

WHEREAS, pursuant to notice published as required by Section 384.25 of the Code of Iowa, this Council has held a public meeting and hearing upon the proposal to institute proceedings for the issuance of the Bonds, and the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, pursuant to Section 384.28 of the Code of Iowa, it is hereby found and determined that the various general obligation Bonds authorized as hereinabove described shall be combined for the purpose of issuance in a single issue of $10,300,000 General Obligation Bonds as hereinafter set forth; and

WHEREAS, pursuant to the provisions of Chapter 75 of the Code of Iowa, the above mentioned Bonds were heretofore sold at public sale and action should now be taken to issue said Bonds conforming to the terms and conditions of the best bid received at the advertised public sale.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. Definitions. The following terms shall have the following meanings in this Resolution unless the text expressly or by necessary implication requires otherwise:

- "Authorized Denominations" shall mean $5,000 or any integral multiple thereof.

- "Beneficial Owner" shall mean, whenever used with respect to a Bond, the person in whose name such Bond is recorded as the beneficial owner of such Bond by a Participant on the records of such Participant or such person's subrogee.

- "Blanket Issuer Letter of Representations" shall mean the Representation Letter from the Issuer to DTC, with respect to the Bonds.

- "Bond Fund" shall mean the fund created in Section 3 of this Resolution.

- "Bonds" shall mean $10,300,000 General Obligation Bonds, Series 2026B, authorized to be issued by this Resolution.

- "Cede & Co." shall mean Cede & Co., the nominee of DTC, and any successor nominee of DTC with respect to the Bonds.

- "Continuing Disclosure Certificate" shall mean that certain Continuing Disclosure Certificate approved under the terms of this Resolution and to be executed by the Issuer and dated the date of issuance and delivery of the Bonds, as originally executed and as it may be amended from time to time in accordance with the terms thereof.

- "Depository Bonds " shall mean the Bonds as issued in the form of one global certificate for each maturity, registered in the Registration Books maintained by the Registrar in the name of DTC or its nominee.

- "DTC" shall mean The Depository Trust Company, New York, New York, which will act as security depository for the Bond pursuant to the Representation Letter.

- "Issuer" and "City" shall mean the City of Waterloo, State of Iowa.

- "Participants" shall mean those broker-dealers, banks and other financial institutions for which DTC holds Bonds as securities depository.

- "Paying Agent" shall mean UMB Bank, N.A., or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein as Issuer's agent to provide for the payment of principal of and interest on the Bonds as the same shall become due.

• "Project" shall mean the costs of the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams; the acquisition of peace officer communication equipment and other emergency services communication equipment and systems; the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing; the acquiring, developing, and improving of a geographic computer data base system suitable for automated mapping and facilities management; the rehabilitation and improvement of parks already owned, including the removal, replacement and planting of trees in the parks, and facilities, equipment, and improvements commonly found in city parks; the equipping of fire, police and street departments; the acquisition, construction, reconstruction, and improvement of all waterways, and real and personal property, useful for the protection or reclamation of property situated within the corporate limits of cities from floods or high waters, and for the protection of property in cities from the effects of flood waters, including the construction and improvement of levees; the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages; the equipping of city utilities, public improvements and city buildings, including the acquisition of vehicles; the construction, reconstruction, enlargement, improvement and equipping of city hall, recreational buildings, fire stations, police stations, downtown parking ramps, libraries and other public buildings, including security and technology upgrades; the construction, reconstruction, improvement, renovation and equipping of public works garages and facilities; the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings; and the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams, including infrastructure improvements at the South Waterloo Business Park.

- "Project Fund" shall mean the fund required to be established by this Resolution for the deposit of the proceeds of the Bonds.

- "Rebate Fund" shall mean the fund so defined in and established pursuant to the Tax Exemption Certificate.

- "Registrar" shall mean UMB Bank, N.A. of West Des Moines, Iowa, or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein with respect to maintaining a register of the owners of the Bonds. Unless otherwise specified, the Registrar shall also act as Transfer Agent for the Bonds.

- "Resolution" shall mean this resolution authorizing the Bonds.

- "Tax Exemption Certificate" shall mean the Tax Exemption Certificate approved under the terms of this Resolution and to be executed by the Treasurer and delivered at the time of issuance and delivery of the Bonds.

- "Treasurer" shall mean the Finance Director or such other officer as shall succeed to the same duties and responsibilities with respect to the recording and payment of the Bonds issued hereunder.

Section 2. Levy and Certification of Annual Tax; Other Funds to be Used.

a) Levy of Annual Tax. That for the purpose of providing funds to pay the principal and interest of the Bonds hereinafter authorized to be issued, there is hereby levied for each future year the following direct annual tax on all of the taxable property in the City of Waterloo, State of Iowa, to-wit:

AMOUNT	FISCAL YEAR (JULY 1 TO JUNE 30) YEAR OF COLLECTION
$589,955.56	2026/2027*
$1,018,600.00	2027/2028
$1,044,000.00	2028/2029
$1,047,400.00	2029/2030
$1,044,600.00	2030/2031
$1,045,800.00	2031/2032
$1,040,800.00	2032/2033
$1,044,800.00	2033/2034
$1,047,400.00	2034/2035
$1,048,600.00	2035/2036
$1,048,400.00	2036/2037
$1,046,800.00	2037/2038
$548,800.00	2038/2039
$529,200.00	2039/2040
$509,600.00	2040/2041

*A levy in the amount of $1,448,000 has been included in the budget previously certified and a portion of said levy will be used to pay the principal and interest of the Bond coming due in fiscal year 2026/2027, with the remaining amount being used to pay principal and interest on the Taxable General Obligation Bonds, Series 2026C, and any amount leftover being utilized to pay debt service in fiscal year 2027/2028.

(NOTE: For example the levy to be made and certified against the taxable valuations of January 1, 2026 will be collected during the fiscal year commencing July 1, 2027.)

b) Resolution to be Filed With County Auditor. A certified copy of this Resolution, which amends the resolution authorizing the issuance and levying a tax for the payment thereof dated March 16, 2026 (pre-levy resolution) shall be filed with the Auditor of Black Hawk County, Iowa and the Auditor is hereby instructed in and for each of the years as provided, to levy and assess the tax hereby authorized in Section 2 of this Resolution, in like manner as other taxes are levied and assessed, and such taxes so levied in and for each of the years aforesaid be collected in like manner as other taxes of the City are collected, and when collected be used for the purpose of paying principal and interest on said Bonds issued in anticipation of the tax, and for no other purpose whatsoever.

c) Additional City Funds Available. Principal and interest coming due at any time when the proceeds of said tax on hand shall be insufficient to pay the same shall be promptly paid when due from current funds of the City available for that purpose and reimbursement shall be made from such special fund in the amounts thus advanced.

Section 3. Bond Fund. Said tax shall be assessed and collected each year at the same time and in the same manner as, and in addition to, all other taxes in and for the City, and when collected they shall be converted into a special fund within the Debt Service Fund to be known as the "2026B GENERAL OBLIGATION BOND FUND NO. 1" (the "Bond Fund"), which is hereby pledged for and shall be used only for the payment of the principal of and interest on the Bonds hereinafter authorized to be issued; and also there shall be apportioned to said fund its proportion of taxes received by the City from property that is centrally assessed by the State of Iowa.

Section 4. Application of Bond Proceeds. Proceeds of the Bonds, other than accrued interest except as may be provided below, shall be credited to the Project Fund and expended therefrom for the purposes of issuance. Any amounts on hand in the Project Fund shall be available for the payment of the principal of or interest on the Bonds at any time that other funds shall be insufficient to the purpose, in which event such funds shall be repaid to the Project Fund at the earliest opportunity. Any balance on hand in the Project Fund and not immediately required for its purposes may be invested not inconsistent with limitations provided by law or this Resolution.

Section 5. Investment of Bond Fund Proceeds. All moneys held in the Bond Fund, provided for by Section 3 of this Resolution shall be invested in investments permitted by Chapter 12B, Code of Iowa, 2025, as amended, or deposited in financial institutions which are members of the Federal Deposit Insurance Corporation and the deposits in which are insured thereby and all such deposits exceeding the maximum amount insured from time to time by FDIC or its equivalent successor in any one financial institution shall be continuously secured in compliance with Chapter 12C of the Code of Iowa, 2025, as amended, or otherwise by a valid pledge of direct obligations of the United States Government having an equivalent market value. All such interim investments shall mature before the date on which the moneys are required for payment of principal of or interest on the Bonds as herein provided.

Section 6. Bond Details, Execution and Redemption.

a) Bond Details. General Obligation Bonds of the City in the amount of $10,300,000, shall be issued pursuant to the provisions of Sections 384.25, 384.26 and 384.28 of the Code of Iowa for the aforesaid purposes. The Bonds shall be designated "GENERAL OBLIGATION BOND, SERIES 2026B", be dated June 29, 2026, and bear interest from the date thereof, until payment thereof, at the office of the Paying Agent, said interest payable on December 1, 2026, and semiannually thereafter on the 1st day of June and December in each year until maturity at the rates hereinafter provided.

The Bonds shall be executed by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of the Clerk, and impressed or printed with the seal of the City and shall be fully registered as to both principal and interest as provided in this Resolution; principal, interest and premium, if any, shall be payable at the office of the Paying Agent by mailing of a check to the registered owner of the Bond. The Bonds shall be in the denomination of $5,000 or multiples thereof. The Bonds shall mature and bear interest as follows:

Principal Amount	Interest Rate	Maturity June 1st
$210,000.00	4.000%	2027
$615,000.00	4.000%	2028
$665,000.00	4.000%	2029
$695,000.00	4.000%	2030
$720,000.00	4.000%	2031
$750,000.00	4.000%	2032
$775,000.00	4.000%	2033
$810,000.00	4.000%	2034
$845,000.00	4.000%	2035
$880,000.00	4.000%	2036
$915,000.00	4.000%	2037
$950,000.00	4.000%	2038
$490,000.00	4.000%	2039
$490,000.00	4.000%	2040
$490,000.00	4.000%	2041

b) Redemption.

i. Optional Redemption. Bonds maturing after June 1, 2034, may be called for optional redemption by the Issuer on that date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in any order of maturity and within an annual maturity by lot. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' written notice of redemption shall be given to the registered owner of the Bond. Failure to give written notice to any registered owner of the Bonds or any defect therein shall not affect the validity of any proceedings for the redemption of the Bonds. All Bonds or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment. Written notice will be deemed completed upon transmission to the owner of record.

If selection by lot within a maturity is required, the Registrar shall designate the Bonds to be redeemed by random selection of the names of the registered owners of the entire annual maturity until the total amount of Bonds to be called has been reached.

If less than all of a maturity is called for redemption, the Issuer will notify DTC of the particular amount of such maturity to be redeemed prior to maturity. DTC will determine by lot the amount of each Participant's interest in such maturity to be redeemed and each Participant will then select by lot the beneficial ownership interests in such maturity to be redeemed. All prepayments shall be at a price of par plus accrued interest.

Section 7. Issuance of Bonds in Book-Entry Form; Replacement Bonds.

a) Notwithstanding the other provisions of this Resolution regarding registration, ownership, transfer, payment and exchange of the Bonds, unless the Issuer determines to permit the exchange of Depository Bonds for Bonds in Authorized Denominations, the Bonds shall be issued as Depository Bonds in denominations of the entire principal amount of each maturity of Bonds (or, if a portion of said principal amount is prepaid, said principal amount less the prepaid amount). The Bonds must be registered in the name of Cede & Co., as nominee for DTC. Payment of semiannual interest for any Bonds registered in the name of Cede & Co. will be made by wire transfer or New York Clearing House or equivalent next day funds to the account of Cede & Co. on the interest payment date for the Bonds at the address indicated or in the Representation Letter.

b) The Bonds will be initially issued in the form of separate single authenticated fully registered bonds in the amount of each stated maturity of the Bonds. Upon initial issuance, the ownership of the Bonds will be registered in the registry books of the UMB Bank, N.A. kept by the Paying Agent and Registrar in the name of Cede & Co., as

nominee of DTC. The Paying Agent and Registrar and the Issuer may treat DTC (or its nominee) as the sole and exclusive owner of the Bonds registered in its name for the purposes of payment of the principal or redemption price of or interest on the Bonds, selecting the Bonds or portions to be redeemed, giving any notice permitted or required to be given to registered owners of Bonds under the Resolution of the Issuer, registering the transfer of Bonds, obtaining any consent or other action to be taken by registered owners of the Bonds and for other purposes. The Paying Agent, Registrar and the Issuer have no responsibility or obligation to any Participant or Beneficial Owner of the Bonds under or through DTC with respect to the accuracy of records maintained by DTC or any Participant; with respect to the payment by DTC or Participant of an amount of principal or redemption price of or interest on the Bonds; with respect to any notice given to owners of Bonds under the Resolution; with respect to the Participant(s) selected to receive payment in the event of a partial redemption of the Bonds, or a consent given or other action taken by DTC as registered owner of the Bonds. The Paying Agent and Registrar shall pay all principal of and premium, if any, and interest on the Bonds only to Cede & Co. in accordance with the Representation Letter, and all payments are valid and effective to fully satisfy and discharge the Issuer's obligations with respect to the principal of and premium, if any, and interest on the Bonds to the extent of the sum paid. DTC must receive an authenticated Bond for each separate stated maturity evidencing the obligation of the Issuer to make payments of principal of and premium, if any, and interest. Upon delivery by DTC to the Paying Agent and Registrar of written notice that DTC has determined to substitute a new nominee in place of Cede & Co., the Bonds will be transferable to the new nominee in accordance with this Section.

c) In the event the Issuer determines that it is in the best interest of the Beneficial Owners that they be able to obtain Bonds certificates, the Issuer may notify DTC and the Paying Agent and Registrar, whereupon DTC will notify the Participants, of the availability through DTC of Bonds certificates. The Bonds will be transferable in accordance with this Section. DTC may determine to discontinue providing its services with respect to the Bonds at any time by giving notice to the Issuer and the Paying Agent and Registrar and discharging its responsibilities under applicable law. In this event, the Bonds will be transferable in accordance with this Section.

d) Notwithstanding any other provision of the Resolution to the contrary, so long as any Bond is registered in the name of Cede & Co., as nominee of DTC, all payments with respect to the principal of and premium, if any, and interest on the Bond and all notices must be made and given, respectively to DTC as provided in the Representation letter.

e) In connection with any notice or other communication to be provided to Bondholders by the Issuer or the Paying Agent and Registrar with respect to a consent or other action to be taken by Bondholders, the Issuer or the Paying Agent and Registrar, as the case may be, shall establish a record date for the consent or other action and give DTC notice of the record date not less than 15 calendar days in advance of the record date to the extent possible. Notice to DTC must be given only when DTC is the sole Bondholder.

f) The Representation Letter is on file with DTC and sets forth certain matters with respect to, among other things, notices, consents and approvals by Bondholders and payments on the Bonds. The execution and delivery of the Representation Letter to DTC by the Issuer is ratified and confirmed.

g) In the event that a transfer or exchange of the Bonds is permitted under this Section, the transfer or exchange may be accomplished upon receipt by the Registrar from the registered owners of the Bonds to be transferred or exchanged and appropriate instruments of transfer. In the event Bond certificates are issued to holders other than Cede & Co., its successor as nominee for DTC as holder of all the Bonds, or other securities depository as holder of all the Bonds, the provisions of the Resolution apply to, among other things, the printing of certificates and the method or payment of principal of and interest on the certificates. Any substitute depository shall be designated in writing by the Issuer to the Paying Agent. Any such substitute depository shall be a qualified and registered "clearing agency" as provided in Section 17A of the Securities Exchange Act of 1934, as amended. The substitute depository shall provide for (i) immobilization of the Depository Bonds, (ii) registration and transfer of interests in Depository Bonds by book entries made on records of the depository or its nominee and (iii) payment of principal of, premium, if any, and interest on the Bonds in accordance with and as such interests may appear with respect to such book entries.

h) The officers of the Issuer are authorized and directed to prepare and furnish to the purchaser, and to the attorneys approving the legality of Bonds, certified copies of proceedings, ordinances, resolutions and records and all certificates and affidavits and other instruments as may be required to evidence the legality and marketability of the Bonds, and all certified copies, certificates, affidavits and other instruments constitute representations of the Issuer as to the correctness of all stated or recited facts.

Section 8. Registration of Bonds; Appointment of Registrar; Transfer; Ownership; Delivery; and Cancellation.

a) Registration. The ownership of Bonds may be transferred only by the making of an entry upon the books kept for the registration and transfer of ownership of the Bonds, and in no other way. UMB Bank, N.A. is hereby appointed as Bond Registrar under the terms of this Resolution and under the provisions of a separate agreement with the Issuer filed herewith which is made a part hereof by this reference. Registrar shall maintain the books of the Issuer for the registration of ownership of the Bonds for the payment of principal of and interest on the Bonds as provided in this Resolution. All Bonds shall be negotiable as provided in Article 8 of the Uniform Commercial Code and Section 384.31 of the Code of Iowa, subject to the provisions for registration and transfer contained in the Bonds and in this Resolution.

b) Transfer. The ownership of any Bond may be transferred only upon the Registration Books kept for the registration and transfer of Bonds and only upon surrender thereof at the office of the Registrar together with an assignment duly executed by the holder or his duly authorized attorney in fact in such form as shall be satisfactory to the Registrar, along with the address and social security number or federal employer

identification number of such transferee (or, if registration is to be made in the name of multiple individuals, of all such transferees). In the event that the address of the registered owner of a Bond (other than a registered owner which is the nominee of the broker or dealer in question) is that of a broker or dealer, there must be disclosed on the Registration Books the information pertaining to the registered owner required above. Upon the transfer of any such Bond, a new fully registered Bond, of any denomination or denominations permitted by this Resolution in aggregate principal amount equal to the unmatured and unredeemed principal amount of such transferred fully registered Bond, and bearing interest at the same rate and maturing on the same date or dates shall be delivered by the Registrar.

c) Registration of Transferred Bonds. In all cases of the transfer of the Bonds, the Registrar shall register, at the earliest practicable time, on the Registration Books, the Bonds, in accordance with the provisions of this Resolution.

d) Ownership. As to any Bond, the person in whose name the ownership of the same shall be registered on the Registration Books of the Registrar shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of or on account of the principal of any such Bonds and the premium, if any, and interest thereon shall be made only to or upon the order of the registered owner thereof or his legal representative. All such payments shall be valid and effectual to satisfy and discharge the liability upon such Bond, including the interest thereon, to the extent of the sum or sums so paid.

e) Cancellation. All Bonds which have been redeemed shall not be reissued but shall be cancelled by the Registrar. All Bonds which are cancelled by the Registrar shall be destroyed and a certificate of the destruction thereof shall be furnished promptly to the Issuer; provided that if the Issuer shall so direct, the Registrar shall forward the cancelled Bonds to the Issuer.

f) Non-Presentment of Bonds. In the event any payment check, wire, or electronic transfer of funds representing payment of principal of or interest on the Bonds is returned to the Paying Agent or if any bond is not presented for payment of principal at the maturity or redemption date, if funds sufficient to pay such principal of or interest on Bonds shall have been made available to the Paying Agent for the benefit of the owner thereof, all liability of the Issuer to the owner thereof for such interest or payment of such Bonds shall forthwith cease, terminate and be completely discharged, and thereupon it shall be the duty of the Paying Agent to hold such funds, without liability for interest thereon, for the benefit of the owner of such Bonds who shall thereafter be restricted exclusively to such funds for any claim of whatever nature on his part under this Resolution or on, or with respect to, such interest or Bonds. The Paying Agent's obligation to hold such funds shall continue for a period equal to two years and six months following the date on which such interest or principal became due, whether at maturity, or at the date fixed for redemption thereof, or otherwise, at which time the Paying Agent shall surrender any remaining funds so held to the Issuer, whereupon any claim under this Resolution by the Owners of such interest or Bonds of whatever nature shall be made upon the Issuer.

g) Registration and Transfer Fees. The Registrar may furnish to each owner, at the Issuer's expense, one bond for each annual maturity. The Registrar shall furnish additional Bonds in lesser denominations (but not less than the minimum denomination) to an owner who so requests.

Section 9. Reissuance of Mutilated, Destroyed, Stolen or Lost Bonds. In case any outstanding Bond shall become mutilated or be destroyed, stolen or lost, the Issuer shall at the request of Registrar authenticate and deliver a new Bond of like tenor and amount as the Bond so mutilated, destroyed, stolen or lost, in exchange and substitution for such mutilated Bond to Registrar, upon surrender of such mutilated Bond, or in lieu of and substitution for the Bond destroyed, stolen or lost, upon filing with the Registrar evidence satisfactory to the Registrar and Issuer that such Bond has been destroyed, stolen or lost and proof of ownership thereof, and upon furnishing the Registrar and Issuer with satisfactory indemnity and complying with such other reasonable regulations as the Issuer or its agent may prescribe and paying such expenses as the Issuer may incur in connection therewith.

Section 10. Record Date. Payments of principal and interest, otherwise than upon full redemption, made in respect of any Bond, shall be made to the registered holder thereof or to their designated agent as the same appear on the books of the Registrar on the 15th day of the month preceding the payment date. All such payments shall fully discharge the obligations of the Issuer in respect of such Bonds to the extent of the payments so made. Upon receipt of the final payment of principal, the holder of the Bond shall surrender the Bond to the Paying Agent.

Section 11. Execution, Authentication and Delivery of the Bonds. Upon the adoption of this Resolution, the Mayor and Clerk shall execute the Bonds by their manual or authorized signature and deliver the Bonds to the Registrar, who shall authenticate the Bonds and deliver the same to or upon order of the Purchaser. No Bond shall be valid or obligatory for any purpose or shall be entitled to any right or benefit hereunder unless the Registrar shall duly endorse and execute on such Bond a Certificate of Authentication substantially in the form of the Certificate herein set forth. Such Certificate upon any Bond executed on behalf of the Issuer shall be conclusive evidence that the Bond so authenticated has been duly issued under this Resolution and that the holder thereof is entitled to the benefits of this Resolution.

No Bonds shall be authenticated and delivered by the Registrar unless and until there shall have been provided the following:

1. A certified copy of the Resolution of Issuer authorizing the issuance of the Bonds;

2. A written order of Issuer signed by the Treasurer of the Issuer directing the authentication and delivery of the Bonds to or upon the order of the Purchaser upon payment of the purchase price as set forth therein;

3. The approving opinion of Ahlers & Cooney, P.C., Bond Counsel, concerning the validity and legality of all the Bonds proposed to be issued.

Section 12. Right to Name Substitute Paying Agent or Registrar. Issuer reserves the right to name a substitute, successor Registrar or Paying Agent upon giving prompt written notice to each registered bondholder.

Section 13. Form of Bond. Bonds shall be printed substantially in the form as follows:

"STATE OF IOWA"
"COUNTY OF BLACK HAWK"
"CITY OF WATERLOO"
"GENERAL OBLIGATION BOND"
"SERIES 2026B"
CORPORATE PURPOSE

Rate: _____
Maturity: _____
Bond Date: June 29, 2026
CUSIP No.: _____
"Registered"
Certificate No. _____
Principal Amount: $_____

The City of Waterloo, State of Iowa, a municipal corporation organized and existing under and by virtue of the Constitution and laws of the State of Iowa (the "Issuer"), for value received, promises to pay from the source and as hereinafter provided, on the maturity date indicated above, to

(Registration panel to be completed by Registrar or Printer with name of Registered Owner).

or registered assigns, the principal sum of (enter principal amount in long form) THOUSAND DOLLARS in lawful money of the United States of America, on the maturity date shown above, only upon presentation and surrender hereof at the office of UMB Bank, N.A., Paying Agent of this issue, or its successor, with interest on the sum from the date hereof until paid at the rate per annum specified above, payable on December 1, 2026, and semiannually thereafter on the 1st day of June and December in each year.

Interest and principal shall be paid to the registered holder of the Bond as shown on the records of ownership maintained by the Registrar as of the 15th day of the month preceding such interest payment date. Interest shall be computed on the basis of a 360-day year of twelve 30-day months.

This Bond is issued pursuant to the provisions of Sections 384.25, 384.26 and 384.28 of the Code of Iowa, for the purpose of paying costs of the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control

devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams; the acquisition of peace officer communication equipment and other emergency services communication equipment and systems; the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing; the acquiring, developing, and improving of a geographic computer data base system suitable for automated mapping and facilities management; the rehabilitation and improvement of parks already owned, including the removal, replacement and planting of trees in the parks, and facilities, equipment, and improvements commonly found in city parks; the equipping of fire, police and street departments; the acquisition, construction, reconstruction, and improvement of all waterways, and real and personal property, useful for the protection or reclamation of property situated within the corporate limits of cities from floods or high waters, and for the protection of property in cities from the effects of flood waters, including the construction and improvement of levees; the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages; the equipping of city utilities, public improvements and city buildings, including the acquisition of vehicles; the construction, reconstruction, enlargement, improvement and equipping of city hall, recreational buildings, fire stations, police stations, downtown parking ramps, libraries and other public buildings, including security and technology upgrades; the construction, reconstruction, improvement, renovation and equipping of public works garages and facilities; the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings; and the opening, widening, extending, grading, and draining of the right-of-way of streets, highways, avenues, alleys and public grounds, and the removal and replacement of dead or diseased trees thereon; the construction, reconstruction, and repairing of any street improvements; the acquisition, installation, and repair of traffic control devices; the acquisition, construction, improvement, and installation of street lighting fixtures, connections, and facilities; the construction, reconstruction, and repair of sidewalks and pedestrian underpasses and overpasses, and the acquisition of real estate needed for such purposes; the acquisition, construction, reconstruction, enlargement, improvement, and repair of bridges, culverts, retaining walls, viaducts, underpasses, grade crossing separations, and approaches thereto; the acquisition, reconstruction, extension and improvement of works and facilities useful for the collection, treatment, and disposal of sewage, surface waters and streams, including infrastructure improvements at the South Waterloo Business Park, in conformity to a Resolution of the Council of said City duly passed and approved.

Unless this certificate is presented by an authorized representative of The Depository Trust Company, a limited purpose trust company ("DTC"), to the Issuer or its agent for registration of transfer, exchange or payment, and any certificate issued is registered in the name of Cede & Co. or such other name as requested by an authorized representative of DTC (and any

payment is made to Cede & Co. or to such other Issuer as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

Bonds maturing after June 1, 2034, may be called for optional redemption by the Issuer and paid before maturity on said date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in any order of maturity and within an annual maturity by lot. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' written notice of redemption shall be given to the registered owner of the Bond. Failure to give written notice to any registered owner of the Bonds or any defect therein shall not affect the validity of any proceedings for the redemption of the Bonds. All bonds or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment. Written notice will be deemed completed upon transmission to the owner of record.

If selection by lot within a maturity is required, the Registrar shall designate the Bonds to be redeemed by random selection of the names of the registered owners of the entire annual maturity until the total amount of Bonds to be called has been reached.

If less than all of a maturity is called for redemption, the Issuer will notify DTC of the particular amount of such maturity to be redeemed prior to maturity. DTC will determine by lot the amount of each Participant's interest in such maturity to be redeemed and each Participant will then select by lot the beneficial ownership interests in such maturity to be redeemed. All prepayments shall be at a price of par plus accrued interest.

Ownership of this Bond may be transferred only by transfer upon the books kept for such purpose by UMB Bank, N.A., the Registrar. Such transfer on the books shall occur only upon presentation and surrender of this Bond at the office of the Registrar as designated below, together with an assignment duly executed by the owner hereof or his duly authorized attorney in the form as shall be satisfactory to the Registrar. Issuer reserves the right to substitute the Registrar and Paying Agent but shall, however, promptly give notice to registered Bondholders of such change. All bonds shall be negotiable as provided in Article 8 of the Uniform Commercial Code and Section 384.31 of the Code of Iowa, subject to the provisions for registration and transfer contained in the Bond Resolution.

And it is hereby represented and certified that all acts, conditions and things requisite, according to the laws and Constitution of the State of Iowa, to exist, to be had, to be done, or to be performed precedent to the lawful issue of this Bond, have been existent, had, done and performed as required by law; that provision has been made for the levy of a sufficient continuing annual tax on all the taxable property within the territory of the Issuer for the payment of the principal and interest of this Bond as the same will respectively become due; that such taxes have been irrevocably pledged for the prompt payment hereof, both principal and interest; and the total indebtedness of the Issuer including this Bond, does not exceed the constitutional or statutory limitations.

IN TESTIMONY WHEREOF, the Issuer by its Council, has caused this Bond to be signed by the manual or facsimile signature of its Mayor and attested by the manual or facsimile signature of its City Clerk, with the seal of the City printed or impressed hereon, and to be authenticated by the manual signature of an authorized representative of the Registrar, UMB Bank, N.A., West Des Moines, Iowa.

Date of authentication:_____
This is one of the Bonds described in the within mentioned Resolution, as registered by UMB Bank, N.A.

UMB BANK, N.A., Registrar

By: _____
Authorized Signature

Registrar and Transfer Agent: UMB Bank, N.A.
Paying Agent: UMB Bank, N.A.

SEE REVERSE FOR CERTAIN DEFINITIONS

(Seal)
(Signature Block)

CITY OF WATERLOO, STATE OF IOWA

By: _____(manual or facsimile signature)_____
Mayor

ATTEST:

By: _____(manual or facsimile signature)_____
City Clerk

(Information Required for Registration)

ASSIGNMENT

For value received, the undersigned hereby sells, assigns and transfers unto _____ (Social Security or Tax Identification No. _____) the within Bond and does hereby irrevocably constitute and appoint _____ attorney in fact to transfer the said Bond on the books kept for registration of the within Bond, with full power of substitution in the premises.

Dated: _____

_____

_____
(Person(s) executing this Assignment sign(s) here)

SIGNATURE)
GUARANTEED)_____

IMPORTANT - READ CAREFULLY

The signature(s) to this Power must correspond with the name(s) as written upon the face of the certificate(s) or bond(s) in every particular without alteration or enlargement or any change whatever. Signature guarantee must be provided in accordance with the prevailing standards and procedures of the Registrar and Transfer Agent. Such standards and procedures may require signature to be guaranteed by certain eligible guarantor institutions that participate in a recognized signature guarantee program.

INFORMATION REQUIRED FOR REGISTRATION OF TRANSFER

Name of Transferee(s) _____
Address of Transferee(s) _____
Social Security or Tax Identification
Number of Transferee(s) _____
Transferee is a(n):

Individual*	_____	Corporation	_____
Partnership	_____	Trust	_____

*If the Bond is to be registered in the names of multiple individual owners, the names of all such owners and one address and social security number must be provided.

The following abbreviations, when used in the inscription on the face of this Bond, shall be construed as though written out in full according to applicable laws or regulations:

TEN COM - as tenants in common
TEN ENT - as tenants by the entireties
JT TEN - as joint tenants with rights of survivorship and not as tenants in common

IA UNIF TRANS MIN ACT - ..... Custodian .....
(Cust) (Minor)
Under Iowa Uniform Transfers to Minors Act.....
(State)

ADDITIONAL ABBREVIATIONS MAY
ALSO BE USED THOUGH NOT IN THE ABOVE LIST

(End of form of Bond)

Section 14. Closing Documents. The Mayor and City Clerk are authorized and directed to execute, attest, seal and deliver for and on behalf of the City any other additional certificates, documents, or other papers and perform all other acts, including without limitation the execution of all closing documents, as they may deem necessary or appropriate in order to implement and carry out the intent and purposes of this Resolution.

Section 15. Contract Between Issuer and Purchaser. This Resolution constitutes a contract between said City and the purchaser of the Bonds.

Section 16. Non-Arbitrage Covenants. The Issuer reasonably expects and covenants that no use will be made of the proceeds from the issuance and sale of the Bonds issued hereunder which will cause any of the Bonds to be classified as arbitrage bonds within the meaning of Sections 148(a) and (b) of the Internal Revenue Code of the United States, as amended, and that throughout the term of the Bonds it will comply with the requirements of statutes and regulations issued thereunder.

To the best knowledge and belief of the Issuer, there are no facts or circumstances that would materially change the foregoing statements or the conclusion that it is not expected that the proceeds of the Bonds will be used in a manner that would cause the Bonds to be arbitrage bonds.

Section 17. Approval of Tax Exemption Certificate. Attached hereto is a form of Tax Exemption Certificate stating the Issuer's reasonable expectations as to the use of the proceeds of the Bonds. The form of Tax Exemption Certificate is approved. The Issuer hereby agrees to comply with the provisions of the Tax Exemption Certificate and the provisions of the Tax Exemption Certificate are hereby incorporated by reference as part of this Resolution. The Finance Director is hereby directed to make and insert all calculations and determinations necessary to complete the Tax Exemption Certificate at issuance of the Bonds to certify as to the reasonable expectations and covenants of the Issuer at that date.

Section 18. Continuing Disclosure. The Issuer hereby covenants and agrees that it will comply with and carry out all of the provisions of the Continuing Disclosure Certificate, and the provisions of the Continuing Disclosure Certificate are hereby incorporated by reference as part of this Resolution and made a part hereof. Notwithstanding any other provision of this Resolution, failure of the Issuer to comply with the Continuing Disclosure Certificate shall not be considered an event of default under this Resolution; however, any holder of the Bonds or

Beneficial Owner may take such actions as may be necessary and appropriate, including seeking specific performance by court order, to cause the Issuer to comply with its obligations under the Continuing Disclosure Certificate. For purposes of this section, "Beneficial Owner" means any person which (a) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bond (including persons holding Bonds through nominees, depositories or other intermediaries), or (b) is treated as the owner of any Bonds for federal income tax purposes.

Section 19. Additional Covenants, Representations and Warranties of the Issuer. The Issuer certifies and covenants with the purchasers and holders of the Bonds from time to time outstanding that the Issuer through its officers, (a) will make such further specific covenants, representations and assurances as may be necessary or advisable; (b) comply with all representations, covenants and assurances contained in the Tax Exemption Certificate, which Tax Exemption Certificate shall constitute a part of the contract between the Issuer and the owners of the Bonds;(c) consult with Bond Counsel (as defined in the Tax Exemption Certificate); (d) pay to the United States, as necessary, such sums of money representing required rebates of excess arbitrage profits relating to the Bonds;(e) file such forms, statements and supporting documents as may be required and in a timely manner; and (f) if deemed necessary or advisable by its officers, to employ and pay fiscal agents, financial advisors, attorneys and other persons to assist the Issuer in such compliance.

Section 20. Amendment of Resolution to Maintain Tax Exemption. This Resolution may be amended without the consent of any owner of the Bonds if, in the opinion of Bond Counsel, such amendment is necessary to maintain tax exemption with respect to the Bonds under applicable Federal law or regulations.

Section 21. Repeal of Conflicting Resolutions or Ordinances. All ordinances and resolutions and parts of ordinances and resolutions in conflict herewith are hereby repealed.

Section 22. Severability Clause. If any section, paragraph, clause or provision of this Resolution be held invalid, such invalidity shall not affect any of the remaining provisions hereof, and this Resolution shall become effective immediately upon its passage and approval.

PASSED AND APPROVED this 15th day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

CERTIFICATE

STATE OF IOWA)
) SS
COUNTY OF BLACK HAWK)

I, the undersigned City Clerk of the City of Waterloo, State of Iowa, do hereby certify that attached is a true and complete copy of the portion of the records of the City showing proceedings of the Council, and the same is a true and complete copy of the action taken by the Council with respect to the matter at the meeting held on the date indicated in the attachment, which proceedings remain in full force and effect, and have not been amended or rescinded in any way; that meeting and all action thereat was duly and publicly held in accordance with a notice of meeting and tentative agenda, a copy of which was timely served on each member of the Council and posted on a bulletin board or other prominent place easily accessible to the public and clearly designated for that purpose at the principal office of the Council pursuant to the local rules of the Council and the provisions of Chapter 21, Code of Iowa, upon reasonable advance notice to the public and media at least twenty-four hours prior to the commencement of the meeting as required by law and with members of the public present in attendance; I further certify that the individuals named therein were on the date thereof duly and lawfully possessed of their respective City offices as indicated therein, that no Council vacancy existed except as may be stated in the proceedings, and that no controversy or litigation is pending, prayed or threatened involving the incorporation, organization, existence or boundaries of the City or the right of the individuals named therein as officers to their respective positions.

WITNESS my hand and the seal of the Council hereto affixed this _____ day of _____, 2026.

_____
Kelley Felchle, City Clerk, City of Waterloo, State of Iowa

(SEAL)

4922-9376-7345-1\11310-181

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Bridgett Wood, Finance Director
Finance Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution Appointing Paying Agent, Note Registrar, and Transfer Agent, Approving the Paying Agent and Note Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement, $1,700,000.00 2026C Taxable General Obligation Bonds.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Waterloo (183) - Authorizing Resolution 2026C Taxable GO Bonds

ITEMS TO INCLUDE ON AGENDA
FOR THE COUNCIL MEETING ON JUNE 15, 2026

CITY OF WATERLOO, IOWA

$1,700,000 Taxable General Obligation Bonds, Series 2026C

- Resolution Appointing Paying Agent, Bond Registrar, and Transfer Agent, Approving the Paying Agent and Bond Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement.
- Resolution authorizing and providing for the issuance, and levying a tax to pay the Bonds; Approval of the Continuing Disclosure Certificate.

NOTICE MUST BE GIVEN PURSUANT TO IOWA CODE CHAPTER 21 AND THE LOCAL RULES OF THE CITY.

June 15, 2026

The City Council of the City of Waterloo, State of Iowa, met in _____ session, in the Council Chambers, City Hall, 715 Mulberry Street, Waterloo, Iowa, at _____ _____.M., on the above date. There were present Mayor Dave Boesen, in the chair, and the following named Council Members:

_____

Absent: _____

Vacant: _____

* * * * * * *

Council Member _____ introduced the following resolution entitled "RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, BOND REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND BOND REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT", and moved that the resolution be adopted. Council Member _____ seconded the motion to adopt. The roll was called and the vote was,

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared said Resolution duly adopted as follows:

RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, BOND REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND BOND REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT

WHEREAS, $1,700,000 Taxable General Obligation Bonds, Series 2026C, dated June 29, 2026, have been sold and action should now be taken to provide for the maintenance of records, registration of certificates and payment of principal and interest in connection with the issuance of the Bonds; and

WHEREAS, this Council has deemed that the services offered by UMB Bank, N.A. of West Des Moines, Iowa, are necessary for compliance with rules, regulations, and requirements governing the registration, transfer and payment of registered bonds; and

WHEREAS, a Paying Agent, Bond Registrar and Transfer Agent Agreement (hereafter "Agreement") has been prepared to be entered into between the City and UMB Bank, N.A.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

1. That UMB Bank, N.A. of West Des Moines, Iowa, is hereby appointed to serve as Paying Agent, Bond Registrar and Transfer Agent in connection with the issuance of $1,700,000 Taxable General Obligation Bonds, Series 2026C, dated June 29, 2026.

2. That the Agreement with UMB Bank, N.A. of West Des Moines, Iowa, is hereby approved and that the Mayor and Clerk are authorized to sign the Agreement on behalf of the City.

PASSED AND APPROVED this 15th day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

Council Member _____ introduced the following Resolution entitled "RESOLUTION AUTHORIZING AND PROVIDING FOR THE ISSUANCE OF $1,700,000 TAXABLE GENERAL OBLIGATION BONDS, SERIES 2026C, AND LEVYING A TAX TO PAY SAID BONDS; APPROVAL OF THE CONTINUING DISCLOSURE CERTIFICATE" and moved that it be adopted. Council Member _____ seconded the motion to adopt, and the roll being called thereon, the vote was as follows:

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared said Resolution duly adopted as follows:

RESOLUTION AUTHORIZING AND PROVIDING FOR THE ISSUANCE OF $1,700,000 TAXABLE GENERAL OBLIGATION BONDS, SERIES 2026C, AND LEVYING A TAX TO PAY SAID BONDS; APPROVAL OF THE CONTINUING DISCLOSURE CERTIFICATE

WHEREAS, the Issuer is duly incorporated, organized and exists under and by virtue of the laws and Constitution of the State of Iowa; and

WHEREAS, the Issuer is in need of funds to pay costs of the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing, essential corporate purpose(s), and it is deemed necessary and advisable that Taxable General Obligation Bonds, to the amount of Not to Exceed $4,000,000 be authorized for said purpose(s); and

WHEREAS, pursuant to notice published as required by Section 384.25 of the Code of Iowa, this Council has held a public meeting and hearing upon the proposal to institute proceedings for the issuance of the Bonds, and the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the City is in need of funds to pay costs of the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages, general corporate purpose(s), and it is deemed necessary and advisable that Taxable General Obligation Bonds, to the amount of Not to Exceed $969,149 be authorized for said purpose(s); and

WHEREAS, the Issuer has a population of more than 5,000 but not more than 75,000, and the Bonds for these purposes do not exceed $969,149; and

WHEREAS, pursuant to notice published as required by Section 384.26 of the Code of Iowa, the Council of the City has held public meeting and hearing upon the proposal to institute proceedings for the issuance of Bonds for general corporate purpose(s) in the amounts as above set forth, and, no petition for referendum having been received, the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the City is in need of funds to pay costs of the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings, including for Young Arena, general corporate purpose(s), and it is deemed necessary and advisable that Taxable General Obligation Bonds, to the amount of Not to Exceed $969,149 be authorized for said purpose(s); and

WHEREAS, the Issuer has a population of more than 5,000 but not more than 75,000, and the Bonds for these purposes do not exceed $969,149; and

WHEREAS, pursuant to notice published as required by Section 384.26 of the Code of Iowa, the Council of the City has held public meeting and hearing upon the proposal to institute proceedings for the issuance of Bonds for general corporate purpose(s) in the amounts as above set forth, and, no petition for referendum having been received, the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, pursuant to Section 384.28 of the Code of Iowa, it is hereby found and determined that the various general obligation Bonds authorized as hereinabove described shall be combined for the purpose of issuance in a single issue of $1,700,000 General Obligation Bonds as hereinafter set forth; and

WHEREAS, pursuant to the provisions of Chapter 75 of the Code of Iowa, the above mentioned Bonds were heretofore sold at public sale and action should now be taken to issue said Bonds conforming to the terms and conditions of the best bid received at the advertised public sale.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. Definitions. The following terms shall have the following meanings in this Resolution unless the text expressly or by necessary implication requires otherwise:

- "Authorized Denominations" shall mean $5,000 or any integral multiple thereof.

- "Beneficial Owner" shall mean, whenever used with respect to a Bond, the person in whose name such Bond is recorded as the beneficial owner of such Bond by a Participant on the records of such Participant or such person's subrogee.

- "Blanket Issuer Letter of Representations" shall mean the Representation Letter from the Issuer to DTC, with respect to the Bonds.

- "Bond Fund" shall mean the fund created in Section 3 of this Resolution.

- "Bonds" shall mean $1,700,000 Taxable General Obligation Bonds, Series 2026C, authorized to be issued by this Resolution.

- "Cede & Co." shall mean Cede & Co., the nominee of DTC, and any successor nominee of DTC with respect to the Bonds.

- "Continuing Disclosure Certificate" shall mean that certain Continuing Disclosure Certificate approved under the terms of this Resolution and to be executed by the Issuer and dated the date of issuance and delivery of the Bonds, as originally executed and as it may be amended from time to time in accordance with the terms thereof.

- "Depository Bonds " shall mean the Bonds as issued in the form of one global certificate for each maturity, registered in the Registration Books maintained by the Registrar in the name of DTC or its nominee.

- "DTC" shall mean The Depository Trust Company, New York, New York, which will act as security depository for the Bond pursuant to the Representation Letter.

- "Issuer" and "City" shall mean the City of Waterloo, State of Iowa.

- "Participants" shall mean those broker-dealers, banks and other financial institutions for which DTC holds Bonds as securities depository.

- "Paying Agent" shall mean UMB Bank, N.A., or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein as Issuer's agent to provide for the payment of principal of and interest on the Bonds as the same shall become due.

- "Project" shall mean the costs of the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing; the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages; and the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings, including for Young Arena.

- "Project Fund" shall mean the fund required to be established by this Resolution for the deposit of the proceeds of the Bonds.

- "Registrar" shall mean UMB Bank, N.A. of West Des Moines, Iowa, or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein with respect to maintaining a register of the owners of the

Bonds. Unless otherwise specified, the Registrar shall also act as Transfer Agent for the Bonds.

- "Resolution" shall mean this resolution authorizing the Bonds.

- "Treasurer" shall mean the Finance Director or such other officer as shall succeed to the same duties and responsibilities with respect to the recording and payment of the Bonds issued hereunder.

Section 2. Levy and Certification of Annual Tax; Other Funds to be Used.

a) Levy of Annual Tax. That for the purpose of providing funds to pay the principal and interest of the Bonds hereinafter authorized to be issued, there is hereby levied for each future year the following direct annual tax on all of the taxable property in the City of Waterloo, State of Iowa, to-wit:

AMOUNT	FISCAL YEAR (JULY 1 TO JUNE 30) YEAR OF COLLECTION
$192,184.64	2026/2027*
$193,472.50	2027/2028
$188,072.50	2028/2029
$187,672.50	2029/2030
$187,047.50	2030/2031
$186,197.50	2031/2032
$190,122.50	2032/2033
$188,525.00	2033/2034
$186,550.00	2034/2035
$184,265.00	2035/2036
$181,665.00	2036/2037
$183,662.50	2037/2038

*A levy in the amount of $1,448,000 has been included in the budget previously certified and a portion of said levy will be used to pay the principal and interest of the Bond coming due in fiscal year 2026/2027, with the remaining amount being used to pay principal and interest on the Taxable General Obligation Bonds, Series 2026C, and any amount leftover being utilized to pay debt service in fiscal year 2027/2028.

(NOTE: For example the levy to be made and certified against the taxable valuations of January 1, 2026 will be collected during the fiscal year commencing July 1, 2027.)

b) Resolution to be Filed With County Auditor. A certified copy of this Resolution, which amends the resolution authorizing the issuance and levying a tax for the payment thereof dated March 16, 2026 (pre-levy resolution) shall be filed with the Auditor of Black Hawk County, Iowa and the Auditor is hereby instructed in and for each of the years as provided, to levy and assess the tax hereby authorized in Section 2 of this Resolution, in like manner as other taxes are levied and assessed, and such taxes so levied

in and for each of the years aforesaid be collected in like manner as other taxes of the City are collected, and when collected be used for the purpose of paying principal and interest on said Bonds issued in anticipation of the tax, and for no other purpose whatsoever.

c) Additional City Funds Available. Principal and interest coming due at any time when the proceeds of said tax on hand shall be insufficient to pay the same shall be promptly paid when due from current funds of the City available for that purpose and reimbursement shall be made from such special fund in the amounts thus advanced.

Section 3. Bond Fund. Said tax shall be assessed and collected each year at the same time and in the same manner as, and in addition to, all other taxes in and for the City, and when collected they shall be converted into a special fund within the Debt Service Fund to be known as the "2026C GENERAL OBLIGATION BOND FUND NO. 1" (the "Bond Fund"), which is hereby pledged for and shall be used only for the payment of the principal of and interest on the Bonds hereinafter authorized to be issued; and also there shall be apportioned to said fund its proportion of taxes received by the City from property that is centrally assessed by the State of Iowa.

Section 4. Application of Bond Proceeds. Proceeds of the Bonds, other than accrued interest except as may be provided below, shall be credited to the Project Fund and expended therefrom for the purposes of issuance. Any amounts on hand in the Project Fund shall be available for the payment of the principal of or interest on the Bonds at any time that other funds shall be insufficient to the purpose, in which event such funds shall be repaid to the Project Fund at the earliest opportunity. Any balance on hand in the Project Fund and not immediately required for its purposes may be invested not inconsistent with limitations provided by law or this Resolution.

Section 5. Investment of Bond Fund Proceeds. All moneys held in the Bond Fund, provided for by Section 3 of this Resolution shall be invested in investments permitted by Chapter 12B, Code of Iowa, 2025, as amended, or deposited in financial institutions which are members of the Federal Deposit Insurance Corporation and the deposits in which are insured thereby and all such deposits exceeding the maximum amount insured from time to time by FDIC or its equivalent successor in any one financial institution shall be continuously secured in compliance with Chapter 12C of the Code of Iowa, 2025, as amended, or otherwise by a valid pledge of direct obligations of the United States Government having an equivalent market value. All such interim investments shall mature before the date on which the moneys are required for payment of principal of or interest on the Bonds as herein provided.

Section 6. Bond Details, Execution and Redemption.

a) Bond Details. Taxable General Obligation Bonds of the City in the amount of $1,700,000, shall be issued pursuant to the provisions of Section 384.25 of the Code of Iowa for the aforesaid purposes. The Bonds shall be designated "TAXABLE GENERAL OBLIGATION BOND, SERIES 2026C", be dated June 29, 2026, and bear interest from the date thereof, until payment thereof, at the office of the Paying Agent, said interest

payable on December 1, 2026, and semiannually thereafter on the 1st day of June and December in each year until maturity at the rates hereinafter provided.

The Bonds shall be executed by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of the Clerk, and impressed or printed with the seal of the City and shall be fully registered as to both principal and interest as provided in this Resolution; principal, interest and premium, if any, shall be payable at the office of the Paying Agent by mailing of a check to the registered owner of the Bond. The Bonds shall be in the denomination of $5,000 or multiples thereof. The Bonds shall mature and bear interest as follows:

Principal Amount	Interest Rate	Maturity June 1st
$120,000.00	4.000%	2027
$120,000.00	4.500%	2028
$120,000.00	4.500%	2029
$125,000.00	4.500%	2030
$130,000.00	4.500%	2031
$135,000.00	4.500%	2032
$145,000.00	4.550%	2033
$150,000.00	4.650%	2034
$155,000.00	4.700%	2035
$160,000.00	4.750%	2036
$165,000.00	4.850%	2037
$175,000.00	4.950%	2038

b) Redemption.

i. Optional Redemption. Bonds maturing after June 1, 2034, may be called for optional redemption by the Issuer on that date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in any order of maturity and within an annual maturity by lot. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' written notice of redemption shall be given to the registered owner of the Bond. Failure to give written notice to any registered owner of the Bonds or any defect therein shall not affect the validity of any proceedings for the redemption of the Bonds. All Bonds or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment. Written notice will be deemed completed upon transmission to the owner of record.

If selection by lot within a maturity is required, the Registrar shall designate the Bonds to be redeemed by random selection of the names of the

registered owners of the entire annual maturity until the total amount of Bonds to be called has been reached.

If less than all of a maturity is called for redemption, the Issuer will notify DTC of the particular amount of such maturity to be redeemed prior to maturity. DTC will determine by lot the amount of each Participant's interest in such maturity to be redeemed and each Participant will then select by lot the beneficial ownership interests in such maturity to be redeemed. All prepayments shall be at a price of par plus accrued interest.

Section 7. Issuance of Bonds in Book-Entry Form; Replacement Bonds.

a) Notwithstanding the other provisions of this Resolution regarding registration, ownership, transfer, payment and exchange of the Bonds, unless the Issuer determines to permit the exchange of Depository Bonds for Bonds in Authorized Denominations, the Bonds shall be issued as Depository Bonds in denominations of the entire principal amount of each maturity of Bonds (or, if a portion of said principal amount is prepaid, said principal amount less the prepaid amount). The Bonds must be registered in the name of Cede & Co., as nominee for DTC. Payment of semiannual interest for any Bonds registered in the name of Cede & Co. will be made by wire transfer or New York Clearing House or equivalent next day funds to the account of Cede & Co. on the interest payment date for the Bonds at the address indicated or in the Representation Letter.

b) The Bonds will be initially issued in the form of separate single authenticated fully registered bonds in the amount of each stated maturity of the Bonds. Upon initial issuance, the ownership of the Bonds will be registered in the registry books of the UMB Bank, N.A. kept by the Paying Agent and Registrar in the name of Cede & Co., as nominee of DTC. The Paying Agent and Registrar and the Issuer may treat DTC (or its nominee) as the sole and exclusive owner of the Bonds registered in its name for the purposes of payment of the principal or redemption price of or interest on the Bonds, selecting the Bonds or portions to be redeemed, giving any notice permitted or required to be given to registered owners of Bonds under the Resolution of the Issuer, registering the transfer of Bonds, obtaining any consent or other action to be taken by registered owners of the Bonds and for other purposes. The Paying Agent, Registrar and the Issuer have no responsibility or obligation to any Participant or Beneficial Owner of the Bonds under or through DTC with respect to the accuracy of records maintained by DTC or any Participant; with respect to the payment by DTC or Participant of an amount of principal or redemption price of or interest on the Bonds; with respect to any notice given to owners of Bonds under the Resolution; with respect to the Participant(s) selected to receive payment in the event of a partial redemption of the Bonds, or a consent given or other action taken by DTC as registered owner of the Bonds. The Paying Agent and Registrar shall pay all principal of and premium, if any, and interest on the Bonds only to Cede & Co. in accordance with the Representation Letter, and all payments are valid and effective to fully satisfy and discharge the Issuer's obligations with respect to the principal of and premium, if any, and interest on the Bonds to the extent of the sum paid. DTC must receive an authenticated Bond for each separate stated maturity evidencing the obligation of the Issuer to make payments of principal of and premium, if any, and

interest. Upon delivery by DTC to the Paying Agent and Registrar of written notice that DTC has determined to substitute a new nominee in place of Cede & Co., the Bonds will be transferable to the new nominee in accordance with this Section.

c) In the event the Issuer determines that it is in the best interest of the Beneficial Owners that they be able to obtain Bonds certificates, the Issuer may notify DTC and the Paying Agent and Registrar, whereupon DTC will notify the Participants, of the availability through DTC of Bonds certificates. The Bonds will be transferable in accordance with this Section. DTC may determine to discontinue providing its services with respect to the Bonds at any time by giving notice to the Issuer and the Paying Agent and Registrar and discharging its responsibilities under applicable law. In this event, the Bonds will be transferable in accordance with this Section.

d) Notwithstanding any other provision of the Resolution to the contrary, so long as any Bond is registered in the name of Cede & Co., as nominee of DTC, all payments with respect to the principal of and premium, if any, and interest on the Bond and all notices must be made and given, respectively to DTC as provided in the Representation letter.

e) In connection with any notice or other communication to be provided to Bondholders by the Issuer or the Paying Agent and Registrar with respect to a consent or other action to be taken by Bondholders, the Issuer or the Paying Agent and Registrar, as the case may be, shall establish a record date for the consent or other action and give DTC notice of the record date not less than 15 calendar days in advance of the record date to the extent possible. Notice to DTC must be given only when DTC is the sole Bondholder.

f) The Representation Letter is on file with DTC and sets forth certain matters with respect to, among other things, notices, consents and approvals by Bondholders and payments on the Bonds. The execution and delivery of the Representation Letter to DTC by the Issuer is ratified and confirmed.

g) In the event that a transfer or exchange of the Bonds is permitted under this Section, the transfer or exchange may be accomplished upon receipt by the Registrar from the registered owners of the Bonds to be transferred or exchanged and appropriate instruments of transfer. In the event Bond certificates are issued to holders other than Cede & Co., its successor as nominee for DTC as holder of all the Bonds, or other securities depository as holder of all the Bonds, the provisions of the Resolution apply to, among other things, the printing of certificates and the method or payment of principal of and interest on the certificates. Any substitute depository shall be designated in writing by the Issuer to the Paying Agent. Any such substitute depository shall be a qualified and registered "clearing agency" as provided in Section 17A of the Securities Exchange Act of 1934, as amended. The substitute depository shall provide for (i) immobilization of the Depository Bonds, (ii) registration and transfer of interests in Depository Bonds by book entries made on records of the depository or its nominee and (iii) payment of principal of, premium, if any, and interest on the Bonds in accordance with and as such interests may appear with respect to such book entries.

h) The officers of the Issuer are authorized and directed to prepare and furnish to the purchaser, and to the attorneys approving the legality of Bonds, certified copies of proceedings, ordinances, resolutions and records and all certificates and affidavits and other instruments as may be required to evidence the legality and marketability of the Bonds, and all certified copies, certificates, affidavits and other instruments constitute representations of the Issuer as to the correctness of all stated or recited facts.

Section 8. Registration of Bonds; Appointment of Registrar; Transfer; Ownership; Delivery; and Cancellation.

a) Registration. The ownership of Bonds may be transferred only by the making of an entry upon the books kept for the registration and transfer of ownership of the Bonds, and in no other way. UMB Bank, N.A. is hereby appointed as Bond Registrar under the terms of this Resolution and under the provisions of a separate agreement with the Issuer filed herewith which is made a part hereof by this reference. Registrar shall maintain the books of the Issuer for the registration of ownership of the Bonds for the payment of principal of and interest on the Bonds as provided in this Resolution. All Bonds shall be negotiable as provided in Article 8 of the Uniform Commercial Code and Section 384.31 of the Code of Iowa, subject to the provisions for registration and transfer contained in the Bonds and in this Resolution.

b) Transfer. The ownership of any Bond may be transferred only upon the Registration Books kept for the registration and transfer of Bonds and only upon surrender thereof at the office of the Registrar together with an assignment duly executed by the holder or his duly authorized attorney in fact in such form as shall be satisfactory to the Registrar, along with the address and social security number or federal employer identification number of such transferee (or, if registration is to be made in the name of multiple individuals, of all such transferees). In the event that the address of the registered owner of a Bond (other than a registered owner which is the nominee of the broker or dealer in question) is that of a broker or dealer, there must be disclosed on the Registration Books the information pertaining to the registered owner required above. Upon the transfer of any such Bond, a new fully registered Bond, of any denomination or denominations permitted by this Resolution in aggregate principal amount equal to the unmatured and unredeemed principal amount of such transferred fully registered Bond, and bearing interest at the same rate and maturing on the same date or dates shall be delivered by the Registrar.

c) Registration of Transferred Bonds. In all cases of the transfer of the Bonds, the Registrar shall register, at the earliest practicable time, on the Registration Books, the Bonds, in accordance with the provisions of this Resolution.

d) Ownership. As to any Bond, the person in whose name the ownership of the same shall be registered on the Registration Books of the Registrar shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of or on account of the principal of any such Bonds and the premium, if any, and interest thereon shall be made only to or upon the order of the registered owner thereof or his legal representative.

All such payments shall be valid and effectual to satisfy and discharge the liability upon such Bond, including the interest thereon, to the extent of the sum or sums so paid.

e) Cancellation. All Bonds which have been redeemed shall not be reissued but shall be cancelled by the Registrar. All Bonds which are cancelled by the Registrar shall be destroyed and a certificate of the destruction thereof shall be furnished promptly to the Issuer; provided that if the Issuer shall so direct, the Registrar shall forward the cancelled Bonds to the Issuer.

f) Non-Presentment of Bonds. In the event any payment check, wire, or electronic transfer of funds representing payment of principal of or interest on the Bonds is returned to the Paying Agent or if any bond is not presented for payment of principal at the maturity or redemption date, if funds sufficient to pay such principal of or interest on Bonds shall have been made available to the Paying Agent for the benefit of the owner thereof, all liability of the Issuer to the owner thereof for such interest or payment of such Bonds shall forthwith cease, terminate and be completely discharged, and thereupon it shall be the duty of the Paying Agent to hold such funds, without liability for interest thereon, for the benefit of the owner of such Bonds who shall thereafter be restricted exclusively to such funds for any claim of whatever nature on his part under this Resolution or on, or with respect to, such interest or Bonds. The Paying Agent's obligation to hold such funds shall continue for a period equal to two years and six months following the date on which such interest or principal became due, whether at maturity, or at the date fixed for redemption thereof, or otherwise, at which time the Paying Agent shall surrender any remaining funds so held to the Issuer, whereupon any claim under this Resolution by the Owners of such interest or Bonds of whatever nature shall be made upon the Issuer.

g) Registration and Transfer Fees. The Registrar may furnish to each owner, at the Issuer's expense, one bond for each annual maturity. The Registrar shall furnish additional Bonds in lesser denominations (but not less than the minimum denomination) to an owner who so requests.

Section 9. Reissuance of Mutilated, Destroyed, Stolen or Lost Bonds. In case any outstanding Bond shall become mutilated or be destroyed, stolen or lost, the Issuer shall at the request of Registrar authenticate and deliver a new Bond of like tenor and amount as the Bond so mutilated, destroyed, stolen or lost, in exchange and substitution for such mutilated Bond to Registrar, upon surrender of such mutilated Bond, or in lieu of and substitution for the Bond destroyed, stolen or lost, upon filing with the Registrar evidence satisfactory to the Registrar and Issuer that such Bond has been destroyed, stolen or lost and proof of ownership thereof, and upon furnishing the Registrar and Issuer with satisfactory indemnity and complying with such other reasonable regulations as the Issuer or its agent may prescribe and paying such expenses as the Issuer may incur in connection therewith.

Section 10. Record Date. Payments of principal and interest, otherwise than upon full redemption, made in respect of any Bond, shall be made to the registered holder thereof or to their designated agent as the same appear on the books of the Registrar on the 15th day of the month preceding the payment date. All such payments shall fully discharge the obligations of

the Issuer in respect of such Bonds to the extent of the payments so made. Upon receipt of the final payment of principal, the holder of the Bond shall surrender the Bond to the Paying Agent.

Section 11. Execution, Authentication and Delivery of the Bonds. Upon the adoption of this Resolution, the Mayor and Clerk shall execute the Bonds by their manual or authorized signature and deliver the Bonds to the Registrar, who shall authenticate the Bonds and deliver the same to or upon order of the Purchaser. No Bond shall be valid or obligatory for any purpose or shall be entitled to any right or benefit hereunder unless the Registrar shall duly endorse and execute on such Bond a Certificate of Authentication substantially in the form of the Certificate herein set forth. Such Certificate upon any Bond executed on behalf of the Issuer shall be conclusive evidence that the Bond so authenticated has been duly issued under this Resolution and that the holder thereof is entitled to the benefits of this Resolution.

No Bonds shall be authenticated and delivered by the Registrar unless and until there shall have been provided the following:

1. A certified copy of the Resolution of Issuer authorizing the issuance of the Bonds;

2. A written order of Issuer signed by the Treasurer of the Issuer directing the authentication and delivery of the Bonds to or upon the order of the Purchaser upon payment of the purchase price as set forth therein;

3. The approving opinion of Ahlers & Cooney, P.C., Bond Counsel, concerning the validity and legality of all the Bonds proposed to be issued.

Section 12. Right to Name Substitute Paying Agent or Registrar. Issuer reserves the right to name a substitute, successor Registrar or Paying Agent upon giving prompt written notice to each registered bondholder.

Section 13. Form of Bond. Bonds shall be printed substantially in the form as follows:

"STATE OF IOWA"
"COUNTY OF BLACK HAWK"
"CITY OF WATERLOO"
"TAXABLE GENERAL OBLIGATION BOND"
"SERIES 2026C"
CORPORATE PURPOSE

Rate: _____
Maturity: _____
Bond Date: June 29, 2026
CUSIP No.: _____
"Registered"
Certificate No. _____
Principal Amount: $_____

The City of Waterloo, State of Iowa, a municipal corporation organized and existing under and by virtue of the Constitution and laws of the State of Iowa (the "Issuer"), for value received, promises to pay from the source and as hereinafter provided, on the maturity date indicated above, to

(Registration panel to be completed by Registrar or Printer with name of Registered Owner).

or registered assigns, the principal sum of (enter principal amount in long form) THOUSAND DOLLARS in lawful money of the United States of America, on the maturity date shown above, only upon presentation and surrender hereof at the office of UMB Bank, N.A., Paying Agent of this issue, or its successor, with interest on the sum from the date hereof until paid at the rate per annum specified above, payable on December 1, 2026, and semiannually thereafter on the 1st day of June and December in each year.

Interest and principal shall be paid to the registered holder of the Bond as shown on the records of ownership maintained by the Registrar as of the 15th day of the month preceding such interest payment date. Interest shall be computed on the basis of a 360-day year of twelve 30-day months.

THE HOLDERS OF THE BONDS SHOULD TREAT THE INTEREST AS SUBJECT TO FEDERAL INCOME TAXATION.

This Bond is issued pursuant to the provisions of Section 384.25 of the Code of Iowa, for the purpose of paying costs of the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing; the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages; and the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings, including for Young Arena, in conformity to a Resolution of the Council of said City duly passed and approved.

Unless this certificate is presented by an authorized representative of The Depository Trust Company, a limited purpose trust company ("DTC"), to the Issuer or its agent for registration of transfer, exchange or payment, and any certificate issued is registered in the name of Cede & Co. or such other name as requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other Issuer as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

Bonds maturing after June 1, 2034, may be called for optional redemption by the Issuer and paid before maturity on said date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in any order of maturity and within an annual maturity by lot. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' written notice of redemption shall be given to the registered owner of the Bond. Failure to give written notice to any registered owner of the Bonds or any defect therein shall not affect the validity of any proceedings for the redemption of the Bonds. All bonds or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment. Written notice will be deemed completed upon transmission to the owner of record.

If selection by lot within a maturity is required, the Registrar shall designate the Bonds to be redeemed by random selection of the names of the registered owners of the entire annual maturity until the total amount of Bonds to be called has been reached.

If less than all of a maturity is called for redemption, the Issuer will notify DTC of the particular amount of such maturity to be redeemed prior to maturity. DTC will determine by lot the amount of each Participant's interest in such maturity to be redeemed and each Participant will then select by lot the beneficial ownership interests in such maturity to be redeemed. All prepayments shall be at a price of par plus accrued interest.

Ownership of this Bond may be transferred only by transfer upon the books kept for such purpose by UMB Bank, N.A., the Registrar. Such transfer on the books shall occur only upon presentation and surrender of this Bond at the office of the Registrar as designated below, together with an assignment duly executed by the owner hereof or his duly authorized attorney in the form as shall be satisfactory to the Registrar. Issuer reserves the right to substitute the Registrar and Paying Agent but shall, however, promptly give notice to registered Bondholders of such change. All bonds shall be negotiable as provided in Article 8 of the Uniform Commercial Code and Section 384.31 of the Code of Iowa, subject to the provisions for registration and transfer contained in the Bond Resolution.

And it is hereby represented and certified that all acts, conditions and things requisite, according to the laws and Constitution of the State of Iowa, to exist, to be had, to be done, or to be performed precedent to the lawful issue of this Bond, have been existent, had, done and performed as required by law; that provision has been made for the levy of a sufficient continuing annual tax on all the taxable property within the territory of the Issuer for the payment of the principal and interest of this Bond as the same will respectively become due; that such taxes have been irrevocably pledged for the prompt payment hereof, both principal and interest; and the total indebtedness of the Issuer including this Bond, does not exceed the constitutional or statutory limitations.

IN TESTIMONY WHEREOF, the Issuer by its Council, has caused this Bond to be signed by the manual or facsimile signature of its Mayor and attested by the manual or facsimile signature of its City Clerk, with the seal of the City printed or impressed hereon, and to be authenticated by the manual signature of an authorized representative of the Registrar, UMB Bank, N.A., West Des Moines, Iowa.

Date of authentication:_____

This is one of the Bonds described in the within mentioned Resolution, as registered by UMB Bank, N.A.

UMB BANK, N.A., Registrar

By: _____
Authorized Signature

Registrar and Transfer Agent: UMB Bank, N.A.
Paying Agent: UMB Bank, N.A.

SEE REVERSE FOR CERTAIN DEFINITIONS

(Seal)
(Signature Block)

CITY OF WATERLOO, STATE OF IOWA

By: _____(manual or facsimile signature)_____
Mayor

ATTEST:

By: _____(manual or facsimile signature)_____
City Clerk

(Information Required for Registration)

ASSIGNMENT

For value received, the undersigned hereby sells, assigns and transfers unto _____ (Social Security or Tax Identification No. _____) the within Bond and does hereby irrevocably constitute and appoint _____ attorney in fact to transfer the said Bond on the books kept for registration of the within Bond, with full power of substitution in the premises.

Dated: _____

_____

_____
(Person(s) executing this Assignment sign(s) here)

SIGNATURE)
GUARANTEED)_____

IMPORTANT - READ CAREFULLY

The signature(s) to this Power must correspond with the name(s) as written upon the face of the certificate(s) or bond(s) in every particular without alteration or enlargement or any change whatever. Signature guarantee must be provided in accordance with the prevailing standards and procedures of the Registrar and Transfer Agent. Such standards and procedures may require signature to be guaranteed by certain eligible guarantor institutions that participate in a recognized signature guarantee program.

INFORMATION REQUIRED FOR REGISTRATION OF TRANSFER

Name of Transferee(s) _____
Address of Transferee(s) _____
Social Security or Tax Identification
Number of Transferee(s) _____
Transferee is a(n):

Individual*	_____	Corporation	_____
Partnership	_____	Trust	_____

*If the Bond is to be registered in the names of multiple individual owners, the names of all such owners and one address and social security number must be provided.

The following abbreviations, when used in the inscription on the face of this Bond, shall be construed as though written out in full according to applicable laws or regulations:

TEN COM - as tenants in common
TEN ENT - as tenants by the entireties
JT TEN - as joint tenants with rights of survivorship and not as tenants in common
IA UNIF TRANS MIN ACT - ..... Custodian .....
(Cust) (Minor)
Under Iowa Uniform Transfers to Minors Act.....
(State)

ADDITIONAL ABBREVIATIONS MAY
ALSO BE USED THOUGH NOT IN THE ABOVE LIST

(End of form of Bond)

Section 14. Closing Documents. The Mayor and City Clerk are authorized and directed to execute, attest, seal and deliver for and on behalf of the City any other additional certificates, documents, or other papers and perform all other acts, including without limitation the execution of all closing documents, as they may deem necessary or appropriate in order to implement and carry out the intent and purposes of this Resolution.

Section 15. Contract Between Issuer and Purchaser. This Resolution constitutes a contract between said City and the purchaser of the Bonds.

Section 16. Continuing Disclosure. The Issuer hereby covenants and agrees that it will comply with and carry out all of the provisions of the Continuing Disclosure Certificate, and the provisions of the Continuing Disclosure Certificate are hereby incorporated by reference as part of this Resolution and made a part hereof. Notwithstanding any other provision of this Resolution, failure of the Issuer to comply with the Continuing Disclosure Certificate shall not be considered an event of default under this Resolution; however, any holder of the Bonds or Beneficial Owner may take such actions as may be necessary and appropriate, including seeking specific performance by court order, to cause the Issuer to comply with its obligations under the Continuing Disclosure Certificate. For purposes of this section, "Beneficial Owner" means any person which (a) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bond (including persons holding Bonds through nominees, depositories or other intermediaries), or (b) is treated as the owner of any Bonds for federal income tax purposes.

Section 17. Repeal of Conflicting Resolutions or Ordinances. All ordinances and resolutions and parts of ordinances and resolutions in conflict herewith are hereby repealed.

Section 18. Severability Clause. If any section, paragraph, clause or provision of this Resolution be held invalid, such invalidity shall not affect any of the remaining provisions hereof, and this Resolution shall become effective immediately upon its passage and approval.

PASSED AND APPROVED this 15th day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

CERTIFICATE

STATE OF IOWA)
) SS
COUNTY OF BLACK HAWK)

I, the undersigned City Clerk of the City of Waterloo, State of Iowa, do hereby certify that attached is a true and complete copy of the portion of the records of the City showing proceedings of the Council, and the same is a true and complete copy of the action taken by the Council with respect to the matter at the meeting held on the date indicated in the attachment, which proceedings remain in full force and effect, and have not been amended or rescinded in any way; that meeting and all action thereat was duly and publicly held in accordance with a notice of meeting and tentative agenda, a copy of which was timely served on each member of the Council and posted on a bulletin board or other prominent place easily accessible to the public and clearly designated for that purpose at the principal office of the Council pursuant to the local rules of the Council and the provisions of Chapter 21, Code of Iowa, upon reasonable advance notice to the public and media at least twenty-four hours prior to the commencement of the meeting as required by law and with members of the public present in attendance; I further certify that the individuals named therein were on the date thereof duly and lawfully possessed of their respective City offices as indicated therein, that no Council vacancy existed except as may be stated in the proceedings, and that no controversy or litigation is pending, prayed or threatened involving the incorporation, organization, existence or boundaries of the City or the right of the individuals named therein as officers to their respective positions.

WITNESS my hand and the seal of the Council hereto affixed this _____ day of _____, 2026.

_____
Kelley Felchle, City Clerk, City of Waterloo, State of Iowa

(SEAL)

4937-0022-0338-1\11310-183

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Bridgett Wood, Finance Director
Finance Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution authorizing and providing for the issuance, and levying a tax to pay the $1,700,000 Taxable General Obligation Bonds, Series 2026C and approval of the Continuing Disclosure Certificate.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Waterloo (183) - Authorizing Resolution 2026C Taxable GO Bonds

ITEMS TO INCLUDE ON AGENDA
FOR THE COUNCIL MEETING ON JUNE 15, 2026

CITY OF WATERLOO, IOWA

$1,700,000 Taxable General Obligation Bonds, Series 2026C

- Resolution Appointing Paying Agent, Bond Registrar, and Transfer Agent, Approving the Paying Agent and Bond Registrar and Transfer Agent Agreement and Authorizing the Execution of the Agreement.
- Resolution authorizing and providing for the issuance, and levying a tax to pay the Bonds; Approval of the Continuing Disclosure Certificate.

NOTICE MUST BE GIVEN PURSUANT TO IOWA CODE CHAPTER 21 AND THE LOCAL RULES OF THE CITY.

June 15, 2026

The City Council of the City of Waterloo, State of Iowa, met in _____ session, in the Council Chambers, City Hall, 715 Mulberry Street, Waterloo, Iowa, at _____ _____.M., on the above date. There were present Mayor Dave Boesen, in the chair, and the following named Council Members:

_____

Absent: _____

Vacant: _____

* * * * * * *

Council Member _____ introduced the following resolution entitled "RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, BOND REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND BOND REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT", and moved that the resolution be adopted. Council Member _____ seconded the motion to adopt. The roll was called and the vote was,

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared said Resolution duly adopted as follows:

RESOLUTION APPOINTING UMB BANK, N.A. OF WEST DES MOINES, IOWA, TO SERVE AS PAYING AGENT, BOND REGISTRAR, AND TRANSFER AGENT, APPROVING THE PAYING AGENT AND BOND REGISTRAR AND TRANSFER AGENT AGREEMENT AND AUTHORIZING THE EXECUTION OF THE AGREEMENT

WHEREAS, $1,700,000 Taxable General Obligation Bonds, Series 2026C, dated June 29, 2026, have been sold and action should now be taken to provide for the maintenance of records, registration of certificates and payment of principal and interest in connection with the issuance of the Bonds; and

WHEREAS, this Council has deemed that the services offered by UMB Bank, N.A. of West Des Moines, Iowa, are necessary for compliance with rules, regulations, and requirements governing the registration, transfer and payment of registered bonds; and

WHEREAS, a Paying Agent, Bond Registrar and Transfer Agent Agreement (hereafter "Agreement") has been prepared to be entered into between the City and UMB Bank, N.A.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

1. That UMB Bank, N.A. of West Des Moines, Iowa, is hereby appointed to serve as Paying Agent, Bond Registrar and Transfer Agent in connection with the issuance of $1,700,000 Taxable General Obligation Bonds, Series 2026C, dated June 29, 2026.

2. That the Agreement with UMB Bank, N.A. of West Des Moines, Iowa, is hereby approved and that the Mayor and Clerk are authorized to sign the Agreement on behalf of the City.

PASSED AND APPROVED this 15th day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

Council Member _____ introduced the following Resolution entitled "RESOLUTION AUTHORIZING AND PROVIDING FOR THE ISSUANCE OF $1,700,000 TAXABLE GENERAL OBLIGATION BONDS, SERIES 2026C, AND LEVYING A TAX TO PAY SAID BONDS; APPROVAL OF THE CONTINUING DISCLOSURE CERTIFICATE" and moved that it be adopted. Council Member _____ seconded the motion to adopt, and the roll being called thereon, the vote was as follows:

AYES: _____

_____

NAYS: _____

Whereupon, the Mayor declared said Resolution duly adopted as follows:

RESOLUTION AUTHORIZING AND PROVIDING FOR THE ISSUANCE OF $1,700,000 TAXABLE GENERAL OBLIGATION BONDS, SERIES 2026C, AND LEVYING A TAX TO PAY SAID BONDS; APPROVAL OF THE CONTINUING DISCLOSURE CERTIFICATE

WHEREAS, the Issuer is duly incorporated, organized and exists under and by virtue of the laws and Constitution of the State of Iowa; and

WHEREAS, the Issuer is in need of funds to pay costs of the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing, essential corporate purpose(s), and it is deemed necessary and advisable that Taxable General Obligation Bonds, to the amount of Not to Exceed $4,000,000 be authorized for said purpose(s); and

WHEREAS, pursuant to notice published as required by Section 384.25 of the Code of Iowa, this Council has held a public meeting and hearing upon the proposal to institute proceedings for the issuance of the Bonds, and the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the City is in need of funds to pay costs of the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages, general corporate purpose(s), and it is deemed necessary and advisable that Taxable General Obligation Bonds, to the amount of Not to Exceed $969,149 be authorized for said purpose(s); and

WHEREAS, the Issuer has a population of more than 5,000 but not more than 75,000, and the Bonds for these purposes do not exceed $969,149; and

WHEREAS, pursuant to notice published as required by Section 384.26 of the Code of Iowa, the Council of the City has held public meeting and hearing upon the proposal to institute proceedings for the issuance of Bonds for general corporate purpose(s) in the amounts as above set forth, and, no petition for referendum having been received, the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, the City is in need of funds to pay costs of the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings, including for Young Arena, general corporate purpose(s), and it is deemed necessary and advisable that Taxable General Obligation Bonds, to the amount of Not to Exceed $969,149 be authorized for said purpose(s); and

WHEREAS, the Issuer has a population of more than 5,000 but not more than 75,000, and the Bonds for these purposes do not exceed $969,149; and

WHEREAS, pursuant to notice published as required by Section 384.26 of the Code of Iowa, the Council of the City has held public meeting and hearing upon the proposal to institute proceedings for the issuance of Bonds for general corporate purpose(s) in the amounts as above set forth, and, no petition for referendum having been received, the Council is therefore now authorized to proceed with the issuance of said Bonds for such purpose(s); and

WHEREAS, pursuant to Section 384.28 of the Code of Iowa, it is hereby found and determined that the various general obligation Bonds authorized as hereinabove described shall be combined for the purpose of issuance in a single issue of $1,700,000 General Obligation Bonds as hereinafter set forth; and

WHEREAS, pursuant to the provisions of Chapter 75 of the Code of Iowa, the above mentioned Bonds were heretofore sold at public sale and action should now be taken to issue said Bonds conforming to the terms and conditions of the best bid received at the advertised public sale.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WATERLOO, STATE OF IOWA:

Section 1. Definitions. The following terms shall have the following meanings in this Resolution unless the text expressly or by necessary implication requires otherwise:

- "Authorized Denominations" shall mean $5,000 or any integral multiple thereof.

- "Beneficial Owner" shall mean, whenever used with respect to a Bond, the person in whose name such Bond is recorded as the beneficial owner of such Bond by a Participant on the records of such Participant or such person's subrogee.

- "Blanket Issuer Letter of Representations" shall mean the Representation Letter from the Issuer to DTC, with respect to the Bonds.

- "Bond Fund" shall mean the fund created in Section 3 of this Resolution.

- "Bonds" shall mean $1,700,000 Taxable General Obligation Bonds, Series 2026C, authorized to be issued by this Resolution.

- "Cede & Co." shall mean Cede & Co., the nominee of DTC, and any successor nominee of DTC with respect to the Bonds.

- "Continuing Disclosure Certificate" shall mean that certain Continuing Disclosure Certificate approved under the terms of this Resolution and to be executed by the Issuer and dated the date of issuance and delivery of the Bonds, as originally executed and as it may be amended from time to time in accordance with the terms thereof.

- "Depository Bonds " shall mean the Bonds as issued in the form of one global certificate for each maturity, registered in the Registration Books maintained by the Registrar in the name of DTC or its nominee.

- "DTC" shall mean The Depository Trust Company, New York, New York, which will act as security depository for the Bond pursuant to the Representation Letter.

- "Issuer" and "City" shall mean the City of Waterloo, State of Iowa.

- "Participants" shall mean those broker-dealers, banks and other financial institutions for which DTC holds Bonds as securities depository.

- "Paying Agent" shall mean UMB Bank, N.A., or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein as Issuer's agent to provide for the payment of principal of and interest on the Bonds as the same shall become due.

- "Project" shall mean the costs of the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing; the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages; and the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings, including for Young Arena.

- "Project Fund" shall mean the fund required to be established by this Resolution for the deposit of the proceeds of the Bonds.

- "Registrar" shall mean UMB Bank, N.A. of West Des Moines, Iowa, or such successor as may be approved by Issuer as provided herein and who shall carry out the duties prescribed herein with respect to maintaining a register of the owners of the

Bonds. Unless otherwise specified, the Registrar shall also act as Transfer Agent for the Bonds.

- "Resolution" shall mean this resolution authorizing the Bonds.

- "Treasurer" shall mean the Finance Director or such other officer as shall succeed to the same duties and responsibilities with respect to the recording and payment of the Bonds issued hereunder.

Section 2. Levy and Certification of Annual Tax; Other Funds to be Used.

a) Levy of Annual Tax. That for the purpose of providing funds to pay the principal and interest of the Bonds hereinafter authorized to be issued, there is hereby levied for each future year the following direct annual tax on all of the taxable property in the City of Waterloo, State of Iowa, to-wit:

AMOUNT	FISCAL YEAR (JULY 1 TO JUNE 30) YEAR OF COLLECTION
$192,184.64	2026/2027*
$193,472.50	2027/2028
$188,072.50	2028/2029
$187,672.50	2029/2030
$187,047.50	2030/2031
$186,197.50	2031/2032
$190,122.50	2032/2033
$188,525.00	2033/2034
$186,550.00	2034/2035
$184,265.00	2035/2036
$181,665.00	2036/2037
$183,662.50	2037/2038

*A levy in the amount of $1,448,000 has been included in the budget previously certified and a portion of said levy will be used to pay the principal and interest of the Bond coming due in fiscal year 2026/2027, with the remaining amount being used to pay principal and interest on the Taxable General Obligation Bonds, Series 2026C, and any amount leftover being utilized to pay debt service in fiscal year 2027/2028.

(NOTE: For example the levy to be made and certified against the taxable valuations of January 1, 2026 will be collected during the fiscal year commencing July 1, 2027.)

b) Resolution to be Filed With County Auditor. A certified copy of this Resolution, which amends the resolution authorizing the issuance and levying a tax for the payment thereof dated March 16, 2026 (pre-levy resolution) shall be filed with the Auditor of Black Hawk County, Iowa and the Auditor is hereby instructed in and for each of the years as provided, to levy and assess the tax hereby authorized in Section 2 of this Resolution, in like manner as other taxes are levied and assessed, and such taxes so levied

in and for each of the years aforesaid be collected in like manner as other taxes of the City are collected, and when collected be used for the purpose of paying principal and interest on said Bonds issued in anticipation of the tax, and for no other purpose whatsoever.

c) Additional City Funds Available. Principal and interest coming due at any time when the proceeds of said tax on hand shall be insufficient to pay the same shall be promptly paid when due from current funds of the City available for that purpose and reimbursement shall be made from such special fund in the amounts thus advanced.

Section 3. Bond Fund. Said tax shall be assessed and collected each year at the same time and in the same manner as, and in addition to, all other taxes in and for the City, and when collected they shall be converted into a special fund within the Debt Service Fund to be known as the "2026C GENERAL OBLIGATION BOND FUND NO. 1" (the "Bond Fund"), which is hereby pledged for and shall be used only for the payment of the principal of and interest on the Bonds hereinafter authorized to be issued; and also there shall be apportioned to said fund its proportion of taxes received by the City from property that is centrally assessed by the State of Iowa.

Section 4. Application of Bond Proceeds. Proceeds of the Bonds, other than accrued interest except as may be provided below, shall be credited to the Project Fund and expended therefrom for the purposes of issuance. Any amounts on hand in the Project Fund shall be available for the payment of the principal of or interest on the Bonds at any time that other funds shall be insufficient to the purpose, in which event such funds shall be repaid to the Project Fund at the earliest opportunity. Any balance on hand in the Project Fund and not immediately required for its purposes may be invested not inconsistent with limitations provided by law or this Resolution.

Section 5. Investment of Bond Fund Proceeds. All moneys held in the Bond Fund, provided for by Section 3 of this Resolution shall be invested in investments permitted by Chapter 12B, Code of Iowa, 2025, as amended, or deposited in financial institutions which are members of the Federal Deposit Insurance Corporation and the deposits in which are insured thereby and all such deposits exceeding the maximum amount insured from time to time by FDIC or its equivalent successor in any one financial institution shall be continuously secured in compliance with Chapter 12C of the Code of Iowa, 2025, as amended, or otherwise by a valid pledge of direct obligations of the United States Government having an equivalent market value. All such interim investments shall mature before the date on which the moneys are required for payment of principal of or interest on the Bonds as herein provided.

Section 6. Bond Details, Execution and Redemption.

a) Bond Details. Taxable General Obligation Bonds of the City in the amount of $1,700,000, shall be issued pursuant to the provisions of Section 384.25 of the Code of Iowa for the aforesaid purposes. The Bonds shall be designated "TAXABLE GENERAL OBLIGATION BOND, SERIES 2026C", be dated June 29, 2026, and bear interest from the date thereof, until payment thereof, at the office of the Paying Agent, said interest

payable on December 1, 2026, and semiannually thereafter on the 1st day of June and December in each year until maturity at the rates hereinafter provided.

The Bonds shall be executed by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of the Clerk, and impressed or printed with the seal of the City and shall be fully registered as to both principal and interest as provided in this Resolution; principal, interest and premium, if any, shall be payable at the office of the Paying Agent by mailing of a check to the registered owner of the Bond. The Bonds shall be in the denomination of $5,000 or multiples thereof. The Bonds shall mature and bear interest as follows:

Principal Amount	Interest Rate	Maturity June 1st
$120,000.00	4.000%	2027
$120,000.00	4.500%	2028
$120,000.00	4.500%	2029
$125,000.00	4.500%	2030
$130,000.00	4.500%	2031
$135,000.00	4.500%	2032
$145,000.00	4.550%	2033
$150,000.00	4.650%	2034
$155,000.00	4.700%	2035
$160,000.00	4.750%	2036
$165,000.00	4.850%	2037
$175,000.00	4.950%	2038

b) Redemption.

i. Optional Redemption. Bonds maturing after June 1, 2034, may be called for optional redemption by the Issuer on that date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in any order of maturity and within an annual maturity by lot. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' written notice of redemption shall be given to the registered owner of the Bond. Failure to give written notice to any registered owner of the Bonds or any defect therein shall not affect the validity of any proceedings for the redemption of the Bonds. All Bonds or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment. Written notice will be deemed completed upon transmission to the owner of record.

If selection by lot within a maturity is required, the Registrar shall designate the Bonds to be redeemed by random selection of the names of the

registered owners of the entire annual maturity until the total amount of Bonds to be called has been reached.

If less than all of a maturity is called for redemption, the Issuer will notify DTC of the particular amount of such maturity to be redeemed prior to maturity. DTC will determine by lot the amount of each Participant's interest in such maturity to be redeemed and each Participant will then select by lot the beneficial ownership interests in such maturity to be redeemed. All prepayments shall be at a price of par plus accrued interest.

Section 7. Issuance of Bonds in Book-Entry Form; Replacement Bonds.

a) Notwithstanding the other provisions of this Resolution regarding registration, ownership, transfer, payment and exchange of the Bonds, unless the Issuer determines to permit the exchange of Depository Bonds for Bonds in Authorized Denominations, the Bonds shall be issued as Depository Bonds in denominations of the entire principal amount of each maturity of Bonds (or, if a portion of said principal amount is prepaid, said principal amount less the prepaid amount). The Bonds must be registered in the name of Cede & Co., as nominee for DTC. Payment of semiannual interest for any Bonds registered in the name of Cede & Co. will be made by wire transfer or New York Clearing House or equivalent next day funds to the account of Cede & Co. on the interest payment date for the Bonds at the address indicated or in the Representation Letter.

b) The Bonds will be initially issued in the form of separate single authenticated fully registered bonds in the amount of each stated maturity of the Bonds. Upon initial issuance, the ownership of the Bonds will be registered in the registry books of the UMB Bank, N.A. kept by the Paying Agent and Registrar in the name of Cede & Co., as nominee of DTC. The Paying Agent and Registrar and the Issuer may treat DTC (or its nominee) as the sole and exclusive owner of the Bonds registered in its name for the purposes of payment of the principal or redemption price of or interest on the Bonds, selecting the Bonds or portions to be redeemed, giving any notice permitted or required to be given to registered owners of Bonds under the Resolution of the Issuer, registering the transfer of Bonds, obtaining any consent or other action to be taken by registered owners of the Bonds and for other purposes. The Paying Agent, Registrar and the Issuer have no responsibility or obligation to any Participant or Beneficial Owner of the Bonds under or through DTC with respect to the accuracy of records maintained by DTC or any Participant; with respect to the payment by DTC or Participant of an amount of principal or redemption price of or interest on the Bonds; with respect to any notice given to owners of Bonds under the Resolution; with respect to the Participant(s) selected to receive payment in the event of a partial redemption of the Bonds, or a consent given or other action taken by DTC as registered owner of the Bonds. The Paying Agent and Registrar shall pay all principal of and premium, if any, and interest on the Bonds only to Cede & Co. in accordance with the Representation Letter, and all payments are valid and effective to fully satisfy and discharge the Issuer's obligations with respect to the principal of and premium, if any, and interest on the Bonds to the extent of the sum paid. DTC must receive an authenticated Bond for each separate stated maturity evidencing the obligation of the Issuer to make payments of principal of and premium, if any, and

interest. Upon delivery by DTC to the Paying Agent and Registrar of written notice that DTC has determined to substitute a new nominee in place of Cede & Co., the Bonds will be transferable to the new nominee in accordance with this Section.

c) In the event the Issuer determines that it is in the best interest of the Beneficial Owners that they be able to obtain Bonds certificates, the Issuer may notify DTC and the Paying Agent and Registrar, whereupon DTC will notify the Participants, of the availability through DTC of Bonds certificates. The Bonds will be transferable in accordance with this Section. DTC may determine to discontinue providing its services with respect to the Bonds at any time by giving notice to the Issuer and the Paying Agent and Registrar and discharging its responsibilities under applicable law. In this event, the Bonds will be transferable in accordance with this Section.

d) Notwithstanding any other provision of the Resolution to the contrary, so long as any Bond is registered in the name of Cede & Co., as nominee of DTC, all payments with respect to the principal of and premium, if any, and interest on the Bond and all notices must be made and given, respectively to DTC as provided in the Representation letter.

e) In connection with any notice or other communication to be provided to Bondholders by the Issuer or the Paying Agent and Registrar with respect to a consent or other action to be taken by Bondholders, the Issuer or the Paying Agent and Registrar, as the case may be, shall establish a record date for the consent or other action and give DTC notice of the record date not less than 15 calendar days in advance of the record date to the extent possible. Notice to DTC must be given only when DTC is the sole Bondholder.

f) The Representation Letter is on file with DTC and sets forth certain matters with respect to, among other things, notices, consents and approvals by Bondholders and payments on the Bonds. The execution and delivery of the Representation Letter to DTC by the Issuer is ratified and confirmed.

g) In the event that a transfer or exchange of the Bonds is permitted under this Section, the transfer or exchange may be accomplished upon receipt by the Registrar from the registered owners of the Bonds to be transferred or exchanged and appropriate instruments of transfer. In the event Bond certificates are issued to holders other than Cede & Co., its successor as nominee for DTC as holder of all the Bonds, or other securities depository as holder of all the Bonds, the provisions of the Resolution apply to, among other things, the printing of certificates and the method or payment of principal of and interest on the certificates. Any substitute depository shall be designated in writing by the Issuer to the Paying Agent. Any such substitute depository shall be a qualified and registered "clearing agency" as provided in Section 17A of the Securities Exchange Act of 1934, as amended. The substitute depository shall provide for (i) immobilization of the Depository Bonds, (ii) registration and transfer of interests in Depository Bonds by book entries made on records of the depository or its nominee and (iii) payment of principal of, premium, if any, and interest on the Bonds in accordance with and as such interests may appear with respect to such book entries.

h) The officers of the Issuer are authorized and directed to prepare and furnish to the purchaser, and to the attorneys approving the legality of Bonds, certified copies of proceedings, ordinances, resolutions and records and all certificates and affidavits and other instruments as may be required to evidence the legality and marketability of the Bonds, and all certified copies, certificates, affidavits and other instruments constitute representations of the Issuer as to the correctness of all stated or recited facts.

Section 8. Registration of Bonds; Appointment of Registrar; Transfer; Ownership; Delivery; and Cancellation.

a) Registration. The ownership of Bonds may be transferred only by the making of an entry upon the books kept for the registration and transfer of ownership of the Bonds, and in no other way. UMB Bank, N.A. is hereby appointed as Bond Registrar under the terms of this Resolution and under the provisions of a separate agreement with the Issuer filed herewith which is made a part hereof by this reference. Registrar shall maintain the books of the Issuer for the registration of ownership of the Bonds for the payment of principal of and interest on the Bonds as provided in this Resolution. All Bonds shall be negotiable as provided in Article 8 of the Uniform Commercial Code and Section 384.31 of the Code of Iowa, subject to the provisions for registration and transfer contained in the Bonds and in this Resolution.

b) Transfer. The ownership of any Bond may be transferred only upon the Registration Books kept for the registration and transfer of Bonds and only upon surrender thereof at the office of the Registrar together with an assignment duly executed by the holder or his duly authorized attorney in fact in such form as shall be satisfactory to the Registrar, along with the address and social security number or federal employer identification number of such transferee (or, if registration is to be made in the name of multiple individuals, of all such transferees). In the event that the address of the registered owner of a Bond (other than a registered owner which is the nominee of the broker or dealer in question) is that of a broker or dealer, there must be disclosed on the Registration Books the information pertaining to the registered owner required above. Upon the transfer of any such Bond, a new fully registered Bond, of any denomination or denominations permitted by this Resolution in aggregate principal amount equal to the unmatured and unredeemed principal amount of such transferred fully registered Bond, and bearing interest at the same rate and maturing on the same date or dates shall be delivered by the Registrar.

c) Registration of Transferred Bonds. In all cases of the transfer of the Bonds, the Registrar shall register, at the earliest practicable time, on the Registration Books, the Bonds, in accordance with the provisions of this Resolution.

d) Ownership. As to any Bond, the person in whose name the ownership of the same shall be registered on the Registration Books of the Registrar shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of or on account of the principal of any such Bonds and the premium, if any, and interest thereon shall be made only to or upon the order of the registered owner thereof or his legal representative.

All such payments shall be valid and effectual to satisfy and discharge the liability upon such Bond, including the interest thereon, to the extent of the sum or sums so paid.

e) Cancellation. All Bonds which have been redeemed shall not be reissued but shall be cancelled by the Registrar. All Bonds which are cancelled by the Registrar shall be destroyed and a certificate of the destruction thereof shall be furnished promptly to the Issuer; provided that if the Issuer shall so direct, the Registrar shall forward the cancelled Bonds to the Issuer.

f) Non-Presentment of Bonds. In the event any payment check, wire, or electronic transfer of funds representing payment of principal of or interest on the Bonds is returned to the Paying Agent or if any bond is not presented for payment of principal at the maturity or redemption date, if funds sufficient to pay such principal of or interest on Bonds shall have been made available to the Paying Agent for the benefit of the owner thereof, all liability of the Issuer to the owner thereof for such interest or payment of such Bonds shall forthwith cease, terminate and be completely discharged, and thereupon it shall be the duty of the Paying Agent to hold such funds, without liability for interest thereon, for the benefit of the owner of such Bonds who shall thereafter be restricted exclusively to such funds for any claim of whatever nature on his part under this Resolution or on, or with respect to, such interest or Bonds. The Paying Agent's obligation to hold such funds shall continue for a period equal to two years and six months following the date on which such interest or principal became due, whether at maturity, or at the date fixed for redemption thereof, or otherwise, at which time the Paying Agent shall surrender any remaining funds so held to the Issuer, whereupon any claim under this Resolution by the Owners of such interest or Bonds of whatever nature shall be made upon the Issuer.

g) Registration and Transfer Fees. The Registrar may furnish to each owner, at the Issuer's expense, one bond for each annual maturity. The Registrar shall furnish additional Bonds in lesser denominations (but not less than the minimum denomination) to an owner who so requests.

Section 9. Reissuance of Mutilated, Destroyed, Stolen or Lost Bonds. In case any outstanding Bond shall become mutilated or be destroyed, stolen or lost, the Issuer shall at the request of Registrar authenticate and deliver a new Bond of like tenor and amount as the Bond so mutilated, destroyed, stolen or lost, in exchange and substitution for such mutilated Bond to Registrar, upon surrender of such mutilated Bond, or in lieu of and substitution for the Bond destroyed, stolen or lost, upon filing with the Registrar evidence satisfactory to the Registrar and Issuer that such Bond has been destroyed, stolen or lost and proof of ownership thereof, and upon furnishing the Registrar and Issuer with satisfactory indemnity and complying with such other reasonable regulations as the Issuer or its agent may prescribe and paying such expenses as the Issuer may incur in connection therewith.

Section 10. Record Date. Payments of principal and interest, otherwise than upon full redemption, made in respect of any Bond, shall be made to the registered holder thereof or to their designated agent as the same appear on the books of the Registrar on the 15th day of the month preceding the payment date. All such payments shall fully discharge the obligations of

the Issuer in respect of such Bonds to the extent of the payments so made. Upon receipt of the final payment of principal, the holder of the Bond shall surrender the Bond to the Paying Agent.

Section 11. Execution, Authentication and Delivery of the Bonds. Upon the adoption of this Resolution, the Mayor and Clerk shall execute the Bonds by their manual or authorized signature and deliver the Bonds to the Registrar, who shall authenticate the Bonds and deliver the same to or upon order of the Purchaser. No Bond shall be valid or obligatory for any purpose or shall be entitled to any right or benefit hereunder unless the Registrar shall duly endorse and execute on such Bond a Certificate of Authentication substantially in the form of the Certificate herein set forth. Such Certificate upon any Bond executed on behalf of the Issuer shall be conclusive evidence that the Bond so authenticated has been duly issued under this Resolution and that the holder thereof is entitled to the benefits of this Resolution.

No Bonds shall be authenticated and delivered by the Registrar unless and until there shall have been provided the following:

1. A certified copy of the Resolution of Issuer authorizing the issuance of the Bonds;

2. A written order of Issuer signed by the Treasurer of the Issuer directing the authentication and delivery of the Bonds to or upon the order of the Purchaser upon payment of the purchase price as set forth therein;

3. The approving opinion of Ahlers & Cooney, P.C., Bond Counsel, concerning the validity and legality of all the Bonds proposed to be issued.

Section 12. Right to Name Substitute Paying Agent or Registrar. Issuer reserves the right to name a substitute, successor Registrar or Paying Agent upon giving prompt written notice to each registered bondholder.

Section 13. Form of Bond. Bonds shall be printed substantially in the form as follows:

"STATE OF IOWA"
"COUNTY OF BLACK HAWK"
"CITY OF WATERLOO"
"TAXABLE GENERAL OBLIGATION BOND"
"SERIES 2026C"
CORPORATE PURPOSE

Rate: _____
Maturity: _____
Bond Date: June 29, 2026
CUSIP No.: _____
"Registered"
Certificate No. _____
Principal Amount: $_____

The City of Waterloo, State of Iowa, a municipal corporation organized and existing under and by virtue of the Constitution and laws of the State of Iowa (the "Issuer"), for value received, promises to pay from the source and as hereinafter provided, on the maturity date indicated above, to

(Registration panel to be completed by Registrar or Printer with name of Registered Owner).

or registered assigns, the principal sum of (enter principal amount in long form) THOUSAND DOLLARS in lawful money of the United States of America, on the maturity date shown above, only upon presentation and surrender hereof at the office of UMB Bank, N.A., Paying Agent of this issue, or its successor, with interest on the sum from the date hereof until paid at the rate per annum specified above, payable on December 1, 2026, and semiannually thereafter on the 1st day of June and December in each year.

Interest and principal shall be paid to the registered holder of the Bond as shown on the records of ownership maintained by the Registrar as of the 15th day of the month preceding such interest payment date. Interest shall be computed on the basis of a 360-day year of twelve 30-day months.

THE HOLDERS OF THE BONDS SHOULD TREAT THE INTEREST AS SUBJECT TO FEDERAL INCOME TAXATION.

This Bond is issued pursuant to the provisions of Section 384.25 of the Code of Iowa, for the purpose of paying costs of the acquisition, restoration, or demolition of abandoned, dilapidated, or dangerous buildings, structures or properties or the abatement of a nuisance and for the establishment or funding of programs to provide for or assist in providing for the acquisition, restoration, or demolition of housing; the construction, reconstruction, improvement, renovation, and equipping of downtown parking ramps and garages; and the construction, reconstruction, enlargement, improvement and equipping of recreational buildings, recreational grounds, golf courses, parks and public buildings, including for Young Arena, in conformity to a Resolution of the Council of said City duly passed and approved.

Unless this certificate is presented by an authorized representative of The Depository Trust Company, a limited purpose trust company ("DTC"), to the Issuer or its agent for registration of transfer, exchange or payment, and any certificate issued is registered in the name of Cede & Co. or such other name as requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other Issuer as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

Bonds maturing after June 1, 2034, may be called for optional redemption by the Issuer and paid before maturity on said date or any date thereafter, from any funds regardless of source, in whole or from time to time in part, in any order of maturity and within an annual maturity by lot. The terms of redemption shall be par, plus accrued interest to date of call.

Thirty days' written notice of redemption shall be given to the registered owner of the Bond. Failure to give written notice to any registered owner of the Bonds or any defect therein shall not affect the validity of any proceedings for the redemption of the Bonds. All bonds or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment. Written notice will be deemed completed upon transmission to the owner of record.

If selection by lot within a maturity is required, the Registrar shall designate the Bonds to be redeemed by random selection of the names of the registered owners of the entire annual maturity until the total amount of Bonds to be called has been reached.

If less than all of a maturity is called for redemption, the Issuer will notify DTC of the particular amount of such maturity to be redeemed prior to maturity. DTC will determine by lot the amount of each Participant's interest in such maturity to be redeemed and each Participant will then select by lot the beneficial ownership interests in such maturity to be redeemed. All prepayments shall be at a price of par plus accrued interest.

Ownership of this Bond may be transferred only by transfer upon the books kept for such purpose by UMB Bank, N.A., the Registrar. Such transfer on the books shall occur only upon presentation and surrender of this Bond at the office of the Registrar as designated below, together with an assignment duly executed by the owner hereof or his duly authorized attorney in the form as shall be satisfactory to the Registrar. Issuer reserves the right to substitute the Registrar and Paying Agent but shall, however, promptly give notice to registered Bondholders of such change. All bonds shall be negotiable as provided in Article 8 of the Uniform Commercial Code and Section 384.31 of the Code of Iowa, subject to the provisions for registration and transfer contained in the Bond Resolution.

And it is hereby represented and certified that all acts, conditions and things requisite, according to the laws and Constitution of the State of Iowa, to exist, to be had, to be done, or to be performed precedent to the lawful issue of this Bond, have been existent, had, done and performed as required by law; that provision has been made for the levy of a sufficient continuing annual tax on all the taxable property within the territory of the Issuer for the payment of the principal and interest of this Bond as the same will respectively become due; that such taxes have been irrevocably pledged for the prompt payment hereof, both principal and interest; and the total indebtedness of the Issuer including this Bond, does not exceed the constitutional or statutory limitations.

IN TESTIMONY WHEREOF, the Issuer by its Council, has caused this Bond to be signed by the manual or facsimile signature of its Mayor and attested by the manual or facsimile signature of its City Clerk, with the seal of the City printed or impressed hereon, and to be authenticated by the manual signature of an authorized representative of the Registrar, UMB Bank, N.A., West Des Moines, Iowa.

Date of authentication:_____

This is one of the Bonds described in the within mentioned Resolution, as registered by UMB Bank, N.A.

UMB BANK, N.A., Registrar

By: _____
Authorized Signature

Registrar and Transfer Agent: UMB Bank, N.A.
Paying Agent: UMB Bank, N.A.

SEE REVERSE FOR CERTAIN DEFINITIONS

(Seal)
(Signature Block)

CITY OF WATERLOO, STATE OF IOWA

By: _____(manual or facsimile signature)_____
Mayor

ATTEST:

By: _____(manual or facsimile signature)_____
City Clerk

(Information Required for Registration)

ASSIGNMENT

For value received, the undersigned hereby sells, assigns and transfers unto _____ (Social Security or Tax Identification No. _____) the within Bond and does hereby irrevocably constitute and appoint _____ attorney in fact to transfer the said Bond on the books kept for registration of the within Bond, with full power of substitution in the premises.

Dated: _____

_____

_____
(Person(s) executing this Assignment sign(s) here)

SIGNATURE)
GUARANTEED)_____

IMPORTANT - READ CAREFULLY

The signature(s) to this Power must correspond with the name(s) as written upon the face of the certificate(s) or bond(s) in every particular without alteration or enlargement or any change whatever. Signature guarantee must be provided in accordance with the prevailing standards and procedures of the Registrar and Transfer Agent. Such standards and procedures may require signature to be guaranteed by certain eligible guarantor institutions that participate in a recognized signature guarantee program.

INFORMATION REQUIRED FOR REGISTRATION OF TRANSFER

Name of Transferee(s) _____
Address of Transferee(s) _____
Social Security or Tax Identification
Number of Transferee(s) _____
Transferee is a(n):
Individual* _____ Corporation _____
Partnership _____ Trust _____

*If the Bond is to be registered in the names of multiple individual owners, the names of all such owners and one address and social security number must be provided.

The following abbreviations, when used in the inscription on the face of this Bond, shall be construed as though written out in full according to applicable laws or regulations:

TEN COM - as tenants in common
TEN ENT - as tenants by the entireties
JT TEN - as joint tenants with rights of survivorship and not as tenants in common
IA UNIF TRANS MIN ACT - ..... Custodian .....
(Cust) (Minor)
Under Iowa Uniform Transfers to Minors Act.....
(State)

ADDITIONAL ABBREVIATIONS MAY
ALSO BE USED THOUGH NOT IN THE ABOVE LIST

(End of form of Bond)

Section 14. Closing Documents. The Mayor and City Clerk are authorized and directed to execute, attest, seal and deliver for and on behalf of the City any other additional certificates, documents, or other papers and perform all other acts, including without limitation the execution of all closing documents, as they may deem necessary or appropriate in order to implement and carry out the intent and purposes of this Resolution.

Section 15. Contract Between Issuer and Purchaser. This Resolution constitutes a contract between said City and the purchaser of the Bonds.

Section 16. Continuing Disclosure. The Issuer hereby covenants and agrees that it will comply with and carry out all of the provisions of the Continuing Disclosure Certificate, and the provisions of the Continuing Disclosure Certificate are hereby incorporated by reference as part of this Resolution and made a part hereof. Notwithstanding any other provision of this Resolution, failure of the Issuer to comply with the Continuing Disclosure Certificate shall not be considered an event of default under this Resolution; however, any holder of the Bonds or Beneficial Owner may take such actions as may be necessary and appropriate, including seeking specific performance by court order, to cause the Issuer to comply with its obligations under the Continuing Disclosure Certificate. For purposes of this section, "Beneficial Owner" means any person which (a) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bond (including persons holding Bonds through nominees, depositories or other intermediaries), or (b) is treated as the owner of any Bonds for federal income tax purposes.

Section 17. Repeal of Conflicting Resolutions or Ordinances. All ordinances and resolutions and parts of ordinances and resolutions in conflict herewith are hereby repealed.

Section 18. Severability Clause. If any section, paragraph, clause or provision of this Resolution be held invalid, such invalidity shall not affect any of the remaining provisions hereof, and this Resolution shall become effective immediately upon its passage and approval.

PASSED AND APPROVED this 15th day of June, 2026.

_____
Dave Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

CERTIFICATE

STATE OF IOWA)
) SS
COUNTY OF BLACK HAWK)

I, the undersigned City Clerk of the City of Waterloo, State of Iowa, do hereby certify that attached is a true and complete copy of the portion of the records of the City showing proceedings of the Council, and the same is a true and complete copy of the action taken by the Council with respect to the matter at the meeting held on the date indicated in the attachment, which proceedings remain in full force and effect, and have not been amended or rescinded in any way; that meeting and all action thereat was duly and publicly held in accordance with a notice of meeting and tentative agenda, a copy of which was timely served on each member of the Council and posted on a bulletin board or other prominent place easily accessible to the public and clearly designated for that purpose at the principal office of the Council pursuant to the local rules of the Council and the provisions of Chapter 21, Code of Iowa, upon reasonable advance notice to the public and media at least twenty-four hours prior to the commencement of the meeting as required by law and with members of the public present in attendance; I further certify that the individuals named therein were on the date thereof duly and lawfully possessed of their respective City offices as indicated therein, that no Council vacancy existed except as may be stated in the proceedings, and that no controversy or litigation is pending, prayed or threatened involving the incorporation, organization, existence or boundaries of the City or the right of the individuals named therein as officers to their respective positions.

WITNESS my hand and the seal of the Council hereto affixed this _____ day of _____, 2026.

_____
Kelley Felchle, City Clerk, City of Waterloo, State of Iowa

(SEAL)

4937-0022-0338-1\11310-183

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Lance Dunn, Human Resources Director
Human Resources Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving a Professional Services Agreement with Employee and Family Resources of Des Moines, Iowa, in the amount of $13,389.75, to continue to provide an Employee Assistance Program, and authorizing the Mayor to execute said document.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. July Renewal Form 2026 - City of Waterloo

EFR EMPLOYEE & FAMILY RESOURCES

RENEWAL

PROPOSED FOR City of Waterloo

RENEWAL DATE 07/01/2026

DUE DATE 05/15/2026

Renew at Current Benefit	X	3 Session Core
Per Employee Per Year		$24.75
Total Number of Employees Upon Renewal		541
Fee		
Investment Upon Renewal		$13,389.75

Other Options		
Total Number of Employees Upon Renewal		
Fee		
Investment Upon Renewal		

Pricing is based on one annual payment for a 12-month contract. Pricing is subject to change if the renewal date or the employee count changes.

Additional Services are available should you need them throughout the year. Those include Workplace Trainings, Mediation and Leadership Coaching. Please contact your Account Manager for more information.

SIGNATURE _____ **DATE** _____

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Rob Duncan, Chief of Police
Police Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving a School Resource Officer Agreement with the Waterloo Community School District to provide six School Resource Officers in the schools in the amount of $406,293.00 for FY 2027, $426,608.00 for FY 2028, $447,938.00 for FY29 and $470,335.00 for FY 2030, including funding for Officer training, and authorizing the Mayor and City Clerk to execute said document.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. SRO contract 2026-2030

SCHOOL RESOURCE OFFICERS' AGREEMENT

This Agreement is entered into this 1st day of July, 2023~~3~~6 by and between the Waterloo Community School District, whose address for purposes of this Agreement is 1516 Washington Street, Waterloo, Iowa, 50702 (hereinafter "School") and the City of Waterloo by and through its Police Department, whose address for purposes of this Agreement is 715 Mulberry Street, Waterloo, Iowa, 50703 (hereinafter "Police").

RECITALS

WHEREAS, School desires to provide positive role models for its students by having present uniformed Police School Resource Officers (SRO) to three (3) middle, two (2) high schools and one (1) at the District's alternative school; and

WHEREAS, School and Police endeavor to provide a cooperative effort in making accessible and responsive SRO to the schools, students, staff, and teachers; and

WHEREAS, Police desire to participate in this cooperative effort; and

WHEREAS, SRO can and will provide students with a positive alternative to substance abuse and/or gang activity through the introduction and presentation of the substance abuse and violence awareness program.

WHEREAS, the presence of SRO in School will allow the prevention and detection of delinquency among the students through the cooperative education and preventive measures of School and Police, with the efficacy of a productive learning atmosphere free of crime, violence, and substance abuse.

WHEREAS, prohibits the SROs from becoming involved in formal school discipline situations that are the responsibility of the school administrator.

NOW, THEREFORE, in consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the parties agree as follows.

A. DEFINITION OF TERMS.

1. Parent: A natural or adoptive mother or father, but does not include a mother or father whose parental rights have been terminated.

2. Guardian: A person who is not a parent of a child, but who has been appointed by the court or juvenile court having jurisdiction over the child, to make important decisions which have a permanent effect on the life and development of that child, and to provide for the general welfare of the child.

3. Custodian: A step-parent or a relative within the fourth degree of consanguinity to a minor child who has assumed responsibility for that child, a person who has accepted a release of custody, or a person appointed by a court or juvenile court having jurisdiction over a child.

4. Child: A person under 18 years of age.

5. Taking into Custody: An act, which would be governed by the laws of arrest under the criminal code if the subject committing the act were an adult. The taking into custody of a child is subject to all constitutional and statutory protections, which are afforded an adult upon arrest.

6. Delinquent Act:

   a. The violation of any state law or local ordinance that would constitute a public offense if committed by an adult except any offense which by law is exempt from the jurisdiction of the Juvenile code.

   b. The violation of a federal law or a law of another state whose violation constitutes a criminal offense if the case involving that act has been referred to Juvenile Court.

B. DURATION

1. The term of this Agreement shall be for four (4)~~1~~ years.
   i. Year one (1): 5% increase from 2026-2027
   ii. Year two (2): 5% increase from 2027-2028
   iii. Year three (3): 5% increase from 2028-2029
   iv. Year four (4): 5% increase from 2029-2030

2. Payments: The costs of this Agreement may, at the written request of either party, be reviewed every year in order to reach a mutually acceptable agreement.

3. In the event School fails to receive funding for any year, School may exercise its option to terminate this Agreement by giving at least one hundred twenty (120) days written notice of that intent to the contact person in this Agreement.

C. ADMINISTRATIVE PROCEDURES

1. The Waterloo Police Department agrees to:

   a. Assign six (6) uniformed Police Officers to the Waterloo Police/Waterloo Community Schools/Police School Resource Officer Unit. A dedicated Sergeant appointed by the Chief of Police. The Sergeant will have the availability to fill in at a school when needed.

   b. Provide a police vehicle, uniforms, and related equipment and ensure that all SROs be carefully selected law enforcement officers who have received specialized SRO training in the use of police power and authority in a school environment. Waterloo Schools agree to pay up to $1500.00 per officer for training.

   c. Pay overtime costs of School Resource Officers required to attend after-hour school functions at the school to which they are assigned, other than scheduled events such as: football, basketball, wrestling, baseball, dances, etc.

2. The Waterloo Community School District agrees to:

   ~~a. Waterloo Community School District shall make two (2) payments totaling Three Hundred Twenty Three Thousand Four Hundred and Fifty Five Dollars. ($373,455.00) to the Waterloo Police Department. The first payment due on November 1 2023 and the second payment due on April 1 2024.~~

   ~~b.~~a. Year one (1) of the contract provides Four Hundred and Thirty-One Thousand and Two Hundred and Ninety-Three ($431,293) dollars for the fiscal year, which shall begin on July 1, 2026 and end on June 30, 2027 of the following year. Waterloo Community School District shall make two (2) payments totaling Four Hundred and Thirty-One Thousand and Two Hundred and Ninety-Three ($431,293) dollars to the Waterloo Police Department. The first payment is due on November 1, 2026 and the second payment due April 1, 2027 of the year subsequent to November 1.

   Year two (2) of the contract provide Four Hundred and Fifty-Two Thousand and Eight Hundred and Fifty-Eight ($452,858) dollars for the fiscal year, which shall begin on July 1, 2027 and end on June 30, 2028 of the following year. Waterloo Community School District shall make two (2) payments totaling Four Hundred and Fifty-Two Thousand and Eight

Hundred and Fifty-Eight ($452,858) dollars to the Waterloo Police Department. The first payment is due on November 1, 2027 and the second payment due April 1, 2028 of the year subsequent to November 1.

Year three (3) of the contract provide Four Hundred and Seventy-Five Thousand and Five Hundred ($475,500) dollars for the fiscal year, which shall begin on July 1, 2028 and end on June 30, 2029 of the following year. Waterloo Community School District shall make two (2) payments totaling Four Hundred and Seventy-Five Thousand and Five Hundred ($475,500) dollars to the Waterloo Police Department. The first payment is due on November 1, 2028 and the second payment due April 1, 2029 of the year subsequent to November 1.

Year four (4) of the contract provide Four Hundred and Ninety-Nine Thousand and Two Hundred and Seventy-Five ($499,275) dollars for the fiscal year, which shall begin on July 1, 2029 and end on June 30, 2030 of the following year. Waterloo Community School District shall make two (2) payments totaling Four Hundred and Ninety-Nine Thousand and Two Hundred and Seventy-Five ($499,275) dollars to the Waterloo Police Department. The first payment is due on November 1, 2029 and the second payment due April 1, 2030 of the year subsequent to November 1.

~~c.~~b. Provide the School Resource Officer with accessible office space, and basic office furnishings including a telephone, desk top and any other necessary school materials. The School Resource Officer's designated office space must be constructed and maintained to ensure total confidentiality and security. This environment must be physically and visually shielded to prevent unauthorized access, disclosure, or observation of sensitive information and privileged communications.

~~d.~~c. Provide all drug awareness instructional and hand out materials at each of the three middle schools. Provide appropriate curriculum instructional materials to be used in the Waterloo Community Schools.

~~e.~~d. Arrange for and pay off-duty police officers that are requested for after-hour school activities (football, baseball, basketball, wrestling, dances, etc.) at the officer's current time

and a half rate of pay with a two (2) hour minimum. These events will be filled with officers assigned from the SRO unit unless other arrangements are made through the SRO supervisor. The Waterloo Community Schools will be billed directly for these events by the Waterloo Police Department once a month, at the officer's current time and a half rate of pay.

~~f.~~e. For major events defined as Homecoming dance, Prom dance, and Winter Formal, the SRO assigned to the school holding the event will be directed to work said event, unless other arrangements are made through the SRO supervisor. For these specific events, the SRO and any additional off-duty officers will be compensated at the officer's time-and-a-half rate of pay. The Waterloo Community Schools will be billed directly for these events by the Waterloo Police Department once a month, at the officer's current time and a half rate of pay.

~~g.~~f. We (Waterloo Schools) agree to provide de-escalation training to the appropriate employees, including Administrators. Additionally, we will provide and pay for SROs to be part of this same training to increase awareness of the protocol administrators will use.

~~h.~~g. The Waterloo Community School District will pay at the current officer's time of one and a half rate of pay for each school related phone call/conversation held after normal working hours of the SRO or SRO Supervisor. This will start at a half hour (0.5) minimum up to and including any additional time to address/handle the incident/emergency. Each SRO and the SRO supervisor will allow the Waterloo Community School District to have and use their (SRO's) work cell phone number for the purpose of communication for school related business.

3. The Waterloo Community School District and the Police Department agree that the School Resource Officers shall be selected from volunteer police applicants through a formal interview process. The formal interview panel shall include school staff, police personnel, and community persons.

4. The contact person for School shall be the Executive Director of Student and At-Risk Services, 1516 Washington Street, Waterloo, IA 50702, (319) 433-1801.

The contact person for Police shall be the SRO Supervisor, 715 Mulberry Street, Waterloo, IA 50703, (319) 291-4340.

5. The School Resource Officer's area of concern has to do with public law and its application. The School Resource Officers are not responsible for enforcement of school policies. The School Resource Officer is to act as a member of the school's team and report infractions of school policy to appropriate school personnel.

CITY OF WATERLOO, IOWA
POLICE DEPARTMENT

By:_____
David Boesen, Mayor

ATTEST:

_____
Kelley Felchle, City Clerk

STATE OF IOWA)
) ss.
BLACK HAWK COUNTY)

On this _____ day of _____, 2026~~3~~, before me, the undersigned, a Notary Public in and for the State of Iowa, personally appeared Quentin M. Hart and Kelley Felchle, to me personally known, and who, being by me duly sworn, did say that they are the Mayor and City Clerk, respectively, of the City of Waterloo, Iowa; that the seal affixed to the foregoing instrument is the corporate seal of the corporation, and that the instrument was signed and sealed on behalf of the corporation by authority of its City Council as contained in the Resolution adopted by the City Council, under Council Acton No. _____ of the City Council on the _____ day of _____, 202~~4~~3, and that David Boesen and Kelley Felchle acknowledged the execution of the instrument to be their voluntary act and deed and the voluntary act and deed of the corporation, by it voluntarily executed.

_____
Notary Public in and for the State of Iowa

WATERLOO COMMUNITY SCHOOL DISTRICT

By: _____
Astor Williams ~~Sue Flynn~~
School Board President

STATE OF IOWA)
) ss.
BLACK HAWK COUNTY)

This instrument was acknowledged before me on this _____ day of _____, 2026~~3~~, by Astor Williams ~~Sue Flynn~~, as School Board President, for the Waterloo Community School District.

_____
Notary Public in and for the State of Iowa

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Randy Bennett, Public Works Division Manager
Waste Management Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving Supplemental Agreement No.1 to a Professional Services Agreement originally executed October 17, 2022, with AECOM Technical Services, Inc., of Waterloo, Iowa, in an amount not to exceed $385,100.00 in conjunction with the Cattle Congress Lift Station and Force Main Project Contract No. 1075, and authorizing the Mayor to execute said document.

RECOMMENDED COUNCIL ACTION

Recommend approval of Supplemental Agreement No.1 to a Professional Services Agreement originally executed October 17, 2022 with AECOM Technical Services, Inc., of Waterloo, Iowa, in the amount not to exceed $385,100.00 in conjunction with the Cattle Congress Lift Station and Force Main Project Contract No. 1075

SUMMARY STATEMENT AND BACKGROUND INFORMATION

Supplemental Agreement No. 1 is for construction-related services for this project. This project consists of replacement and construction of a new lift station at the existing Cattle Congress Lift Station site and along the South Riverside Trail in the west central portion of the City of Waterloo. The project will replace the aging lift station and force main and upgrade the infrastructure for future conditions. An on-site emergency generator will be installed to support the continuous operation of the station.

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. AECOM - Cont 1075 - Cattle Congress Lift Station and Force Main - Supplemental Agreement No 1

AECOM
501 Sycamore Street
Suite 222
Waterloo, Iowa 50703
www.aecom.com

319-232-6531 tel
319-232-0271 fax

WATERLOO SANITARY SEWER SYSTEM IMPROVEMENTS
CATTLE CONGRESS LIFT STATION AND FORCE MAIN
CITY OF WATERLOO, IOWA

CONSTRUCTION-RELATED SERVICES
SUPPLEMENTAL AGREEMENT NO. 1

WHEREAS, a Professional Services Agreement was entered into between the City of Waterloo, Iowa, (Client), and AECOM Technical Services, Inc. (ATS), of Waterloo, Iowa, dated October 17, 2022, for the design of the Cattle Congress Lift Station and Force Main project.

WHEREAS, the Client and ATS now desire to enter into Supplemental Agreement No. 1 for construction-related services for the project.

NOW THEREFORE, it is mutually agreed to amend the original Professional Service Agreement as follows:

I. Project Description

The project consists of the replacement and construction of a new lift station and force main at the existing Cattle Congress Lift Station site and along the South Riverside Trail in the west central portion of the City of Waterloo. The project will replace the aging lift station and force main and upgrade the infrastructure for future conditions. An on-site emergency generator will be installed to support the continuous operation of the station. The City will utilize a State Revolving Fund (SRF) loan for the project. The construction cost for the project is approximately $3.5 million dollars. ATS will provide construction-related services along with engineering assistance to the City for the SRF process.

II. Scope of Services

The Scope of Services will encompass and include work, services, materials, equipment, personnel, and supplies necessary to provide construction-related services for the project and associated engineering assistance to the City for the SRF process required for the project. The Scope of Services is further defined as follows:

Task 1. Conduct a preconstruction conference attended by representatives of the Contractor, Client, ATS, and affected utilities.

Task 2. Provide construction staking for horizontal and vertical controls for the project.

Task 3. Review shop drawings and other submittals as required of the Contractor by the contract documents for conformance with the design concept of the project and compliance with the information given in the contract documents.

Task 4. Answer design interpretation questions from the Client, Contractor, review staff, and appropriate agencies.

Task 5. Prepare monthly applications for payment based on information provided by field review staff and the Contractor, and forward to the Client for execution with recommendation for approval and payment.

Task 6. Perform construction site visits by design personnel at appropriate stages of construction to review the quality of the work and to determine whether the work generally conforms to the contract documents.

Task 7. Prepare and assist the Client and Contractor in processing contract change orders.

Task 8. Provide periodic field observation during construction to review the work of the Contractor to determine if the work is proceeding in general accordance with the contract documents and that completed work appears to generally conform to the contract documents. Staffing requirements may be adjusted during the project in relation to the level of construction activity.

Task 9. Report to the Client work believed to be unsatisfactory, faulty, defective, or does not conform to the contract documents, and advise the Client of work that should be corrected or rejected.

Task 10. Consider and evaluate the Contractor's suggestions for modifications and report them with recommendations to the Client.

Task 11. Facilitate construction progress meetings of the project as needed and complete minutes for each meeting. It is anticipated that when construction activities begin, meetings will be bi-weekly.

Task 12. Participate in a review of the project with the Client and review staff near project completion, and prepare a list of items to be completed or corrected.

Task 13. Participate in a field observation of the completed project with the Client and review staff before a final application for payment is processed for the Contractor.

Task 14. Maintain files for correspondence, reports of the job conferences, shop drawings, and sample submissions, reproductions of original contract documents, including addenda, change orders, field modifications, additional drawings issued subsequent to the execution of the contract, Engineer clarifications and interpretations of the contract documents, progress reports, and other project-related documents.

Task 15. Compile Equipment Manufacturer’s and Vendors Operation & Maintenance (O&M) material from Contractor and distribute one electronic and two hard copies of O&M manuals to the Client at the completion of the project.

Task 16. Coordinate and attend one-day training and start-up sessions by Contractor and equipment manufacturer(s) to orient Client’s operating personnel in the operation of the facilities.

Task 17. Provide the Client with a copy of revised drawings of the construction plans (record drawings) for the project based on the construction observation records of the field review staff and the Contractor, showing those changes made during construction considered significant.

Task 18. Prepare and assist the Client with the final close-out documentation received from the Contractor.

III. Compensation

Compensation for the above services will be on an hourly basis in accordance with Part VI of the original agreement and shall be integrated with the fees in the original agreement. The estimated fee is Three Hundred Eighty-Five Thousand One Hundred Dollars ($385,100.00) and will not be exceeded without authorization from the Client.

IV. In all other respects, the obligations of the Client and the Consultant shall remain as specified in the Professional Services Agreement dated October 17, 2022.

IN WITNESS WHEREOF, the parties hereto have executed this Supplemental Agreement No. 1 as of the dates shown below:

AECOM TECHNICAL SERVICES, INC.

By Michelle M. Sweeney Date 6/3/2026
Michelle M. Sweeney, PE, PTOE
Associate Vice President

APPROVED FOR CITY OF WATERLOO:

By:_____ Date_____
David Boesen
Mayor

L:\Secure_DCS\Administration\AGREE\SUPPLE\SA1 WAT Cattle Congress Lift Station Force Main CRS.docx

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Todd Derifield, Leisure Services Director
Leisure Services Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution Approving a Professional Services Agreement with B32 Engineering Group of Hudson, Wisconsin, to design, provide bid assistance, and construction observation of installation of new ice plant refrigeration equipment and related equipment at Young Arena, and authorizing the Mayor to execute said document.

RECOMMENDED COUNCIL ACTION

Approve Professional Services Agreement

SUMMARY STATEMENT AND BACKGROUND INFORMATION

Young Arena's ice plant and refrigeration equipment are original to the facility and are past due for replacement. This equipment has a 25 to 30 year life expectancy and current equipment is 32 years old. If this system were to fail the sheet of ice will melt halting all ice related activities at the arena.

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

CIP Bond Funds

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. B32 Tower and Chiller Design Proposal

April 18, 2026
Revision 1 April 30, 2026

Mr. Chris Dolan
Arena Manager
Young Arena
Waterloo, IA 50703

Via Email: *CHRIS.DOLAN@waterloo-ia.org*

RE: Professional Engineering Services Proposal: Young Arena – Chiller and Cooling Tower Replacement
Ice System Design and Construction Observation Phase Services

Dear Mr. Dolan:

We are pleased to submit this proposal to provide professional engineering services for the above-mentioned project. The following proposal outlines our understanding of the project by defining the scope of our services and key assumptions made in preparing this proposal and fees associated with the Scope of Work.

ABOUT B32 ENGINEERING GROUP, INC.

Our team has extensive and specialty experience in programming, evaluations, concept design, and design and construction phase services for all types of ice rink projects. Successfully completing over 450 ice rink related projects, including some of the most recent and state-of-the-art NCAA Division 1 college hockey facilities; our team, led by Scott Ward, is a leader in the ice rink industry providing some of the most innovative, cost-effective, and energy-efficient design solutions. We know these unique facilities very well, have a thorough understanding of their needs and performance requirements and have the in-depth, specialty experience required to successfully complete this project for you, the City of Waterloo Leisure Services, and other project partners.

We have submitted to you our complete Ice Rink Statement of Qualifications for your review. We would be happy to provide additional information regarding projects, references, etc. at your request.

We recently completed an Ice System Evaluation, dated June 20, 2025, of the ice system (including refrigeration system, ice rink floor system and dasherboard system) at the Young Arena.

A few “local” ice rink projects that have completed or are currently working on includes The Landing Ice Rink - Bettendorf, Marion Central Plaza Ice Skating Trail - Marion, MidAmerican Energy Company RecPlex third sheet addition - West Des Moines, Ames/ISU Ice Arena (ice system study), Xtreme Arena - Coralville, Main Street Landing - Davenport.

Some of the more notable projects that B32 is currently working on, or have recently completed, include the following (NCAA and large venues highlighted in red font)

Professional NHL (New and Renovation)
Baptist Health Ice Plex Florida Panthers Ft. Lauderdale FL (2 sheets)
Xcel Energy Center, St. Paul MN (MN Wild)
American Airlines Center, Dallas TX (Dallas Stars, study)
Ice Den, Coral Springs FL (Owned by Florida Panthers)
Minor Professional ECHL, SPHL, AHL (New and renovation)
Port Wentworth Ice Cove, Port Wentworth GA (2 sheets)
Owens Ice Arena, Peoria IL (2 sheets)
Pelham Civic Complex, Pelham AL (2 sheets)
Blue Cross Arena, Rochester NY (10,000 seats)
Mohegan Sun Arena, Wilkes Barre PA (10,000 seats)
NCAA College Division 1 (New)
Northeastern University, Boston MA
Sacred Heart University, Fairfield CT
Augustana University, Sioux Falls SD
Kalamazoo Event Center, MI (Western Mich and Kalamazoo Wings)
University of St Thomas, St. Paul MN (2 sheets)
NCAA Division 1 and Division 3 College (Renovation)
3MAM at Mariucci University of Minnesota, Minneapolis MN
Berry Event Center University of Northern Michigan, Marquette MI
Ingalls Rink-Yale University, New Haven CT
Baker Rink-Princeton University, Princeton NJ
Conte Forum-Boston College, Boston MA
Carlson Center-University of Alaska Fairbanks, AK
Tuttle North Ice Arena SUNY Brockport NY
Sage Rink, Hamilton College, Hamilton NY
Bird Arena, Ohio University, Athens OH
National Hockey Center, St. Cloud University, MN (2 sheets)
College Prep (Renovation)
Nobles Greenough School, Dedham MA
Community Facilities (Renovation)
Braemar Ice Arena, Edina MN (4 sheets)
Oakton Ice Arena, Oakton IL (2 sheets)
EPIC, Fort Collins CO (2 sheets)
National Sports Center, Super Rink Blaine MN (8 sheets)
Joliet Ice Arena, Joliet IL
Bloomington Ice Gardens, Bloomington MN (3 sheets)
Maple Grove Community Center, Maple Grove MN (3 sheets)
Hoyt Lakes Ice Rink, Hoyt Lakes MN
Hermantown Ice Rink, Hermantown MN (2 sheets)
Northwoods Credit Union Arena, Cloquet MN (2 sheets)
Marathon County Ice Rinks, Wausau WI (2 sheets)
Litchfield Civic Center, Litchfield MN
Webster Groves Ice Rink, Webster Groves MO
Kirkwood Ice Rink, Kirkwood MO
Playland Casino, Rye NY (3 sheets)
Pat Odonnell Civic Center, Ironwood MI
Graham Arena, Rochester MN (2 sheets)
Oak Lawn Ice Arena, Oak Lawn IL
Community Facilities (New)
Hockey Hall of Fame Rink, Inver Grove Heights MN
Mosaic Quarters, Tucson AZ (3 sheets)
Richmond VA (2 sheets)
Bowie Ice Arena, Bowie MD
Fargo Parks Sports Center, Fargo ND (2 sheets)
Mobile Arena, Mobile AL (10,000 seats)
Palm Beach Gardens Iceplex, Palm Beach Gardens FL (2 sheets)
East Brunswick NJ (2 sheets)
Car Shield Ice Rink, Chesterfield MO (2 sheets)
Northfield, MN
Belmont, MA
Woodman's Community Center, Janesville WI (2 sheets)
Prairie Lakes Ice Arena, Watertown SD (2 sheets)
Outdoor Facilities (New)
Middle Park Landing, Bettendorf IA (ice rink)
Jacobson Plaza, Sioux Falls SD (skating trail)
Landmark Ice Rink, Washington DC (skating trail)
Heartland of America, Omaha NE (skating trail)
Warwick Ice Rink, Warwick RI (ice rink)
Windows on the Waterfront, Holland MI (skating trail)
Laskar Pool and Ice Rink, Central Park NY (ice rink)
The Rivers Edge Ice Rink, Davenport IA (ice rink)
Central Plaza Ice Skating Loop, Marion IA (skating trail)
Schenley Ice Rink, Pittsburgh PA (ice rink)
Steinberg Pavilion Ice Rink, St. Louis MO (ice rink)
Elm Street Plaza Ice Rink, Cincinnati OH (ice rink)
City Park Ice Skating Ribbon, Bondurant IA (ice rink)
Red Arrow Park, Milwaukee WI (ice rink)
Ewart Park, Joplin MO (skating trail)
Studies
Panthers Ice Den, Coral Springs FL
Pasadena Ice Skating Rink, Pasadena CA
Young Area, Waterloo IA
American Airlines Arena, Dallas TX
Soldotna Regional Sports Complex, AK
Kenai Multi-purpose Facility, Kenai AK
Ames Ice Arena, Ames IA
Mennen Sports Center, Morristown NJ
Glacier Ice Rink, Missoula MT
Winter Lodge, Palo Alto CA
University of Illinois Urbana-Champaign
M Health Fairview Sports Center, Woodbury MN
BOK Center, Tulsa OK
West Seneca NY

Lou & Gib Reese Ice Arena, Newark OH
Woodbridge Community Center, Woodbridge NJ
Richmond Ice Zone, Richmond VA
Resch Center, Green Bay WI

We can provide you with references for any one of our many successfully completed ice rink projects at your request. Here are a few references to start with:

1. San Jose Ice at San Jose (San Jose Sharks Practice Facility, 2 new sheets and renovated 3 existing sheets) and SAP Center (Shark's game facility).
   Reference: Jon Gustafson, Vice President, Sharks Ice LLC, 408.999.6751.
   jgustafson@sharksice.com
2. Great Park Ice and Sports Complex, Irvine CA (Anaheim Ducks practice facility, 4 sheets),
   Reference: Art Trottier, Vice President – The Rinks. 714.518.3201
   attrottier@the-rinks.com
3. Grand Casino Arena and TRIA Rink, St. Paul, MN (MN Wild Practice and Game Facilities)
   Reference: Jim Ibister, Minnesota Wild Sr. VP of Administration. O.651.265.4801
   JIbister@wild.com
   Reference: Travis Larson, Ice Operations and Event Manager, Grand Casino Arena, 651-726-8160,
   tlarson@wild.com
4. Baptist Ice Plex at Memorial War Memorial, Fort Lauderdale, FL (Panthers Practice Facility)
   Reference: Melissa Fitzgerald, General Manager, Florida Panthers. 954.835.8515
   fitzgeraldm@floridapanthersc.com
5. 3M Arena at Mariucci, University of Minnesota, Minneapolis
   Reference: Craig Flor, Athletic Facility Manager, 612-625-8365, florx003@umn.edu
6. Martire Family Arena, Sacred Heart University, Fairfield CT
   Reference: MS/L/A/Mo Izzo, Executive Director of University Construction,
   izzom2@sacredheart.edu O.203.396.8467
7. Ralph Engelstad Arena, Grand Forks ND
   Reference: Jody Hodgson, General Manager O.701.777.6633 jodyh@theralph.com
9. Super Rink, National Sports Center, Blaine MN
   Reference: Neil Ladd, Senior Director, National Sports Center, O.763.458.6618
   nladd@nscsports.org
10. Herb Brooks National Hockey Center, St. Cloud State University MN
    Reference: Cory Portner, Director O.320.308.5118 cmportner@stcloudstate.edu
11. ImOm Arena, Dubuque IA
    Reference: Robert Schiesl, Assistant City Engineer, City of Dubuque IA O.563.5889.4270
    bschiesl@cityofdubuque.org
12. Ed Robson Arena, Colorado College, CO
    Reference: Michael Brubaker, Mechanical Services Engineer, 719-389-7115,
    Michael.brubaker@coloradocollege.edu
13. Hobey Baker Rink, Princeton University, Princeton NJ
    Reference: Danielle Matuch, Project Manager-Facilities Operations, Princeton University
    O.609.258.3063 dmatuch@princeton.edu.
14. Belmont New Arena, Belmont MA
    Reference: Mark Haley, board member, O.617.886.7400 MHaley@haleyaldrich.com
    Reference: Ted Galante, The Galante Architecture Studio, Inc. O.617.576.2500
    tg@galantearchicture.com
15. Bloomington Ice Gardens, Bloomington MN
    Reference: Lenny Schmitz, Ice Garden Manager, O.952.563.8787 lschmitz@BloomingtonMN.gov
16. Civic Center and All Seasons Arena, Mankato MN
    Reference: Mr. Jim Tatge, Facilities Project Coordinator, City of Mankato MN O.507.387.8504

jtatge@mankatomn.gov

TEAM MEMBERS

Principal and President of B32 Engineering Group, Inc., Scott Ward and our team will work closely with you and the design team on this project. Scott has over 30 years of experience in civil and mechanical engineering fields. He has extensive knowledge of public facilities (e.g., ice arenas, water and wastewater treatment, community centers, aquatic centers, etc.) and associated feasibility and evaluation studies, project development, funding applications, and the design and construction process. His education and engineering experience uniquely qualifies him for the specialized design requirements of ice systems. He has been involved in over 450 ice rink projects since 1997, including professional practice facilities, NCAA Division 1 college venues, single and multi-sheet community arenas, and outdoor ice rinks. Scott is integrally involved in each ice rink project and has owned the business since 2007.

In addition to Scott's professional expertise, he grew up playing hockey and spent the majority of his time in an ice rink facility in southern Minnesota. He continued to play recreational hockey through college, coached youth hockey and was coaching coordinator for 16 years. He is an avid hockey player and supporter of youth hockey and ice skating activities. The application of this practical insight helps ensure each facility, and its systems are designed to meet your needs, operate successfully and be a gathering place for the community.

Education
Master of Science in Mechanical Engineering, University of Minnesota, 2000
Bachelor of Civil Engineering, University of Minnesota, 1995

Registration
Registered Professional Engineer in: AL, AK, AZ, CO, CT, FL, IA, IL, MA, MD, ME, MI, MN, MO, NC, ND, NE, NH, NJ, NM, NY, OH, OR, PA, RI, SD, TN, TX, VA, VT, WA, WI, WV, WY.

Professional Affiliations
American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)
Minnesota Ice Arena Managers Association (MIAMA)
Wisconsin Ice Arena Managers Association (WIAMA)
North East Ice Skating Mangers Association (NEISMA)
Ice Skating Institute (ISI)
United States Ice Rink Association (formerly STAR)
Minnesota Recreation and Park Association (MRPA)

Examples of Ice Arena Projects:
See B32 Engineering Group, Inc. Ice Rink Statement of Qualifications for more information.

PROJECT UNDERSTANDING

Young Arena is a 3,000-seat multipurpose arena with one ice rink floor system. The facility was constructed in 1994. The facility is heavily used from 6am to 10pm daily and serves the community offering skating programs at every level including public skating, Waterloo Blackhawks (USHL Tier I Junior Team), Waterloo Warriors (Midwest High School Hockey League), Waterloo Youth Hockey, Cedar Valley Figure Skating Club, Waterloo Adult Hockey Association, etc.

B32 completed an evaluation of the ice system in June 2025. Since that time the facility has replaced one pump on the system. The majority of the refrigeration equipment, including the chiller (evaporator) system, was installed with the original construction of the building and is over 30 years old reaching or exceeding its expected life of 25-30 years. The existing evaporative condenser was installed in 2000 and is 26 years old, exceeding its expected life of 20-25 years.

The City of Waterloo Leisure Services has requested a proposal from B32 Engineering Group, Inc. for design and construction administration services to replace the existing Vilter VSC 205 evaporative condenser system and shell and tube chiller (evaporator) system for the same type and size of equipment. We will work closely with you, Young Arena staff and Leisure Services on this project. B32 will provide all front end and Division 0 and 1 documents and assemble bidding documents, etc.

Project Schedule
No specific project schedule was provided other than construction taking place in 2027.
Design: 2026
Construction: 2027 (Ice is typically removed around June 1 and installed again in September)

Cost Estimate
There was no project budget or cost estimate provided for this scope.

SCOPE OF WORK

B32 Engineering Group, Inc. will provide a step-by-step design approach as described below:

Step 1 –Design Phase

During this step B32 Engineering Group, Inc. will:

1.1 Kickoff Meeting (In-person): In-person meeting with you and Leisure Services to discuss the following.
1. Project goals, schedule and budget.
2. Evaporator condenser and chiller options. The proposed fee in this proposal assumes these systems are being replaced with the same or similar systems.
3. Concerns with the current equipment that is to remain in place (e.g. pumps, water

tank, piping, controls, electrical, tower structure/foundation, compressors, controls, etc.), project schedule, other project goals, etc.

4. Related work not covered in this proposal.
5. We will also verify and document existing conditions during this site visit.

1.2 Design Meetings (virtual): Follow up virtual meeting(s) with you and Leisure Services to discuss project progress.

1.3 Prepare preliminary drawings and technical specifications in CSI format for our review.

1.4 Prepare front end documents, bidding documents, construction contracts, general conditions, and Division 0 and 1 documents for City review.

1.5 Prepare an Opinion of Probably Construction Costs.

1.6 Provide project schedule.

1.8 Review preliminary drawing and specifications with you and make final changes before issuing a final set of documents.

Step 2 – Bid Phase

During this Step B32 Engineering Group, Inc. will:

2.1 Provide recommendation on bidding and award schedule.

2.2 Prepare Advertisement for Bid.

2.3 Distribute copies of bid documents. Make the bid documents available through Quested and linked through B32's website.

2.4 Answer questions from contractors, suppliers, Leisure Services, the City, etc. during the bidding period.

2.5 Organize a pre-bid meeting with the contractors. B32 will be on-site for this meeting. ~~B32 did not include attending this meeting in person. We can provide this as an extra service.~~

2.6 Bid opening. Review the bid results, prepare bid tabulation, and provide input on award of construction contract. B32 did not include attending the bid opening in person. We can provide this as an extra service.

2.7 Prepare construction contracts for review and approval by the City.

Step 3 – Construction Administration

We will provide the following construction administration service.

3.1 *Contract Administration:* Review pay request, RFIs, change orders, etc. and provide recommendations to you and Leisure Services. Participate in virtual progress meetings no

more than two (2) per month. Review shopdrawings for equipment and materials used on the project, answer questions regarding the drawings and specifications during construction, and review photos of construction progress.

3.2 *Progress visit (in person).* Perform a progress visit when all of the main equipment is set and piping installation has begun.

3.3 *Final site visit after startup (In-person).* Perform a final walkthrough of the systems generating a list of items (punch list) to be completed.

3.4 Any additional site visits, currently not included in our proposal, would be included under additional services and may include:

- *Preconstruction meeting (1 visit).*
- *Progress verification (1-2 visits).*
- *Post-occupancy system performance verification (1 visit).* Visit the site after the ice system has been up and running, has been tested and balanced, to verify the operation of the ice system is as designed. If the Owner will be providing commissioning, we will assist the Owner's commissioning agent by providing information on the ice system as requested. We did not include commissioning services in this proposal.
- *Warranty walkthrough (1 visit).* Walk through the facility 10-11 months after substantial completion to identify potential warranty information.

ASSUMPTIONS

This proposal is based on the following assumptions.

- GETTING STARTED - Prior to starting the work, B32 Engineering Group, Inc. will be provided with full information regarding the City's requirements including any special or extraordinary considerations for the Project or special services needed and will be provided with all pertinent existing data.
- INFORMATION - B32 Engineering Group, Inc. will be relying on CAD files and topographic surveys completed and prepared by others and provided to B32 by the City. B32 Engineering Group, Inc. assumes no liability for the accuracy of such drawings or surveys. B32 did not included creating a CAD file for this project in this proposal.
- EXCLUSIONS - In preparing this proposal, certain items have been excluded from the scope of services that may or may not be required. Should these services become necessary, B32 Engineering Group Inc. can provide them as Additional Services. The following services have been excluded from this proposal:
  - Developing electronic files (AutoCAD, etc.) for use as background drawings for the design for this project. We assume the City has these files available.
  - Structural engineering for the cooling tower supports. Assume existing concrete supports are sufficient and will be reused.
  - Design for other systems or parts of the refrigeration system other than the evaporative

condenser and chiller (evaporator) system.

- Ice rink floor and dasher board systems.
- Evaluation of site and soil conditions in or near the building.
- Rebates, grants, or other funding applications.
- Energy modeling and calculations.
- Life cycle cost analysis.
- Permit applications.
- Concept drawings of improvements to the facility.
- Commissioning of systems.
- Local and State code review meetings.
- Environmental reviews, reports or permits.
- Building energy simulation.
- Sampling, laboratory and on-site material testing or performance and intrusive testing
- Hazardous material testing
- Surveying
- Record plans or as-builts.
- Project advocacy beyond the normal standard of care.

COST OF SERVICES

We propose the following lump fee for the services outlined in this proposal.

PHASE	FEE
DESIGN PHASE (STEP 1), 1 SITE VISIT	$15,700
BIDDING PHASE INCLUDING CONTRACTS (STEP 2), 1 SITE VISIT	$4,782
CONSTRUCTION ADMINISTRATION (STEP 3) 2 SITE VISITS	$8,482
TOTAL FIXED FEE SERVICES	**$28,964**

Conditions of Proposed Fee:

- EXPENSES - Reimbursable expenses are in addition to the fees stated above and will be invoiced in accordance with our standard fee schedule.
- Taxes not included in fee.
- PAYMENTS – All payments due B32 Engineering Group, Inc. shall be made within 30 days after receipt of invoice. Services will be invoiced once per month. Finance charges will be applied to all payments not received within 30 days of invoicing. B32 Engineering Group, Inc., shall have the right to suspend work on the project upon invoice past due more than sixty (90) days from presentation, unless or until B32 Engineering Group, Inc. is satisfied that payment is forthcoming.

- ADDITIONAL SERVICES – Additional Services, if authorized in advance, will be billed in accordance with our standard fee schedule.
- FEE SCHEDULE - The attached fee schedule is valid through December 31, 2026. Any services furnished after December 31, 2026, will be charged in accordance with our 2027 fee schedule. We will not increase any item on the fee schedule by more than 5% per year for work performed in 2027. The lump sum fee will remain unchanged for 2027.
- QUALIFICATIONS – The proposed construction administration fee is based on the Owner hiring an experienced ice rink contractor meeting the qualifications of B32 Engineering Group, Inc. standard Section 131811 – Ice Rink General Requirements that in general states the contractor must have successfully completed five (5) ice rink projects of similar scope in the past five (5) years.
- INSURANCE. This proposal is based on the following insurance coverage carried by B32 Engineering Group, Inc.

Category	Insurance Limits
Comp General Liability and Bodily Injury	$2M each occurrence $4M general aggregate
Professional Liability	$5M each claim $5M aggregate
Umbrella Liability	$2M each occurrence $2M aggregate

- This proposal is based upon completion of our services by September 1, 2027.
- This document serves as record of the basic terms of our agreement. Upon receipt of a countersigned copy of this letter, we assume you will provide B32 Engineering Group, Inc., with an agreement for review and comment.

B32 ENGINEERING GROUP, INC. IS *BEST VALUE* FOR YOUNG ARENA, LEISURE SEVICES AND THE CITY OF WATERLOO.

In addition to having an extensive resume of over 450 very successful ice rink projects of all types and sizes nationwide, B32 Engineering Group, Inc., brings to your project:

- Experience with the newest and most technological advanced NCAA ice arena facilities in the United States.
- Extensive ice rink design and construction experience providing a clear understanding of what works and what doesn't work.
- Extensive single-sheet and multi-sheet ice rink design experience providing the knowledge of proper pumping and flow design to allow individual flow and temperature control to each sheet of ice and central refrigeration system design maximizing system performance and efficiency. As one example, we were involved in the ice system design for two 4-sheet complexes for the same Owner with very tight budgets and two different building types. I have designed many multi-sheet facilities.
- Extensive experience with natural refrigerants such as CO2-based ice systems and ammonia-based ice systems.

- Experience with codes, regulations, statues and ordinances applicable to indoor ice arena facilities.
- Personal attention. The Owner of B32 Engineering Group, Inc., Scott Ward, will be assigned to manage this project for you. This project will be a priority for the B32 Engineering Group, Inc.

- Performance. B32 congratulates the following 2026 Champions and is proud to have designed the ice they skate on:

  United States Olympic Team (Women's)–NSC Super Rink Blaine MN & Olympic Center in Lake Placid NY
  NCAA (Women's) – University of Wisconsin Badgers
  ACHA DI – Ohio University Bobcats
  Minnesota High School Class AA (Girls) – Hill-Murray Pioneers
  Minnesota High School Class AA (Boys) – Moorhead Spuds
  2026 IIHF World Junior Championship – Grand Casino Arena St Paul MN and 3M Arena at Mariucci, University of Minnesota

Experience and passion foster innovation. B32 Engineering Group, Inc. was the first in the ice rink industry to:

- Design an ice system that regenerates a desiccant system using waste heat recovered from the refrigeration system in place of natural gas. (Northfield Ice Arena- MN)
- Design a conversion (direct to indirect) of an existing Holmsten Ice Rink's direct refrigeration system that uses the existing equipment to minimize costs with little or no loss in operating efficiency. This provided the City with the widest range of options for replacing or renovating the existing ice system in the North Arena. (Lund Arena - Gustavus Adolphus College-MN)
- Design a geothermal-based ice system without a well field and using a city water source, maximizing waste heat recovery and providing superior efficiency and reliability without losing performance. (Brooklyn Park Activity Center-MN)
- Design a geothermal-based ice system that uses industrial grade refrigeration technology for a long-life span and ammonia refrigerant to maximize efficiency and reduce greenhouse gas emissions. (Burnsville Ice Center-MN)
- Design of first **CO2-based** ice systems in the United States. B32 Engineering Group, Inc. has designed 11 total CO2-based ice systems with the first in 2014. (Anchorage AK Eagle River AK, Palmer AK, St. Michael MN, Princeton University, Yale University, Northeastern University, Belmont MA, St. Louis MO).
- Design ice systems for LEED certified ice arena facilities including Bentley University MA (Platinum), Amsoil Arena-Duluth MN (Gold), Great Park Ice & Sport Anaheim CA (Silver), Deerfield Academy (Gold), and others. B32 Engineering Group, Inc. is always striving to apply sustainable practices including waste heat recovery, water reuse, using recycled water to make the ice sheet, geothermal, natural light, etc.

Thank you for the opportunity to be involved in this project. We are confident you will find our qualifications, experience, and reputation at the top of the industry. We encourage you to call

any references for any project that we have worked on.

If this proposal meets with your approval and is consistent with your understanding, please sign and return an original copy of this letter by mail. In the event we do not receive a signed copy of this letter, and we are authorized to begin work verbally, we will assume the terms and conditions of this proposal have been accepted by you.

We are very excited about this opportunity, and we look forward to personally sharing our experience and knowledge of ice arena facilities and ice systems with you, Leisure Services, the City of Waterloo, and other project Stakeholders. If you have any questions, please feel free to contact me on my mobile at 651.492.1376.

Sincerely,

B32 ENGINEERING GROUP, INC.

Scott A. Ward, P.E.
President

Enclosure: 2026 Professional Services Fee Schedule

We can provide you with our Ice Rink Statement of Qualifications at your request.

Agreed to and accepted,

_____
By

_____
Title

_____
Date

APPENDIX A

B32 2026 PROFESSIONAL SERVICES FEE SCHEDULE **R1**

Effective: January 1, 2026, December 31, 2026

HOURLY RATES

LABOR CATEGORY	HOURLY RATES
Principal	$275-$290
Senior Project Engineer/Project Manager	$200-$275
Senior Project Manager/Designer/Senior Project Coordinator	$165-$185
Project Engineer/Project Manager	$145-$165
Designer	$100-$120
Intern	$85-$95
Marketing	$110-$130
Administrative	$90-$110

REIMBURSABLE EXPENSES

Reimbursable expenses include, but are not limited to the following:

- Mileage (current IRS rate).
- Parking/Tolls
- Travel Expenses: airfare, lodging, rental cars, and electronic communication in connection with the project.
- Meals will be billed at $75 per diem.
- Reproductions, plots, report materials and standard form documents as outlined in the table below.

Item	Size	Black & White	Color
Photocopies/Printing	8.5 x 11	$0.37	$1.37
	11x17	$0.53	$2.63
Plots and Scans over 11x17 in size	At cost of outside service		

- Outside services (printing, testing, etc.).
- Delivery Services (UPS, FedEx, etc.).
- Subconsultant Services.
- Other similar direct project-related expenditures.

Reimbursable expenses are billable at 12% over cost and per diem.

All payments due to B32 Engineering Group, Inc. shall be made within 45 days after receipt of invoice. B32 invoices monthly.

These rates are subject to adjustment each year on January 1.

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT	MEETING DATE
Noel Anderson, Community Planning and Development Director Planning & Zoning Department	June 15, 2026

AGENDA ITEM TITLE

Resolution approving a Temporary Easement Agreement in the amount of $328.00 with Joseph Gbelley Armah and Johnet J. Dosee, located at 1431 Edgewood Drive, in conjunction with the Katoski Drive/Huntington Road Reconstruction Project, and authorizing the Mayor and City Clerk to execute said document.

RECOMMENDED COUNCIL ACTION

Approval.

SUMMARY STATEMENT AND BACKGROUND INFORMATION

Transmitted is a resolution approving a Temporary Easement Agreement in the amount of $328.00 with Joseph Gbelley Armah and Johnet J. Dosee, located at 1431 Edgewood Drive, in conjunction with the Katoski Drive/Huntington Road Reconstruction Project, and authorizing the Mayor and City Clerk to execute said document.

The temporary easement is for the purposes of doing grading, which ensures a maintainable slope, and reseeding. The easement is shown on the attached project diagram. This smaller temporary easement relates to a new sidewalk along the frontage of the property in the city right-of-way, and this sidewalk will connect to a new recreational trail. The triangular-shaped temporary easement relates to grading and reseeding next to the drainage way that abuts the east property line. The offer price was valued at 120 percent of the assessed value of the land, which is $4.30 per square foot, then multiplied by the area of the temporary easements. However, only ten percent of the full asking price is offered for the temporary easement since it is only temporary and will expire.

With the new high school under construction, improvements are going to be made to Katoski Drive and Huntington Road, which include a roundabout, sidewalks and recreational trails.

NEIGHBORHOOD IMPACT

The temporary easements would not negatively impact the surrounding area. Improvements to the culvert underneath Huntington Road will help with drainage in the area.

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

Local Option Sales Tax.

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Temporary Easement Agreement

Prepared by Tim Andera, City of Waterloo, 715 Mulberry Street, Waterloo, IA 50703 Phone (319) 291-4366

TEMPORARY EASEMENT AGREEMENT

This Temporary Easement Agreement (the "Agreement") is entered into as of _____, 2026 by and between the City of Waterloo, Iowa ("Grantee") and JOSEPH GBELLEY ARMAH/JOHNET J DOSEE ("Grantor").

1. **Grant of Temporary Easement.** In consideration of the mutual promises and covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged Grantor does hereby grant and convey unto Grantee, and Grantee does hereby accept, a temporary easement for purposes relating to construction of the Improvements (the "**Temporary Easement**") in, to, upon, over, across, and beneath the real estate (the "**Temporary Easement Premises**") as set forth on Exhibit "A" attached hereto and by this reference made a part hereof.

2. **Purpose.** The Temporary Easement Premises is intended for use by Grantee, its employees, contractors and agents, to reconstruct Katoski Drive, Huntington Road, and adjoining street connections, utility improvements, grading, seeding, and installation of sidewalk and trail. (the "**Improvements**"). Following completion of Grantee's work in the Premises, Grantee shall restore the Premises to its condition prior to the commencement of construction work, including but not limited to reseeding any grassed areas disturbed by construction activities, and Grantor shall be responsible for watering any reseeded areas. It is the intention of the parties that Grantee shall assume all responsibility for the construction of the Improvements adjacent to the Premises, and that Grantor shall have no liability relating to the Easement or the Improvements except as may arise from the Grantor's own negligent acts or omissions or willful misconduct. The Agreement will be in place until the acceptance of the project. The projected acceptance date is August of 2028.

3. **Grantor Duties and Privileges.** Grantor shall deliver possession of the Temporary Easement Premises to Grantee, "as is, where is", without any representation or warranty as to the condition of same. Grantor shall have no duty to prepare the Temporary Easement Premises in any way for Grantee's use. Following transfer of possession of the Temporary Easement Premises, Grantor shall have no further duty or obligation with respect to same, except as set forth herein. Grantor may mow or care for grasses and vegetation growing in the Temporary Easement Premises during the period of this Agreement but may not conduct other activities upon the Temporary Easement Premises without the prior written consent of Grantee. Grantor agrees that any activities that Grantor, its officers, employees, contractors or agents undertake on the Temporary Easement Premises during the term hereof shall be at their sole risk, and Grantor hereby

agrees to indemnify Grantee, its officials, officers, employees, contractors and agents, with respect to any and all claims for injuries, death, property damage, property loss or otherwise, arising from the acts or omissions of Grantor, its officers, employees, contractors or agents, on or about the Temporary Easement Premises during the term of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Temporary Easement Agreement by their duly authorized representatives as of the date first set forth above.

JOSEPH GBELLEY ARMAH

By: _____

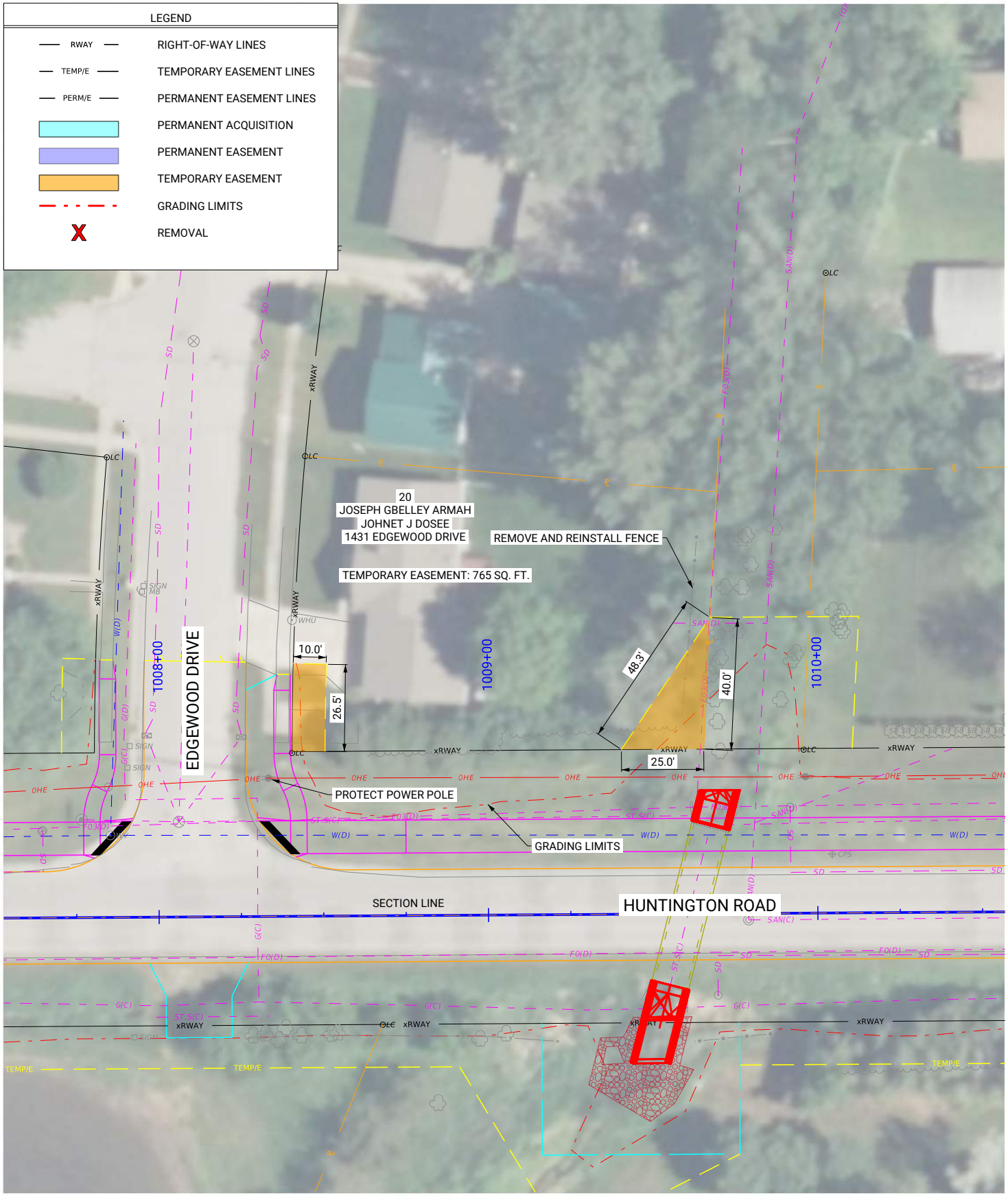
JOHNET J DOSEE

By: _____

CITY OF WATERLOO, IOWA

By: _____
Dave Boesen, Mayor

Attest: _____
Kelley Felchle, City Clerk



HUNTINGTON RD AND KATOSKI DR RECONSTRUCTION PARCEL IMPACT DISPLAY

Foth

PARCEL 20

0 20 40

SCALE: 1"= 40'

DRAWN: G. MEIDENBAUER CHECKED: A. FLOY

12/4/2025 11:16:15 AM pw://foth-pw.bentley.com:foth-pw-01/Documents/Clients/Waterloo IA C/Huntington Road and Katoski Drive Recons/CAD/Displays/Parcel Displays/0025W013.00_PARC

© 2025 Microsoft Corporation © 2025 Maxar ©CNES (2025) Distribution Airbus DS

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT	MEETING DATE
Noel Anderson, Community Planning and Development Director Planning & Zoning Department	June 15, 2026

AGENDA ITEM TITLE

Resolution approving a Temporary Easement Agreement in the amount of $1,877.00, with SHRI GAYATRI MA, Inc., located at 2056 La Porte Road and Parcel No. 8813-02-277-026, in conjunction with the La Porte Road Phase III Reconstruction Project, and authorizing the Mayor and City Clerk to execute said document.

RECOMMENDED COUNCIL ACTION

Approval.

SUMMARY STATEMENT AND BACKGROUND INFORMATION

Transmitted is a resolution approving a Temporary Easement Agreement in the amount of $1,877.00, with SHRI GAYATRI MA, Inc., located at 2056 La Porte Road and Parcel No. 8813-02-277-026, in conjunction with the La Porte Road Phase III Reconstruction Project, and authorizing the Mayor and City Clerk to execute said document. The temporary easements are intended for the reconstruction of La Porte Road, utility improvements, grading, reseeding and installation of a recreational trail.

The offer price was valued at 120 percent of the assessed value of the land. 2056 La Porte Road has a value of which is $9.29 per square foot, and parcel no. 8813-02-277-026, which is vacant ground, has a value of $0.06. The value for the easement at 2056 La Porte Road is $1,777.00 and the vacant parcel was less than $100.00, therefore, $100.00 was offered for that temporary easement. Only ten percent of the full asking price is offered for the temporary easement since it will expire.

NEIGHBORHOOD IMPACT

Reconstruction of the corridor would have a positive impact upon the surrounding commercial area, as the corridor was designed and built in the1960s. The redesigned corridor will have underground utilities and streetscaping.

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

Property owners along the corridor have been invited to multiple public information meetings.

SOURCE OF EXPENDITURES

Crossroads TIF.

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Temporary Easement Agreement

Prepared by Tim Andera, City of Waterloo, 715 Mulberry Street, Waterloo, IA 50703 Phone (319) 291-4366

TEMPORARY EASEMENT AGREEMENT

This Temporary Easement Agreement (the "Agreement") is entered into as of _____, 2026 by and between the City of Waterloo, Iowa ("Grantee") and SHRI GAYATRI MA, INC. ("Grantor").

1. **Grant of Temporary Easement.** In consideration of the mutual promises and covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged Grantor does hereby grant and convey unto Grantee, and Grantee does hereby accept, a temporary easement for purposes relating to construction of the Improvements (the "**Temporary Easement**") in, to, upon, over, across, and beneath the real estate (the "**Temporary Easement Premises**") as set forth on Exhibits "A-1" and "A-2" attached hereto and by this reference made a part hereof.

2. **Purpose.** The Temporary Easement Premises is intended for use by Grantee, its employees, contractors and agents, for Phase III reconstruction of La Porte Road, and utility improvements, grading, seeding, and installation of recreational trail. (the "**Improvements**"). Following completion of Grantee's work in the Premises, Grantee shall restore the Premises to its condition prior to the commencement of construction work, including but not limited to reseeding any grassed areas disturbed by construction activities, and Grantor shall be responsible for watering any reseeded areas. It is the intention of the parties that Grantee shall assume all responsibility for the construction of the Improvements adjacent to the Premises, and that Grantor shall have no liability relating to the Easement or the Improvements except as may arise from the Grantor's own negligent acts or omissions or willful misconduct. The Agreement will be in place until the acceptance of the project.

3. **Grantor Duties and Privileges.** Grantor shall deliver possession of the Temporary Easement Premises to Grantee, "as is, where is", without any representation or warranty as to the condition of same. Grantor shall have no duty to prepare the Temporary Easement Premises in any way for Grantee's use. Following transfer of possession of the Temporary Easement Premises, Grantor shall have no further duty or obligation with respect to same, except as set forth herein. Grantor may mow or care for grasses and vegetation growing in the Temporary Easement Premises during the period of this Agreement but may not conduct other activities upon the Temporary Easement Premises without the prior written consent of Grantee. Grantor agrees that any activities that Grantor, its officers, employees, contractors or agents undertake on the Temporary Easement Premises during the term hereof shall be at their sole risk, and Grantor hereby

agrees to indemnify Grantee, its officials, officers, employees, contractors and agents, with respect to any and all claims for injuries, death, property damage, property loss or otherwise, arising from the acts or omissions of Grantor, its officers, employees, contractors or agents, on or about the Temporary Easement Premises during the term of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Temporary Easement Agreement by their duly authorized representatives as of the date first set forth above.

SHRI GAYATRI MA, INC.

By: _____
Printed Name: ATUL PATEL
Title: OFFICER

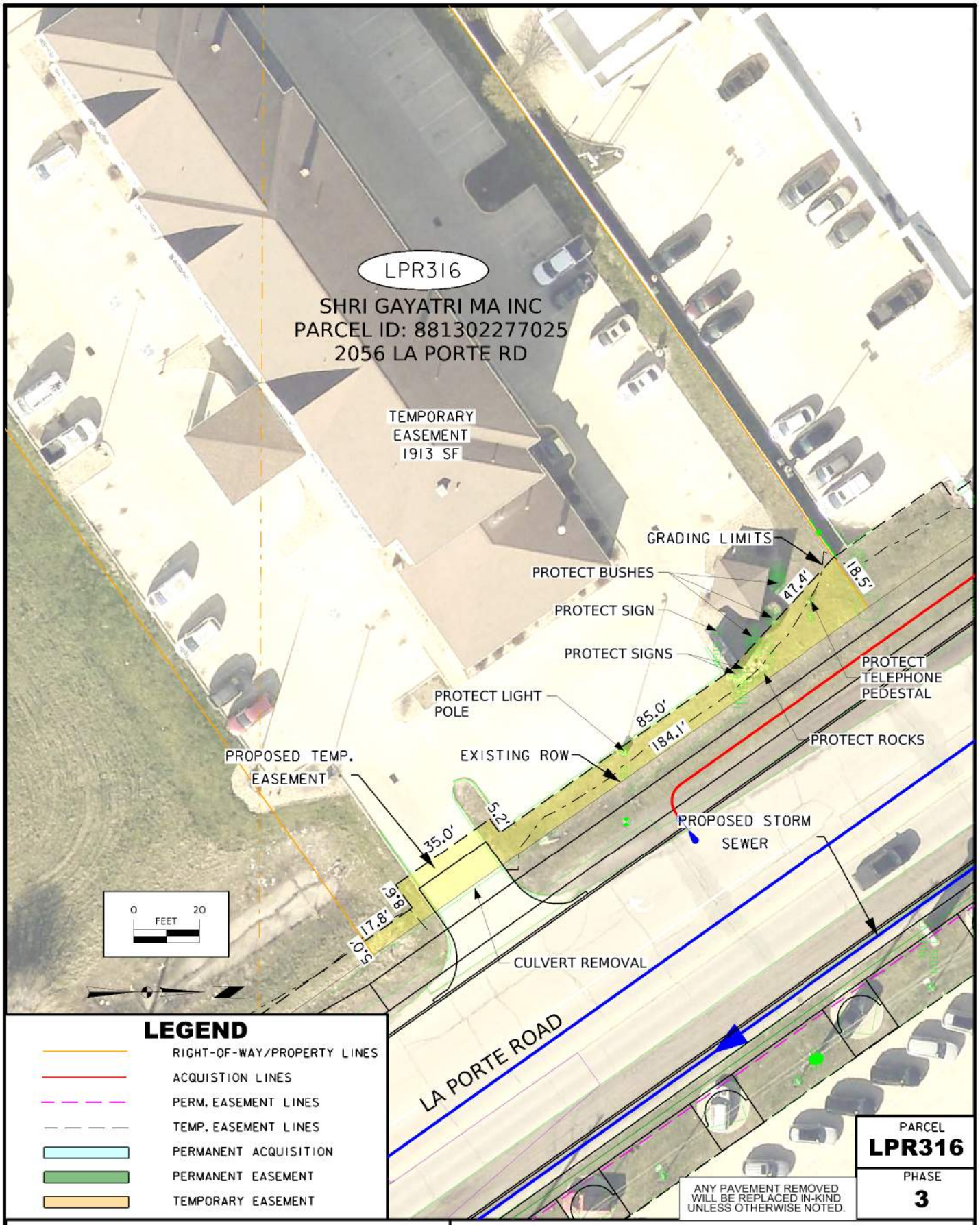
CITY OF WATERLOO, IOWA

By: _____
David Boesen, Mayor

Attest: _____
Kelley Felchle, City Clerk

NOTE: Please send payments to:

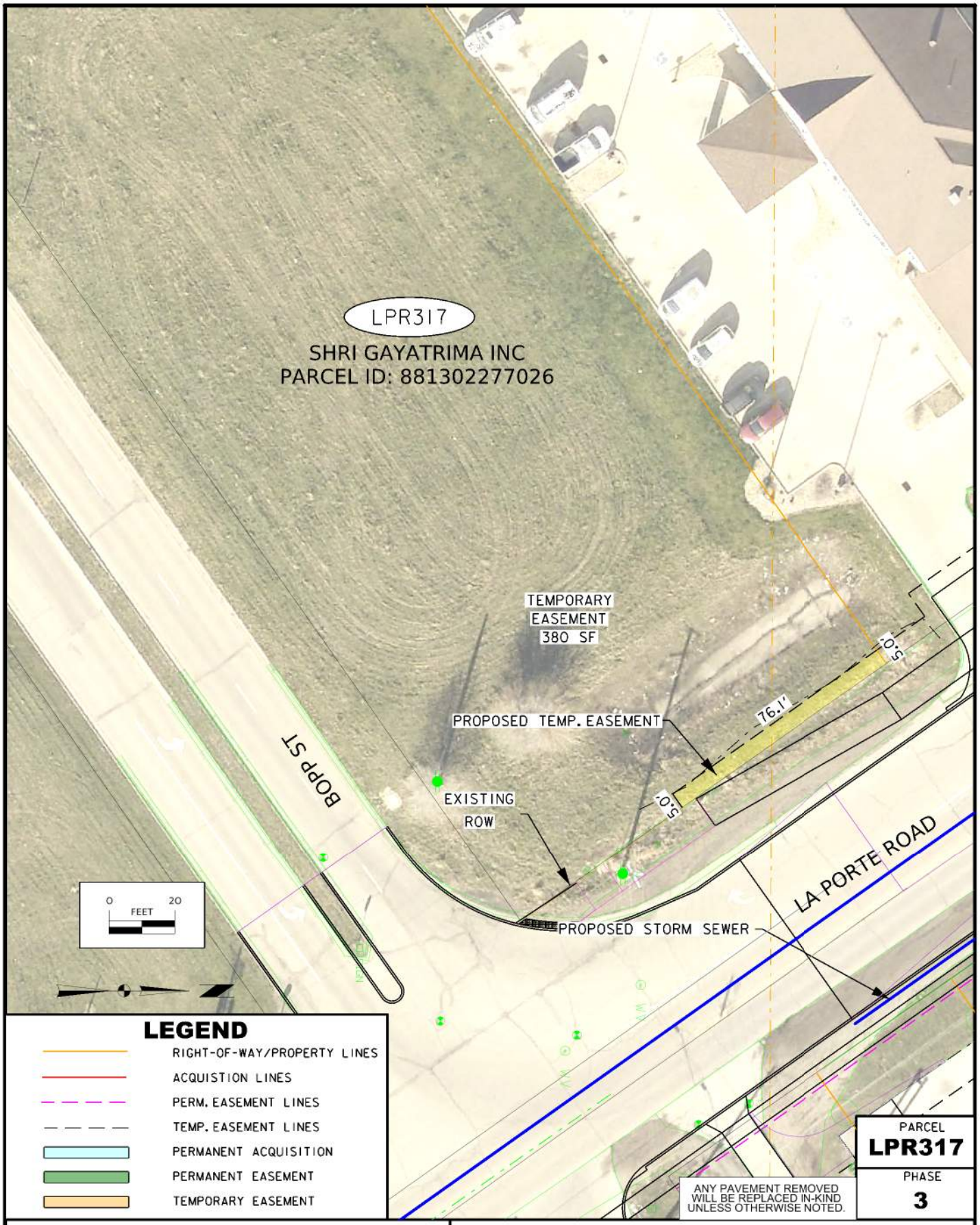
ATUL PATEL
307 Winding Ridge Road
Cedar Falls, Iowa 50613



AECOM

Public Impact Diagram
SHRI GAYATRIMA INC
La Porte Road Reconstruction

01-09-26 Waterloo, Iowa 60736162



AECOM

Public Impact Diagram
SHRI GAYATRIMA INC
La Porte Road Reconstruction

01-09-26 Waterloo, Iowa 60736162

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT	MEETING DATE
Noel Anderson, Community Planning and Development Director Planning & Zoning Department	June 15, 2026

AGENDA ITEM TITLE

Resolution approving a Temporary Easement Agreement in the amount of $100.00 with Timothy L. Hintz, located at 1297 South Hackett Road, in conjunction with the Katoski Drive/Huntington Road Reconstruction Project, and authorizing the Mayor and City Clerk to execute said document.

RECOMMENDED COUNCIL ACTION

Approval.

SUMMARY STATEMENT AND BACKGROUND INFORMATION

Transmitted is resolution approving a Temporary Easement Agreement in the amount of $100.00 with Timothy L. Hintz, located at 1297 South Hackett Road, in conjunction with the Katoski Drive/Huntington Road Reconstruction Project, and authorizing the Mayor and City Clerk to execute said document.

The temporary easement is for the purposes of doing grading, which ensures a maintainable slope, and reseeding. The easement is shown on the attached project diagram. This smaller temporary easement relates to a new sidewalk ramp along the frontage of the property in the city right-of-way. The offer price was valued at 120 percent of the assessed value of the land, which is $2.71 per square foot, then multiplied by the area of the temporary easements. However, only ten percent of the full asking price is offered for the temporary easement since it will expire. This easement was valued less than $100.00, therefore; the offer amount is $100.00, the minimum offer price.

With the new high school under construction, improvements are going to be made to Katoski Drive and Huntington Road, which include a roundabout, sidewalks and recreational trails.

NEIGHBORHOOD IMPACT

The temporary easement will not negatively impact the surrounding area.

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

Local Option Sales Tax.

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Temporary Easement Agreement

Prepared by Tim Andera, City of Waterloo, 715 Mulberry Street, Waterloo, IA 50703 Phone (319) 291-4366

TEMPORARY EASEMENT AGREEMENT

This Temporary Easement Agreement (the "Agreement") is entered into as of _____, 2026 by and between the City of Waterloo, Iowa ("Grantee") and TIMOTHY L HINTZ ("Grantor").

1. **Grant of Temporary Easement.** In consideration of the mutual promises and covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged Grantor does hereby grant and convey unto Grantee, and Grantee does hereby accept, a temporary easement for purposes relating to construction of the Improvements (the "**Temporary Easement**") in, to, upon, over, across, and beneath the real estate (the "**Temporary Easement Premises**") as set forth on Exhibit "A" attached hereto and by this reference made a part hereof.

2. **Purpose.** The Temporary Easement Premises is intended for use by Grantee, its employees, contractors and agents, to reconstruct Katoski Drive, Huntington Road, and adjoining street connections, utility improvements, grading, seeding, and installation of sidewalk and trail. (the "**Improvements**"). Following completion of Grantee's work in the Premises, Grantee shall restore the Premises to its condition prior to the commencement of construction work, including but not limited to reseeding any grassed areas disturbed by construction activities, and Grantor shall be responsible for watering any reseeded areas. It is the intention of the parties that Grantee shall assume all responsibility for the construction of the Improvements adjacent to the Premises, and that Grantor shall have no liability relating to the Easement or the Improvements except as may arise from the Grantor's own negligent acts or omissions or willful misconduct. The Agreement will be in place until the acceptance of the project. The projected acceptance date is August of 2028.

3. **Grantor Duties and Privileges.** Grantor shall deliver possession of the Temporary Easement Premises to Grantee, "as is, where is", without any representation or warranty as to the condition of same. Grantor shall have no duty to prepare the Temporary Easement Premises in any way for Grantee's use. Following transfer of possession of the Temporary Easement Premises, Grantor shall have no further duty or obligation with respect to same, except as set forth herein. Grantor may mow or care for grasses and vegetation growing in the Temporary Easement Premises during the period of this Agreement but may not conduct other activities upon the Temporary Easement Premises without the prior written consent of Grantee. Grantor agrees that any activities that Grantor, its officers, employees, contractors or agents undertake on the Temporary Easement Premises during the term hereof shall be at their sole risk, and Grantor hereby

agrees to indemnify Grantee, its officials, officers, employees, contractors and agents, with respect to any and all claims for injuries, death, property damage, property loss or otherwise, arising from the acts or omissions of Grantor, its officers, employees, contractors or agents, on or about the Temporary Easement Premises during the term of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Temporary Easement Agreement by their duly authorized representatives as of the date first set forth above.

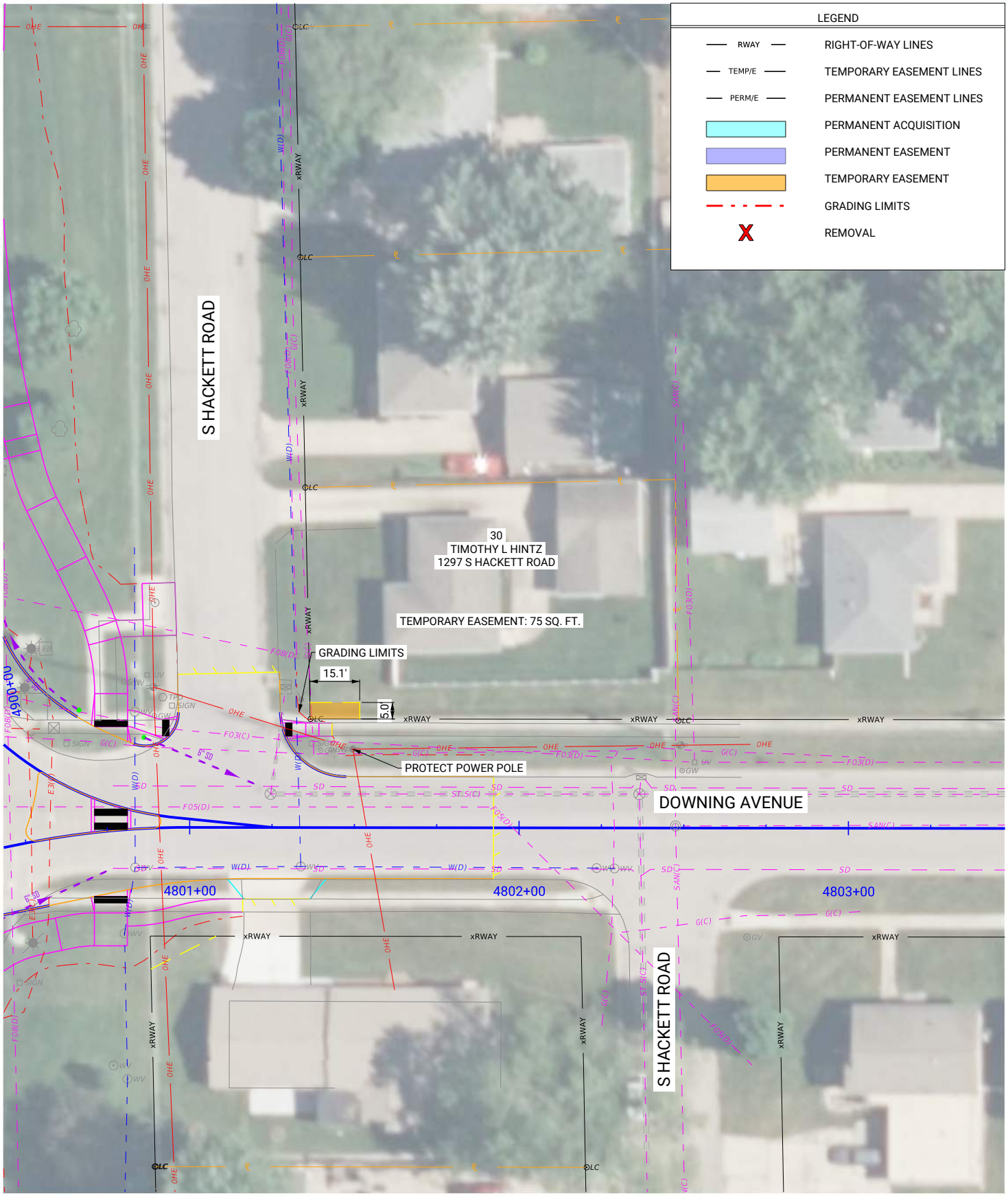
TIMOTHY L HINTZ

By: Tim Hintz

CITY OF WATERLOO, IOWA

By: _____
Dave Boesen, Mayor

Attest: _____
Kelley Felchle, City Clerk



HUNTINGTON RD AND KATOSKI DR RECONSTRUCTION PARCEL IMPACT DISPLAY

Foth

PARCEL 30

0 20 40

SCALE: 1"= 40'

DRAWN: G. MEIDENBAUER CHECKED: A. FLOY

12/4/202511:16:38 AM pw://foth-pw.bentley.com:foth-pw-01/Documents/Clients/Waterloo IA C/Huntington Road and Katoski Drive Recons/CAD/Displays/Parcel Displays/0025W013.00_PARC

© 2025 Microsoft Corporation © 2025 Maxar ©CNES (2025) Distribution Airbus DS

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT	MEETING DATE
Noel Anderson, Community Planning and Development Director Planning & Zoning Department	June 15, 2026

AGENDA ITEM TITLE

Resolution approving a Development and Minimum Assessment Agreement with Plumb Supply Company, LLC, in the amount of $1,630,700.00 for the expansion of an approximately 20,000 square-foot commercial building, five years at fifty percent tax rebates, and authorizing the Mayor and City Clerk to execute said documents.

RECOMMENDED COUNCIL ACTION

Approval.

SUMMARY STATEMENT AND BACKGROUND INFORMATION

Transmitted is a resolution approving a Development Agreement and Minimum Assessment Agreement with Plumb Supply Company, LLC for the expansion of an approximately 20,000 square-foot commercial building, five years at 50 percent tax rebates, and a Minimum Assessment Agreement of $1,630,700.00, and authorizing the Mayor and City Clerk to execute said documents.

NEIGHBORHOOD IMPACT

The new addition will be another positive development occurring near that airport, which is seeing a healthy amount of new development.

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

Rebates paid from East Waterloo Unified TIF.

ALTERNATIVE ACTION

LEGAL DESCRIPTION

That part of the Southeast Quarter of Section Five (5), Township Eighty-nine North (T89N), Range Thirteen West (R13W) of the Fifth Principal Meridian in the City of Waterloo, Black Hawk County, Iowa, described as follows:

Commencing at a point on the South line of said Southeast Quarter (SE 1/4) which is One Thousand Eight Hundred Sixty-five and Sixteen Hundredths (1865.16) feet West of the Southeast corner of said Southeast Quarter (SE 1/4); thence N 0°00' E One Hundred Twenty-six (126.00) feet to the point of beginning; thence continuing N 0°00' E Three Hundred Ninety-three and Seventy-six (393.76) feet to the Southerly line of the Chicago Central and Pacific Railroad; thence S 88°08'45" E Two Hundred Twenty-three and Sixty-two Hundredths (223.62) feet along said Southerly line; thence S 0°00' E Three Hundred Eighty-six and Forty-five Hundredths (386.45) feet to a point which is One Hundred Twenty-six (126.00) feet North of the South line of said Southeast Quarter (SE 1/4); thence N 90°00' W Two Hundred Twenty-three and Five Tenths (223.5) feet to the point of beginning.

Subject to restrictions, easements, covenants, ordinances, and limited access provisions of record and not of record.

And

THAT PART OF THE SOUTHEAST QUARTER (SE 1/4) IN SECTION NO. 5, TOWNSHIP NO. 89 NORTH, RANGE NO. 13 WEST OF THE FIFTH PRINCIPAL MERIDIAN, CITY.OF WATERLOO, BLACK HAWK COUNTY, IOWA, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER, POINT BEING A FOUND ½" REBAR IN P.C.C. PAVEMENT; THENCE ALONG THE SOUTH LINE OF SAID SOUTHEAST QUARTER SOUTH 89°40'50" WEST A DISTANCE OF 1,865.05 FEET; THENCE NORTH 00°23½' WEST A DISTANCE OF 33.05 FEET TO THE SOUTHEAST CORNER OF EXISTING PARCEL "I" PER PLAT OF SURVEY RECORDED IN FILE 2019-00016830 DATED 03/12/2020 IN THE OFFICE OF THE BLACK HA WK COUNTY RECORDER, POINT BEING A FOUND ½" REBAR WITH LICENSE #16775, ALSO BEING THE POINT OF BEGINNING; THENCE ALONG THE EAST LINE OF SAID PARCEL "I" NORTH 00°23½' WEST A DISTANCE OF 92.9 FEET TO THE NORTHEAST CORNER OF SAID PARCEL “I”, ALSO BEING THE NORTHEAST CORNER OF SAID PARCEL "I", ALS0 BEING THE SOUTHWEST CORNER OF EXISTING PARCEL "A" PER PLAT OF SURVEY RECORDED IN MISC. BOOK 297 PAGE 615 DATED 05/04/1990 IN THE OFFICE OF THE BLACK HA WK COUNTY RECORDER, POINT BEING A FOUND ½" REBAR WITH LICENSE #8033; THENCE ALONG THE SOUTH LINE OF SAID PARCEL "A" NORTH 89°41¾' EAST A DISTANCE OF 223.45 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL "A", POINT BEING A FOUND ½" REBAR WITH LICENSE #8033; THENCE ALONG THE WEST LINES OF EXISTING TRACTS "D" AND "C" PER PLAT OF SURVEY RECORDED IN FILE 2019-00009617 DATED 11/21/2018 IN THE OFFICE OF THE BLACK HA WK COUNTY RECORDER SOUTH 00° 19' EAST A DISTANCE OF 92.9 FEET TO THE SOUTHWEST CORNER OF SAID TRACT "C", POINT BEING A SET ½" REBAR WITH LICENSE #16264; THENCE SOUTH 89°42' WEST A DISTANCE OF 223.35 FEET TO THE POINT OF BEGINNING.
CONTAINING 20,750 SQUARE FEET

AND SUBJECT TO THE RETENTION OF A UTILITY EASEMENT OVER, UNDER AND ACROSS THE SOUTH 30 FEET OF PARCEL “J” AS SHOWN ON THE PLAT THEREOF.

SUBJECT TO RESTRICTIONS, EASEMENTS, COVENANTS, ORDINANCES, AND LIMITED ACCESS PROVISIONS OF RECORD AND NOT OF RECORD.
NOTE: THE SOUTH LINE OF SAID SOUTHEAST QUARTER IS ASSUMED TO BEAR SOUTH 89°40’50” WEST FOR THIS DESCRIPTION

ATTACHMENTS

1. Development Agreement

Prepared By/Return to: Austin J. McMahon, Lange & McMahon, PLC, 222 1st St. E., Independence, IA (319) 334-4488

DEVELOPMENT AGREEMENT

This Development Agreement (the "Agreement") is entered into as of this _____ day of _____ 2026, by and between Plumb Supply Company, LLC, an Iowa limited liability company (the “Company”) and the City of Waterloo, Iowa (the “City”).

RECITALS

A. In furtherance of the objectives of Chapter 403 of the Code of Iowa, as amended (the “Urban Renewal Act”), City is engaged in carrying out urban renewal project activities in an area known as the East Waterloo Unified Urban Renewal and Redevelopment Plan Area (“Urban Renewal Area”).

B. Company is willing and able to finance and erect structures and related improvements on real property described in Exhibit A (the “Property”), which is located in the Urban Renewal Area.

C. City considers economic development within the City a benefit to the community and is willing for the overall good and welfare of the community to provide financial incentives so as to encourage that goal, and the City further believes that the project is in the vital and best interests of the City and that the project and such incentives are in accordance with the public purposes and provisions of applicable State and local laws and requirements.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, the parties agree as follows:

1. **Improvements by Company.** Company shall construct or develop a 20,088 sq. ft. expansion of a commercial building or structure on the Property and shall perform related and incidental development as necessary such as landscaping, storm water detention, paving, signage and parking improvements (collectively, the "Improvements" or

"Project"). Company agrees that the Improvements shall be constructed in accordance with the terms of this Agreement, the urban renewal plan applicable to the Property, and all applicable City, state, and federal building codes and shall comply with all applicable City ordinances and other applicable law. City may require that Company submit specific building designs and site plans for City's review and reasonable approval. Company will use its best efforts to obtain, or cause to be obtained, in a timely manner, all required permits, licenses and approvals, and will meet, in a timely manner, all requirements of all applicable local, state, and federal laws and regulations which must be obtained or met before the Improvements may be lawfully constructed, including but not limited to final permit inspections. The Property, the Improvements, and all site preparation and development-related work to make any of the Property usable for Company's purposes as contemplated by this Agreement are collectively referred to as the "Project."

2. **Construction Plans.** Company agrees that it will cause the Improvements to be constructed on the Property in conformance with construction plans (the "Plans") that have been or will be submitted to the City. Company agrees that the scope and scale of the Improvements to be constructed shall not be significantly less than the scope and scale of such improvements as detailed and outlined in the Plans.

If any material modification in the scope, scale or nature of the Plans is proposed, Company shall submit modified Plans (the "Modified Plans") to the City for review. Modified Plans shall be subject to approval by the City as provided in this Section. City shall approve the modified Plans in writing if: (a) the Modified Plans conform to the terms and conditions of this Agreement; (b) the Modified Plans conform to the terms and conditions of the urban renewal plan; (c) the Modified Plans conform to all applicable federal, state and local laws, ordinances, rules and regulations and City permit and design review requirements; (d) the Modified Plans are adequate for purposes of this Agreement to provide for the construction of the Improvements, and (e) no Event of Default under the terms of this Agreement has occurred; provided, however, that any such approval of the Plans or Modified Plans pursuant to this Section shall constitute approval for the purposes of this Agreement only and shall not be deemed to constitute approval or waiver by the City with respect to any building, fire, zoning or other ordinances or regulations of the City, and shall not be deemed to be sufficient plans to serve as the basis for the issuance of a building permit if the Plans or Modified Plans are not as detailed or complete as the plans otherwise required for the issuance of a building permit.

The Plans or Modified Plans must be rejected in writing by City within thirty (30) days of submission or shall be deemed to have been approved by the City. If City rejects the Plans or Modified Plans in whole or in part, Company shall submit new or corrected Plans or Modified Plans within thirty (30) days after receipt by Company of written notification of the rejection, accomplished by a written statement of the City specifying the respects in which Company's Plans or Modified Plans fail to conform to the requirements of this Section. The provisions of this Section relating to approval, rejection, and resubmission of corrected Plans or Modified Plans shall continue to apply until they have been approved by the City, provided, however, that in any event Company shall submit Plans or Modified Plans which are approved by City prior to commencement of construction of additional or modified Improvements.

Approval of the Plans or Modified Plans by the City shall not relieve Company of

any obligation to comply with the terms and provisions of this Agreement, or the provision of applicable federal, state and local laws, ordinances and regulations, nor shall approval of the Plans or Modified Plans by City be deemed to constitute a waiver of any Event of Default. Approval of Plans or Modified Plans hereunder is solely for purposes of this Agreement and shall not constitute approval for any other City purpose nor subject the City to any liability for the Improvements as constructed.

3. **Timeliness of Improvements; Possibility of Termination.** The parties agree that Company's commitment to undertake the Project and to construct the Improvements in a timely manner constitutes a material inducement for the City to convey the Property to Company and that without said commitment City would not do so.

A. Deadlines to Commence and Complete. Company must obtain a building permit and begin construction of the Improvements within four (4) months after the date of conveyance (the "Start Date") and Substantially Complete construction within fourteen (14) months after the date of conveyance (the "Completion Deadline"). For purposes of this Agreement, "Substantially Completed" means the date on which the Improvements have been completed to the extent necessary for the City to issue a certificate of occupancy relating thereto and the City has verified that any Project element for which no permit was necessary has been Substantially Completed. All deadlines are subject to Unavoidable Delays as defined in paragraph B below. The City's Community Planning and Development Director may, but shall not be required to, consent to an extension of time of up to six (6) months for the construction of the Improvements. Any additional or longer extensions will require consent of the City Council.

B. Events Triggering Termination. If Company does not begin or Substantially Complete construction of the Improvements on the schedule stated above, subject to Unavoidable Delays, then City may terminate this Agreement as set forth in this Agreement, and City shall then have no further obligation to Company under this Agreement. If development has commenced within the required period, as the same may be extended, and is subsequently stopped or delayed as a result of extreme weather such as ice, ground freezing, and other conditions that restrict construction, as well as an Act of God, war, civil disturbance, court order, labor dispute, fire, pandemic, governmental mandates (local, state or federal), delays in City approvals, or other cause beyond the reasonable control of Company (each an "Unavoidable Delay"), the requirement that construction be completed by the Completion Deadline shall be tolled for a period of time equal to the period of Unavoidable Delay. If City terminates this Agreement, City shall have no further obligations to Company under this Agreement, including but not limited to, any legal or equitable obligation to reimburse Company for any costs expended by Company with respect to the Project or to compensate Company for any value added to the Property by any Improvements. In connection with termination of the Agreement as set forth herein, City may demand reimbursement of any sums paid to Company or for the benefit of Company in connection with this Agreement, in addition to exercising any other available remedies.

4. **Utilities.** Company will be responsible for extending water, sewer, telephone, telecommunications, electricity, gas and other utility services as required on the Property.

Company will be responsible for payment of any associated connection fees.

5. **City Incentives.** In addition to the property tax rebates provided for herein, the City agrees to provide the following Project assistance:

A. The City will build infrastructure for the Waterloo Air & Rail Park, 4th Addition, as shown on a Final Plat.

6. **Minimum Assessment Agreement.** Company acknowledges and agrees that it will pay when due all taxes and assessments, general or special, and all other charges whatsoever levied upon or assessed or placed against the Property. Company further agrees that prior to the date set forth in Section 2 of the Minimum Assessment Agreement (the "MAA") attached hereto as Exhibit "B" it will not seek or cause a reduction in the taxable value for the Property as improved pursuant to this Agreement, which shall be fixed for assessment purposes, below the amount of $1,630,700.00 (the "Minimum Actual Value"), through:

(a) Willful destruction of the Property, the Improvements, or any part of either;

(b) a request to the Assessor of Black Hawk County; or

(c) any proceedings, whether legal, or equitable, with any administrative body or court within the City, Black Hawk County, the State of Iowa, or the federal government.

Company agrees to execute and deliver the MAA concurrently with its execution and delivery of this Agreement.

7. **Tax Rebates.** Provided that Company has timely and Substantially Completed the Improvements, and subject to the other terms of this Agreement, City agrees to rebate property tax (with the exceptions noted below) with respect to the Improvements, as follows:

Year One through Year Five: 50% rebate each year

for any taxable value added by the completed Improvements (each such payment is a "Rebate") over the initial base value of $632,700.00. Each Rebate is payable in respect of a given property tax fiscal year (a "Fiscal Year") only to the extent that (a) Company has actually paid general property taxes due and owing for such Fiscal Year and (b) the City Council has made an appropriation for the payment of the Rebate. To receive a Rebate for a given Fiscal Year, Company must, within twelve (12) months after the due date of the last installment of the property taxes for the respective Fiscal Year (i.e., the "March Installment"), submit a completed Rebate request to City on the form provided by or otherwise satisfactory to City. A failure to timely submit a request for a Rebate for a Fiscal Year will result in a forfeiture of the right to request a Rebate for such Fiscal Year. City agrees to consider a completed application for a Rebate within sixty (60) days after submission of the application to City.

The taxable value of the Property as a result of the Improvements must be increased by a minimum of 10% and must increase the annual tax by a minimum of $500.00. Rebates

shall not be paid based on any special assessment levy, debt service levy, or any other levy that is exempted from treatment as tax increment financing under the provisions of applicable law. The first Fiscal Year in respect of which a Rebate may be given ("Year One") shall be the first full Fiscal Year for which the assessment is based upon the completed value of the Improvements and not based on a prior Fiscal Year for which the assessment is based solely upon (x) the value of the Property, or upon (y) the value of the Property and a partial value of the Improvements due to partial completion of such Improvements or a partial Fiscal Year.

8. **Limitations on Payment of Rebates.**

A. Each payment of a Rebate is subject to annual appropriation by the city council each fiscal year. City has no obligation to make any payments to Company as contemplated under this Agreement until the city council annually appropriates the funds necessary to make such payments. The right of non-appropriation reserved to City in this paragraph is intended by the parties, and shall be construed at all times, so as to ensure that City's obligation to make future payments of Rebates shall not constitute a legal indebtedness of City within the meaning of any applicable constitutional or statutory debt limitation prior to the adoption of a budget which appropriates funds for the payment of that installment or amount. In the event that any of the provisions of this Agreement are determined by a court of competent jurisdiction or by City's bond counsel to create, or result in the creation of, such a legal indebtedness of City, the enforcement of the said provision shall be suspended, and the Agreement shall at all times be construed and applied in such a manner as will preserve the foregoing intent of the parties, and no Event of Default by City shall be deemed to have occurred as a result thereof. If any provision of this Agreement or the application thereof to any circumstance is so suspended, the suspension shall not affect other provisions of this Agreement which can be given effect without the suspended provision. To this end the provisions of this Agreement are severable.

B. City shall have no obligation to make a payment of a Rebate to Company if at any time during the term hereof City fails to appropriate funds for payment or City receives an opinion from its legal counsel to the effect that the use of Tax Increments resulting from the Property and Improvements to fund a Rebate payment to Company, as contemplated under Section 11 above, is not, based on a change in applicable law or its interpretation since the date of this Agreement, authorized or otherwise an appropriate urban renewal activity permitted to be undertaken by City under the Urban Renewal Act or other applicable provisions of the Code, as then constituted or under controlling decision of any Iowa court having jurisdiction over the subject matter hereof, or City's ability to collect Tax Increment from the Improvements and Property is precluded or terminated by legislative changes to Iowa Code Chapter 403. Upon occurrence of any of the foregoing circumstances, City shall promptly forward notice of the same to Company. If the circumstances continue for a period during which two (2) annual Rebate payments would otherwise have been paid to Company under the terms of this Agreement, then City may terminate this Agreement, without penalty or other liability to City, by written notice to Company.

C. For purposes of this Agreement, "Tax Increments" shall mean the property tax revenues on the Improvements and Property received by and made available to City for deposit in an account maintained under this Agreement, the

provisions of Iowa Code§ 403.19 and the ordinance governing the Urban Renewal Plan.

9. **Conditions to City Funding.**

A. The complete or initial funding by City of the Rebates and other Project commitments shall be deemed an agreement of the parties that the applicable conditions to disbursement of funds shall, as of the date of such funding, have been satisfied or waived. If the conditions set forth in this Section are not satisfied at a Rebate disbursement date, this Agreement shall terminate unless a new disbursement date is established by amendment to this Agreement. The termination of this Agreement shall be the sole remedy available to City or Company if, for whatever reason, a condition set forth in this is not satisfied at a Rebate payment date, it being understood that each party shall nonetheless incur costs and liabilities prior thereto for which they alone are responsible. City and Company each expressly assumes all responsibility for the costs and liabilities they may each so incur prior to a Rebate payment date and agree to indemnify and hold each other harmless therefrom.

B. It is recognized and agreed that the ability of the City to perform the obligations described in this Agreement, including but not limited to the Rebate payments, is subject to compliance with Iowa Code Chapter 403 and other applicable law. Further, all the obligations of City under this Agreement are subject to fulfillment, on or before each Rebate payment date, of each of the following conditions precedent:

(i) The representations and warranties made by Company in Section 17 shall be true and correct as of the Rebate disbursement date with the same force and effect as if made at such date.

(ii) Company shall be in material compliance with all the terms and provisions of this Agreement.

(iii) There has not been, as of the Rebate disbursement date, a substantial change for the worse in the financial resources and ability of Company, or a substantial decrease in the financing commitments secured by Company for construction of the Improvements, which change(s) makes it likely, in the reasonable judgment of the City, that Company will be unable to fulfill its covenants and obligations under this Agreement.

10. **Additional Covenants of Company.** In to the other promises, covenants and agreements of Company as provided elsewhere in this Agreement, Company agrees as follows with respect to each phase of Improvements:

A. Company agrees during construction of the Improvements and thereafter until the MAA termination date to maintain, as applicable, builder's risk, property damage, and liability insurance coverages with respect to the Improvements in such amounts as are customarily carried by like organizations engaged in activities of comparable size and liability exposure, and shall provide evidence of such coverages to the City upon request.

B. Until the Improvements are Substantially Completed, Company shall make such reports to City, in such detail and at such times as may be reasonably requested by City, as to the actual progress of Company with respect to construction of the Improvements. However, in no event shall Company be required to submit a report more frequently than once every thirty (30) day period.

C. During construction of the Improvements and thereafter until the MAA termination date Company will cooperate fully with the City in resolution of any traffic, parking, trash removal, or public safety problems which may arise in connection with the construction and operation of the Improvements.

D. Company will comply with all applicable land development laws and City and county ordinances, and all laws, rules, and regulations relating to its businesses, other than laws, rules, and regulations where the failure to comply with the same or the sanctions and penalties resulting therefrom, would not have a material adverse effect on the business, property, operations, or condition, financial or otherwise, of Company.

E. Until the MAA termination date Company will maintain, preserve, and keep the Property, including but not limited to the Improvements, in good repair and working order, ordinary wear and tear excepted, and from time to time will make all necessary repairs, replacements, renewals, and additions.

F. The Property will have a taxable value as set forth in the MAA and any amendments thereto, and Company agrees that the minimum actual value of the Property and completed Improvements as stated in the MAA and any amendments thereto will be a reasonable estimate of the actual value of the Property and Improvements for ad valorem property tax purposes. Company agrees that it will spend enough in construction of the Improvements that, when combined with the value of the Property and related site improvements, will equal or exceed the assessor's minimum actual value for the Property and Improvements as set forth in the MAA and any amendments thereto.

G. Until the MAA termination date Company agrees that (1) it will not undertake, in any other municipality in Black Hawk County, the construction or rehabilitation of any commercial property as a primary location for Company's business operations of the type to be conducted on the Property, and (2) it will make no conveyance, lease, or other transfer of the Property or any interest therein that would cause the Property or any part thereof to be classified as exempt from taxation or subject to centralized assessment or taxation by the State of Iowa.

H. Company shall pay, or cause to be paid, when due, all real property taxes and assessments payable with respect to any and all parts of the Property conveyed to it. Until the MAA termination date, Company agrees that (1) it will not seek administrative review or judicial review of the applicability or constitutionality of any Iowa tax statute or regulation relating to the taxation of real property included within the Property that is determined by any tax official to be applicable to the Property or to Company, or raise the inapplicability or constitutionality of any such tax statute or regulation as a defense in any proceedings of any type or nature, including but not

limited to delinquent tax proceedings, and (2) it will not seek any tax deferral, credit or abatement, either presently or prospectively authorized under Iowa Code Chapter 403 or 404, or any other state law, of the taxation of real property included within the Property.

11. **Representations and Warranties of City.** City hereby represents and warrants as follows:

A. City is not prohibited from consummating the transaction contemplated in this Agreement by any law, regulation, agreement, instrument, restriction, order or judgment.

B. Each person who executes and delivers this Agreement and all documents to be delivered hereunder is and shall be authorized to do so on behalf of City.

12. **Representations and Warranties of Company.** Company hereby represents and warrants as follows:

A. It is duly organized, validly existing, and in good standing under the laws of the state of its organization and is duly qualified and in good standing under the laws of the State of Iowa.

B. It has all requisite power and authority to own and operate its properties, to carry on its business as now conducted and as presently proposed to be conducted, and to enter into and perform its obligations under this Agreement.

C. This Agreement has been duly and validly executed and delivered by Company and, assuming due authorization, execution and delivery by the other parties hereto, is in full force and effect and is a valid and legally binding instrument of Company that is enforceable in accordance with its terms, except as the same may be limited by bankruptcy, insolvency, reorganization or other laws relating to or affecting creditors' rights generally.

D. The execution and delivery of this Agreement, the consummation of the transactions contemplated hereby, and the fulfillment of or compliance with the terms and conditions of this Agreement are not prevented by, limited by, in conflict with, or result in a violation or breach of, the terms, conditions. or provisions of any contractual restriction, evidence of indebtedness agreement or instrument of whatever nature to which 'Company is now a party or by which it or its property is bound, nor do they constitute a default under any of the foregoing.

E. There are no actions, suits or proceedings pending or to Company's knowledge threatened against or affecting Company in any court or before any arbitrator or before or by any governmental body in which there is a reasonable possibility of an adverse decision which could materially adversely affect the business (present or prospective), financial position, or results of operations of Company or which in any manner raises any questions affecting the validity of the Agreement or Company's ability to perform its obligations under this Agreement.

F. The financing commitments, which Company will proceed with due diligence to obtain, to finance the construction of the Improvements will be sufficient to enable Company to successfully complete construction of the Improvements as contemplated in this Agreement, subject to additional costs incurred due to Unavoidable Delays.

13. **Indemnification and Releases.**

A. Company hereby releases City, its elected officials, officers, employees, and agents (collectively, the "indemnified parties") from, covenants and agrees that the indemnified parties shall not be liable for, and agrees to indemnify, defend and hold harmless the indemnified parties against, any loss or damage to property or any injury to or death of any person occurring at or about the Property arising after Company's lease or acquisition of the same or resulting from any defect in the Improvements. The indemnified parties shall not be liable for any damage or injury to the persons or property of Company or its directors, officers, employees, contractors or agents, or any other person who may be about the Property or the Improvements. due to any act of negligence or willful misconduct of any person, other than any act of negligence or willful misconduct on the part of any such indemnified party or its officers, employees or agents.

B. Except for any misrepresentation, any misconduct, or any unlawful act of the indemnified parties, Company agrees to protect and defend the indemnified parties, now or forever, and further agrees to hold the indemnified parties harmless, from any claim, demand, suit, action, or other proceedings or any type or nature whatsoever by any person or entity whatsoever that arises or purportedly arises from (1) any violation of any agreement or condition of this Agreement (except with respect to any suit, action, demand, or other proceeding brought by Company against the City to enforce its rights under this Agreement), or (2) the acquisition and conditions of the Property and the construction, installation, ownership, and operation of the Improvements, or (3) any hazardous substance or environmental contamination located in or on the Property.

C. The provisions of this Section shall survive the expiration or termination of this Agreement.

14. **Obligations Contingent.** Each and every obligation of City under this Agreement is expressly made subject to and contingent upon City's completion of all procedures, hearings and approvals deemed necessary by City or its legal counsel for amendment of the urban renewal plan applicable to the Property and/or Project area, all of which must be completed within 90 days from the date this Agreement is approved by the City council. If such completion does not occur, then any conveyance, benefit, or incentive of any type provided by City hereunder within said 90-day period is subject to reverter of title, revocation, repayment or other appropriate action to restore such property, benefit, or incentive to City, and Company agrees to cooperate diligently and in good faith with any reasonable request by City to effectuate the restoration of same, or failing such restoration Company agrees to be liable for same or for the fair value thereof, plus interest on any sums owing at the rate of 5% per annum commencing with the date of demand for

payment, if said payment is not remitted to City within 30 days.

15. **No Assignment or Conveyance.** Company agrees that it will not sell, convey, assign, or otherwise transfer its interest in the Property prior to completion of the Project, whether in whole or in part, to any other person or entity without the prior written consent of City. Reasonable grounds for the City to withhold its consent shall include but are not limited to the inability of the proposed transferee to demonstrate to the City's satisfaction that it has the financial ability to observe all of the terms to be performed by Company under this Agreement. Notwithstanding the foregoing, (a) Company may assign the Property to an affiliate of Company without prior approval of City provided (i) the assignee assumes the obligations of Company under this Agreement, (ii) the assignee shall receive all Rebates payable as of and after the date of assignment, and (iii) Company provides written notice of assignment to City within five (5) business days after execution of assignment and (b) Company may mortgage the Property to a lender as security for financing of Project improvements, but for no other purpose.

16. **Default.** The following shall be "Events of Default" under this Agreement, and the term "Event of Default" shall mean any one or more of the following events that continues beyond any applicable cure periods:

A. Failure by Company to cause the construction of the Improvements to be commenced and completed pursuant to the terms, conditions and limitations of this Agreement;

B. Transfer by Company of any interest (either directly or indirectly) in the Improvements, any part of the Property, or this Agreement, without the prior written consent of City except as security for financing of Improvements or the Project or as provided in Section 15 of this Agreement;

C. Failure by Company to pay, before delinquency, all ad valorem property taxes levied on or against any of the Property;

D. Failure by any party hereto to substantially observe or perform any covenant, condition, obligation, or agreement on its part to be observed or performed under this Agreement;

E. Company (1) files any petition in bankruptcy or for any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under the federal bankruptcy law or any similar state law; (2) makes an assignment for the benefit of its creditors; (3) admits in writing its inability to pay its debts generally as they become due; (4) is adjudicated a bankrupt or insolvent; or if a petition or answer proposing the adjudication of Company as a bankrupt or its reorganization under any present or future federal bankruptcy act or any similar federal or state law shall be filed in any court and such petition or answer shall not be discharged or denied within ninety (90) days after the filing thereof; or a receiver, trustee, or liquidator of Company, or part thereof, shall be appointed in any proceedings brought against Company and shall not be discharged within ninety (90) days after such appointment, or if Company shall consent to or acquiesce in such appointment; or (5) defaults under any mortgage applicable to any of Property.

F. Any representation or warranty made by Company in this Agreement, or made by Company in any written statement or certificate furnished by Company pursuant to this Agreement, shall prove to have been incorrect, incomplete or misleading in any material respect on or as of the date of the issuance or making thereof.

17. **Remedies.**

A. Default by Company. Whenever any Event of Default in respect of Company occurs and is continuing, the City may terminate this Agreement. Before exercising such remedy, City shall give 30 days' written notice to Company of the Event of Default, provided that by the conclusion of such period the Event of Default shall not have been cured, or the Event of Default cannot reasonably be cured within 30 days and Company shall not have provided assurances reasonably satisfactory to the City that the Event of Default will be cured as soon as reasonably possible. Upon termination, City may exercise any and all remedies available at law, equity, contract, or otherwise for recovery of any sums paid by City to Company before the date of termination or to recover ownership of the Property as set forth in this Agreement.

B. Default by City. Whenever any Event of Default in respect of City occurs and is continuing, Company may take such action against City to require it to specifically perform its obligations hereunder. Before exercising such remedy, Company shall give 30 days' written notice to City of the Event of Default, provided that by the conclusion of such period the Event of Default shall not have been cured, or if the Event of Default cannot reasonably be cured within 30 days and City shall not have provided assurances reasonably satisfactory to the Company that the Event of Default will be cured as soon as reasonably possible.

C. Remedies under this Agreement shall be cumulative and in addition to any other right or remedy given under this Agreement or existing at law or in equity or by statute. Waiver as to any particular default, or delay or omission in exercising any right or power accruing upon any default, shall not be construed as a waiver of any other or any subsequent default and shall not impair any such right or power.

18. **Materiality of Company's Promises, Covenants, Representations, and Warrantles.** Each and every promise, covenant, representation, and warranty set forth in this Agreement on the part of Company to be performed is a material term of this Agreement, and each and every such promise, covenant, representation, and warranty constitutes a material inducement for City to enter this Agreement. Company acknowledges that without such promises, covenants, representations, and warranties, City would not have entered this Agreement. Upon breach of any promise or covenant, or in the event of the incorrectness or falsity of any representation or warranty, City may, at its sole option and in addition to any other right or remedy available to it, terminate this Agreement and declare it null and void.

19. **Performance by City.** Company acknowledges and agrees that all of the obligations of City under this Agreement shall be subject to, and performed by City In accordance with, all applicable statutory, common law, or constitutional provisions and

procedures consistent with City's lawful authority. All covenants, stipulations, promises, agreements, and obligations of City contained in this Agreement shall be deemed to be the covenants, stipulations, promises, agreements, and obligations of City and not of any governing body member, officer, employee or agent of City in the individual capacity of such person.

20. **No Third-Party Beneficiaries.** No rights or privileges of any party hereto shall inure to the benefit of any contractor, subcontractor, material supplier, or any other person or entity, and no such contractor, subcontractor, material supplier, or other person or entity shall be deemed to be a third-party beneficiary of any of the provisions of this Agreement.

21. **Notices.** Notice under this Agreement shall be in writing and shall be delivered in person, by overnight air courier service, by United States registered or certified mail, postage prepaid, and addressed:

(a) If to City, 715 Mulberry Street, Waterloo, Iowa 50703, Attention: Mayor, with copies to the City Attorney and the Community Planning and Development Director.

(b) If to Company, Scott B. Anshutz, 1622 NE 51ST AVE, P.O. Box 4558, Des Moines, Iowa 50306

Delivery or service of notice shall be deemed completed upon any of the following: (i) on the date of delivery when delivered in person, (ii) one (1) business day following deposit for overnight delivery to an overnight air courier service which guarantees next day delivery, or (iii) three (3) business days following the date of deposit if mailed by United States registered or certified mail, postage prepaid. A party may change the address for giving notice by any method set forth in this Section.

22. **No Joint Venture.** Nothing in this Agreement shall, or shall be deemed or construed to, create or constitute any joint venture, partnership, agency, employment, or any other relationship between the City and Company nor to create any liability for one party with respect to the liabilities or obligations of the other party or any other person.

23. **Amendment, Modification, and Waiver.** No amendment, modification, or waiver of any condition, provision, or term of this Agreement shall be valid or of any effect unless made in writing, signed by the party or parties to be bound or by the duly authorized representative of same, and specifying with particularity the extent and nature of the amendment, modification, or waiver. Any waiver by any party of any default by another party shall not affect or impair any rights arising from any subsequent default.

24. **Severability; Reformation.** Each provision, section, sentence, clause, phrase, and word of this Agreement is intended to be severable. If any portion of this Agreement shall be deemed invalid or unenforceable, whether in whole or in part, the offending provision or part thereof shall be deemed severed from this Agreement and the remaining provisions of this Agreement shall not be affected thereby and shall continue in full force and effect. If, for any reason, a court finds that any portion of this Agreement is invalid or unenforceable as Written, but that by limiting such provision or portion thereof it would become valid and enforceable, then such provision or portion thereof shall be

deemed to be written, and shall be construed and enforced, as so limited.

25. **Captions.** All captions, headings, or titles in the paragraphs or sections of this Agreement are inserted only as a matter of convenience and/or reference, and they shall in no way be construed as limiting, extending, or describing either the scope or intent of this Agreement or of any provisions hereof.

26. **Interpretation.** This Agreement shall not be construed more strictly against one party than against the other merely by virtue of the fact that it may have been prepared by counsel for one of the parties, it being recognized that the parties hereto and their respective attorneys have contributed substantially and materially to the preparation of each and every provision of this Agreement.

27. **Binding Effect.** This Agreement shall be binding and shall inure to the benefit of the parties and their respective successors, assigns, and legal representatives.

28. **Counterparts.** This may be executed in multiple counterparts, each of which shall be deemed an original and all of which, taken together, shall constitute one and the same instrument.

29. **Entire Agreement.** This Agreement, together with the exhibits attached hereto, constitutes the entire agreement of the parties and supersedes all prior or contemporaneous negotiations, discussions, understandings, or agreements, whether oral or written, with respect to the subject matter hereof.

30. **Time of Essence.** Time is of the essence of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Development Agreement by their duly authorized representatives as of the date set forth above.

[signatures on next page]

CITY OF WATERLOO, IOWA

By: _____
David Boesen, Mayor

Attest: _____
Kelley Felchle, City Clerk

PLUMB SUPPLY COMPANY, LLC

By: Ryan Summers
Ryan Summers

Title: Regional Manager

EXHIBIT A

THAT PART OF THE SOUTHEAST QUARTER OF SECTION FIVE (5), TOWNSHIP EIGHTY-NINE NORTH (T89N), RANGE THIRTEEN WEST (R13W) OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WATERLOO, BLACK HAWK COUNTY, IOWA, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER (SE 1/4) WHICH IS ONE THOUSAND EIGHT HUNDRED SIXTY-FIVE AND SIXTEEN HUNDREDTHS (1865.16) FEET WEST OF THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER (SE 1/4); THENCE N 0°00' E ONE HUNDRED TWENTY-SIX (126.00) FEET TO THE POINT OF BEGINNING; THENCE CONTINUING N 0°00' E THREE HUNDRED NINETY-THREE AND SEVENTY-SIX (393.76) FEET TO THE SOUTHERLY LINE OF THE CHICAGO CENTRAL AND PACIFIC RAILROAD; THENCE S 88°08'45" E TWO HUNDRED TWENTY-THREE AND SIXTY-TWO HUNDREDTHS (223.62) FEET ALONG SAID SOUTHERLY LINE; THENCE S 0°00' E THREE HUNDRED EIGHTY-SIX AND FORTY-FIVE HUNDREDTHS (386.45) FEET TO A POINT WHICH IS ONE HUNDRED TWENTY-SIX (126.00) FEET NORTH OF THE SOUTH LINE OF SAID SOUTHEAST QUARTER (SE 1/4); THENCE N 90°00' W TWO HUNDRED TWENTY-THREE AND FIVE TENTHS (223.5) FEET TO THE POINT OF BEGINNING.

SUBJECT TO RESTRICTIONS, EASEMENTS, COVENANTS, ORDINANCES, AND LIMITED ACCESS PROVISIONS OF RECORD AND NOT OF RECORD.

AND

THAT PART OF THE SOUTHEAST QUARTER (SE 1/4) IN SECTION NO. 5, TOWNSHIP NO. 89 NORTH, RANGE NO. 13 WEST OF THE FIFTH PRINCIPAL MERIDIAN, CITY.OF WATERLOO, BLACK HAWK COUNTY, IOWA, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER, POINT BEING A FOUND ½" REBAR IN P.C.C. PAVEMENT; THENCE ALONG THE SOUTH LINE OF SAID SOUTHEAST QUARTER SOUTH 89°40'50" WEST A DISTANCE OF 1,865.05 FEET; THENCE NORTH 00°23½' WEST A DISTANCE OF 33.05 FEET TO THE SOUTHEAST CORNER OF EXISTING PARCEL "I" PER PLAT OF SURVEY RECORDED IN FILE 2019-00016830 DATED 03/12/2020 IN THE OFFICE OF THE BLACK HA WK COUNTY RECORDER, POINT BEING A FOUND ½" REBAR WITH LICENSE #16775, ALSO BEING THE POINT OF BEGINNING; THENCE ALONG THE EAST LINE OF SAID PARCEL "I" NORTH 00°23½' WEST A DISTANCE OF 92.9 FEET TO THE NORTHEAST CORNER OF SAID PARCEL "I", ALSO BEING THE NORTHEAST CORNER OF SAID PARCEL "I", ALS0 BEING THE SOUTHWEST CORNER OF EXISTING PARCEL "A" PER PLAT OF SURVEY RECORDED IN MISC. BOOK 297 PAGE 615 DATED 05/04/1990 IN THE OFFICE OF THE BLACK HA WK COUNTY RECORDER, POINT BEING A FOUND ½" REBAR WITH LICENSE #8033; THENCE ALONG THE SOUTH LINE OF SAID PARCEL "A" NORTH 89°41¾' EAST A DISTANCE OF 223.45 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL "A", POINT BEING A FOUND ½" REBAR

WITH LICENSE #8033; THENCE ALONG THE WEST LINES OF EXISTING TRACTS "D" AND "C" PER PLAT OF SURVEY RECORDED IN FILE 2019-00009617 DATED 11/21/2018 IN THE OFFICE OF THE BLACK HA WK COUNTY RECORDER SOUTH 00° 19' EAST A DISTANCE OF 92.9 FEET TO THE SOUTHWEST CORNER OF SAID TRACT "C", POINT BEING A SET ½" REBAR WITH LICENSE #16264; THENCE SOUTH 89°42' WEST A DISTANCE OF 223.35 FEET TO THE POINT OF BEGINNING.

CONTAINING 20,750 SQUARE FEET

AND SUBJECT TO THE RETENTION OF A UTILITY EASEMENT OVER, UNDER AND ACROSS THE SOUTH 30 FEET OF PARCEL "J" AS SHOWN ON THE PLAT THEREOF.

SUBJECT TO RESTRICTIONS, EASEMENTS, COVENANTS, ORDINANCES, AND LIMITED ACCESS PROVISIONS OF RECORD AND NOT OF RECORD.

NOTE: THE SOUTH LINE OF SAID SOUTHEAST QUARTER IS ASSUMED TO BEAR SOUTH 89°40'50" WEST FOR THIS DESCRIPTION

EXHIBIT B

MINIMUM ASSESSMENT AGREEMENT

This Minimum Assessment Agreement (the “Agreement”) is entered into as of this _____ day of _____, 202___, and among the CITY OF WATERLOO, IOWA (“City”) and PLUMB SUPPLY COMPANY, LLC (“Company”), and the COUNTY ASSESSOR of the BLACK HAWK COUNTY, IOWA (“Assessor”).

WITNESSETH:

WHEREAS, on or before the date hereof the City and Company have entered into a development agreement (the "Development Agreement") regarding certain real property (the “Property”), described in Exhibit "B" thereto, located in the City; and

WHEREAS, it is contemplated that pursuant to the Development Agreement, the Company will undertake the development of an area within the City and within the East Waterloo Unified Urban Renewal and Redevelopment Plan area, including the construction of certain improvements as described in the Development Agreement (the “Minimum Improvements”) on the Property (the “Project”); and

WHEREAS, pursuant to Iowa Code§ 403.6, as amended, the City and the Company desire to establish a minimum actual value for the Property and the Minimum Improvements to be constructed thereon by Company pursuant to the Development Agreement, which shall be effective upon substantial completion of the Project and from then until this Agreement is terminated pursuant to the terms herein and which is intended to reflect the minimum actual value of the land and buildings as to the Project only; and

WHEREAS, the City and the Assessor have reviewed the preliminary plans and specifications for the Minimum Improvements which the parties contemplate will be erected as a part of the Project.

NOW, THEREFORE, the parties hereto, in consideration of the promises, covenants, and agreements made by each other, do hereby agree as follows:

1. Upon completion of construction of the Minimum Improvements by Company, the minimum actual taxable value which shall be fixed for assessment purposes for the Property and Minimum Improvements to be constructed thereon by Company as a part of the Project shall not be less than $1,630,700.00 (the “Minimum Actual Value”) until termination of this Agreement. The parties hereto agree that construction of the Minimum Improvements will be substantially completed by the date set forth in the Development Agreement, and in any case if the Minimum Improvements are not substantially completed by January 31, 2027, the parties agree to execute an amendment to this Agreement that will extend the date specified in Section 2 below.

2. The Minimum Actual Value herein established shall be of no further force and effect, and this Minimum Assessment Agreement shall terminate, on December 31, 2037. The Minimum Actual Value shall be maintained during such period regardless of: (a) any failure to complete the Minimum Improvements; (b) destruction of all or any portion of the

Minimum Improvements; (c) diminution in value of the Property or the Minimum Improvements; or (d) any other circumstance, whether known or unknown and whether now existing or hereafter occurring.

3. Company shall pay, or cause to be paid, when due, all real property taxes and assessments payable with respect to all and any parts of the Property and the Minimum Improvements pursuant to the provisions of this Agreement and the Development Agreement. Such tax payments shall be made without regard to any loss, complete or partial, to the Property or the Minimum Improvements, any interruption in, or discontinuance of, the use, occupancy, ownership, or operation of the Property or the Minimum Improvements by Company or any other matter or thing which for any reason interferes with, prevents or renders burdensome the use or occupancy of the Property or the Minimum Improvements.

4. Company agrees that its obligation to make the tax payments required hereby, to pay the other sums provided for herein, and to perform and observe its other agreements contained in this Agreement shall be absolute and unconditional obligations of Company (not limited to the statutory remedies for unpaid taxes) and that Company shall not be entitled to any abatement or diminution thereof, or set off therefrom, nor to any early termination of this Agreement for any reason whatsoever.

5. Nothing herein shall be deemed to waive the Company's rights under Iowa Code§ 403.6, as amended, to contest that portion of any actual value assignment made by the Assessor in excess of the Minimum Actual Value established herein. In no event, however, shall the Company seek or cause the reduction of the actual value assigned below the Minimum Actual Value established herein during the term of this Agreement. Nothing herein shall limit the discretion of the Assessor to assign at any time an actual value to the land and Minimum Improvements in excess of the Minimum Actual Value.

6. Company agrees that during the term of this Agreement it will not:

(a) seek administrative review or judicial review of the applicability or constitutionality of any Iowa tax statute relating to the taxation of property contained as a part of the Property or the Minimum Improvements determined by any tax official to be applicable to the Property or the Minimum Improvements, or raise the inapplicability or constitutionality of any such tax statute as a defense in any proceedings, including delinquent tax proceedings; or

(b) seek any tax deferral, credit, or abatement, either presently or prospectively authorized under Iowa Code Chapter 403 or 404, or any other state law, of the taxation of real property, including improvements and fixtures thereon, contained in the Property or the Minimum Improvements; or

(c) request the Assessor to reduce the Minimum Actual Value; or

(d) appeal to the board review of the city, county, state or to the Director of Revenue of the State of Iowa to reduce the Minimum Actual Value; or

(e) cause a reduction in the actual value or the Minimum Actual Value through any other proceedings.

7. This Agreement shall be promptly recorded by the City with the Recorder of Black Hawk County, Iowa. The City shall pay all costs of recording.

8. Neither the preambles nor provisions of this Agreement are intended to, or shall be construed as, modifying the terms of the Development Agreement.

9. Each provision, section, sentence, clause, phrase, and word of this Agreement is intended to be severable. If any portion of this Agreement shall be deemed invalid or unenforceable, whether in whole or in part, the offending provision or part thereof shall be deemed severed from this Agreement and the remaining provisions of this Agreement shall not be affected thereby and shall continue in full force and effect. If, for any reason, a court finds that any portion of this Agreement is invalid or unenforceable as written, but that by limiting such provision or portion thereof it would become valid and enforceable, then such provision or portion thereof shall be deemed to be written, and shall be construed and enforced, as so limited.

10. This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the parties, including but not limited to future owners of the Project property.

IN WITNESS WHEREOF, the parties have executed this Minimum Assessment Agreement by their duly authorized representatives as of the date det forth above.

[signatures on next page]

CITY OF WATERLOO, IOWA

By: _____
David Boesen, Mayor

Attest: _____
Kelley Felchle, City Clerk

PLUMB SUPPLY COMPANY, LLC

By: Ryan Summers
Ryan Summers

Title: Regional Manager

STATE OF IOWA)
) **ss.**
COUNTY OF BLACK HAWK)

On this _____ day of _____, 2026, before me, a notary public in and for the State of Iowa, personally appeared David Boesen and Kelley Felchle, to me personally known, who being duly sworn ho being duly sworn, did say that they are the Mayor and City Clerk, respectively, of the City of Waterloo, Iowa, a municipal corporation, created and existing under the laws of the State of Iowa, and that the seal affixed to the foregoing instrument is the seal of said municipal corporation, and that said instrument was signed and sealed on behalf of said municipal corporation by authority and resolution of its City Council, and said Mayor and City Clerk acknowledged said instrument to be the free act and deed of said municipal corporation by it and by them voluntarily executed.

_____
Notary Public

STATE OF _____)
) **ss.**
COUNTY OF _____)

This record was acknowledged before me on 6/4/2026, by **Ryan Summers** Regional Manager (title) of Plumb Supply Company, LLC.

_____
Notary Public

ROBERT J. HINN
Commission Number 853704
MY COMMISSION EXPIRES
FEBRUARY 5, 2027

_____
Notary Public

CERTIFICATION OF ASSESSOR

The undersigned, having reviewed the plans and specifications for the Minimum Improvements to be constructed and the market value assigned to the land upon which the Minimum Improvements are to be constructed for the development, and being of the opinion that the minimum market value contained in the foregoing Minimum Assessment Agreement appears reasonable, hereby certifies as follows: The undersigned Assessor, being legally responsible for the assessment of the property described in the foregoing Minimum Assessment Agreement, certifies that the actual value assigned to that land and improvements upon completion shall not be less than One Million Six Hundred Thirty Thousand Seven Hundred Dollars ($1,630,700.00) until termination of this Minimum Assessment Agreement pursuant to the terms hereof, subject to adjustment as provided in said agreement.

_____ _____

Date Assessor for Black Hawk County, Iowa

STATE OF IOWA)
) **ss.**
COUNTY OF BLACK HAWK)

Subscribed and sworn to before me on _____ by T.J. Koenigsfeld, Assessor for Black Hawk County, Iowa.

_____

Notary Public

16194715

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Jamie Knutson, City Engineer
Engineering Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving documents, and adopt and levy the Final Schedule of Assessments, in conjunction with the FY 2026 Sidewalk Repair Assessment Program - Zone 5A, Contract No. 1127, and instruct the City Clerk to publish notice.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

Transmitted herewith are the final schedule of assessments, abandonment schedule, final plats and breakdown of project costs for the FY 2026 Sidewalk Repair Assessment Program – Zone 5A, Contract No. 1127, which is bounded by:

Sergeant Road (US Hwy 63) - W. Ridgeway Avenue - Kimball Avenue - South City Limits - Sergeant Road (US Hwy 63)

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

None

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Jamie Knutson, City Engineer
Engineering Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving a Site Lease for City-Owned Property Agreement with Croell, Inc., in the amount of $10,000.00, for placing and operating a portable concrete batch plant, and authorizing the Mayor and City Clerk to execute said document.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

The contractor responsible for paving Highway 20 between Highway 63 and Highway 58 has requested approval to lease the southeast corner of Ansborough Avenue and Highway 20 for the setup and operation of a temporary concrete batch plant. This location has been used previously by other contractors working on City projects and is already rocked and graded, making it well-suited for this purpose.

The contractor anticipates operating the plant only for the duration necessary to support the Highway 20 paving work. The proposed timeframe does not conflict with planned activities in the South Waterloo Business Park, and no interference with upcoming development is expected.

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Lease Croell Staging 2026
2. Croell Signed Lease
3. City of Waterloo Cert of Ins

SITE LEASE
for
CITY-OWNED PROPERTY

This Site Lease (the "Agreement") is made and entered into as of_____, 2026 by and between the City of Waterloo, Iowa ("City") and Croell, Inc ("Lessee").

1. **Premises; Use.** The City agrees to allow the Lessee to use and occupy certain City property (the "Property") located south of US Hwy 20 and east of Ansborough Avenue, Section 09, Township 89 North, Range 13 West, in Black Hawk County, Iowa, consisting of approximately 4 acres, and more particularly described in Exhibit "A" attached hereto and made a part hereof by this reference. Lessee shall use the Property only for placing and operating a portable concrete batch plant, activities incident thereto, and temporary stockpile of raw materials and shall not use the Property for any other purpose whatsoever. Lessee may not make any improvements to the Property. Lessee accepts the Property in its "AS IS" condition, with all faults, and without any representation or warranty by City as to the Property's condition or its suitability for a portable concrete batch plant or for any other purpose. City shall not prepare the Property for Lessee's use in any way.

2. **Term, Rent.** The City agrees to allow Lessee to use and occupy the Property for a term commencing approximately June 15, 2026, and terminating approximately September 15, 2026, subject in any case to early termination as provided in Section 3. As rental, the Lessee agrees to pay the City the sum of $7,500.00, upon execution of this Agreement. If the term of this Agreement is extended by the mutual agreement of the parties, then rental amount shall be payable on the date that Lessee delivers an executed amendment to City. Any payment made is non-refundable in the event this Agreement is terminated by either party pursuant to Section 3 below. If rent is not paid by the due date(s), interest shall be charged at the rate of 12% percent per annum, compounded monthly, beginning five (5) days after the due date, until paid. All rent is to be paid to the City of Waterloo, 715 Mulberry Street, Waterloo, IA, 50703, Attn: Community Planning & Development, or at such other place as the City may direct in writing.

3. **EARLY TERMINATION; Compensation to Lessee.** Lessee agrees that the City may terminate this Agreement, as to any part or all of the Property, upon thirty (30) days' written notice if the City needs the use of the Property for its own purposes, including but not limited to a third-party economic development purpose, and Lessee hereby expressly waives any rights it may have under Iowa law that may require the giving of a different notice or the giving of notice by a specific date, and Lessee furthermore expressly waives any claims of any kind whatsoever that it might have against Lessor in connection with the early termination of this Agreement and agrees that this Section shall be Lessee's exclusive remedy. ***Lessee hereby acknowledges and agrees that it takes and uses the Property subject to the risk of early termination, and Lessee hereby agrees to assume said risk.*** Lessee may terminate this Agreement, in whole but not in part, upon thirty (30) days' written notice to the Waterloo Community Planning and Development Department.

4. **Care of Property.** Lessee agrees to do what is reasonably necessary to control soil erosion including, but not limited to, providing labor and normal equipment for the maintenance of existing watercourses, waterways, ditches, drainage areas, terraces and tile drains, and abstaining from any practice which will cause damage to the premises.

5. **Indemnity.** In consideration of the extension of this Agreement to the Lessee, Lessee hereby agrees to indemnify, defend, and hold the City harmless from and against any and all claims, demands, actions, causes of action, fines, fees, penalties, damages and liabilities of any type or nature whatsoever, including but not limited to reasonable attorneys' fees, relating to any person or property, arising from in in any way connected with Lessee's use of the Property in any manner, whether directly or indirectly, and shall further indemnify the City for any damage to the Property caused by Lessee, its employees or agents and any environmental remediation or cleanup costs.

a. **Insurance.** General contractors and subcontractors working on the project shall have Commercial General Liability Insurance written on an occurrence basis with limits no less than $1,000,000 combined single limit per occurrence and $1,000,000 aggregate for personal injury and property damage; and Automobile Liability Insurance written on an occurrence basis with limits no less than $1,000,000 combined single limit with respect to bodily injury, property damage, or death. They shall name the City of Waterloo as additional insured on a primary and non-contributory basis including a waiver of subrogation in favor of the City for this project. Proof of such coverage shall be furnished to the City promptly upon request.

b. General contractors and subcontractors shall provide proof of workers compensation insurance coverage for its employees working on the job. Contractors/Subcontractors shall name the City as additional insured on a primary and non-contributory basis including a waiver of subrogation in favor the City. Proof of such coverage shall be furnished to the City prior to the start of the project and promptly upon request thereafter.

6. **Third-Party Rights.** Reserved.

7. **City Access.** The City may enter the Property at any reasonable time for the purpose of consulting with Lessee, viewing the Property, making improvements, or for other reasonable purposes that do not interfere with Lessee's ability to use the Property as provided herein. The lessee is aware of a proposed construction project in the immediate vicinity of the property and agrees to work with the City's contractors regarding staging, storage and access to the property.

8. **No Sublease or Assignment.** Lessee shall not lease or sublet any part of the Property nor assign this Agreement to any other person without the prior written permission of the City.

9. **Condition at End of Term.** Lessee agrees that on termination of the Agreement, Lessee will yield possession of the Property to City without further demand or notice, in as good order and condition as at the beginning of the term of this Agreement. Loss or damage by forces beyond Lessee's reasonable control and ordinary wear and tear to existing improvements are excepted.

10. **No Joint Venture.** Nothing in this Agreement shall, or shall be deemed or construed to, create or constitute any joint venture, partnership, agency, employment, or any other relationship between City and Lessee nor to create any liability for one party with respect to the liabilities or obligations of the other party or any other person.

11. **Default.** If Lessee fails to observe any term or condition of this Agreement, including but not limited to the payment of rent, it shall be in default of this Agreement, and City may then exercise any and all legal remedies available under applicable law. Lessee stipulates and agrees that Lessor may proceed with a forcible entry and detainer action under Chapter 648 upon issuance of a three-day notice described in Section 17 and Lessee hereby waives any defects in notice or service of process otherwise required under Chapter 648. In the event of default Lessee shall be liable for any and all damage or loss suffered or incurred by City, including but not limited to reasonable attorneys' fees and expenses incurred in connection with the exercise of any right or remedy by City.

12. **Notices.** Any notice under this Agreement shall be in writing and shall be delivered in person or by United States certified mail, postage prepaid and addressed to the other party at its last known address or through electronic mail delivery. Delivery of notice shall be deemed to occur (i) on the date of delivery when delivered in person, or (ii) three (3) business days following the date of deposit if mailed by United States certified mail, postage prepaid.

13. **Miscellaneous.** This Agreement contains the entire Agreement between the parties. None of the covenants, provisions, terms or conditions of this Agreement will be in any manner modified, waived, or abandoned, except by written instrument duly signed by both parties. This Agreement is binding upon and shall inure to the benefit of the parties and their respective heirs, personal representatives, successors and assigns.

14. **Severability; Reformation.** Each provision, section, sentence, clause, phrase, and word of this Agreement is intended to be severable. If any portion of this Agreement shall be deemed invalid or unenforceable, whether in whole or in part, the offending provision or part thereof shall be deemed severed from this Agreement and the remaining provisions of this Agreement shall not be affected thereby and shall continue in full force and effect. If, for any reason, a court finds that any portion of this Agreement is invalid or unenforceable as written, but that by limiting such provision or portion thereof it would become valid and enforceable, then such provision or portion thereof shall be deemed to be written, and shall be construed and enforced, as so limited.

IN WITNESS WHEREOF, the parties have executed this Site Lease by their duly authorized representatives as of the date first set forth above.

[signatures on next page]CITY OF WATERLOO, IOWA (Lessor) **CROELL, INC. (Lessee)**

By: _____ _____
David Boesen, Mayor Tom E. Schmitt

Attest: _____
Kelley Felchle, City Clerk

Date: _____

SITE LEASE
for
CITY-OWNED PROPERTY

This Site Lease (the "Agreement") is made and entered into as of June 15, 2026 by and between the City of Waterloo, Iowa ("City") and Croell, Inc ("Lessee").

1. **Premises; Use.** The City agrees to allow the Lessee to use and occupy certain City property (the "Property") located south of US Hwy 20 and east of Ansborough Avenue, Section 09, Township 89 North, Range 13 West, in Black Hawk County, Iowa, consisting of approximately 4 acres, and more particularly described in Exhibit "A" attached hereto and made a part hereof by this reference. Lessee shall use the Property only for placing and operating a portable concrete batch plant, activities incident thereto, and temporary stockpile of raw materials and shall not use the Property for any other purpose whatsoever. Lessee may not make any improvements to the Property. Lessee accepts the Property in its "AS IS" condition, with all faults, and without any representation or warranty by City as to the Property's condition or its suitability for a portable concrete batch plant or for any other purpose. City shall not prepare the Property for Lessee's use in any way.

2. **Term, Rent.** The City agrees to allow Lessee to use and occupy the Property for a term commencing approximately June 15, 2026, and terminating approximately September 15, 2026, subject in any case to early termination as provided in Section 3. As rental, the Lessee agrees to pay the City the sum of $7,500.00, upon execution of this Agreement. If the term of this Agreement is extended by the mutual agreement of the parties, then rental amount shall be payable on the date that Lessee delivers an executed amendment to City. Any payment made is non-refundable in the event this Agreement is terminated by either party pursuant to Section 3 below. If rent is not paid by the due date(s), interest shall be charged at the rate of 12% percent per annum, compounded monthly, beginning five (5) days after the due date, until paid. All rent is to be paid to the City of Waterloo, 715 Mulberry Street, Waterloo, IA, 50703, Attn: Community Planning & Development, or at such other place as the City may direct in writing.

3. **EARLY TERMINATION; Compensation to Lessee.** Lessee agrees that the City may terminate this Agreement, as to any part or all of the Property, upon thirty (30) days' written notice if the City needs the use of the Property for its own purposes, including but not limited to a third-party economic development purpose, and Lessee hereby expressly waives any rights it may have under Iowa law that may require the giving of a different notice or the giving of notice by a specific date, and Lessee furthermore expressly waives any claims of any kind whatsoever that it might have against Lessor in connection with the early termination of this Agreement and agrees that this Section shall be Lessee's exclusive remedy. ***Lessee hereby acknowledges and agrees that it takes and uses the Property subject to the risk of early termination, and Lessee hereby agrees to assume said risk.*** Lessee may terminate this Agreement, in whole but not in part, upon thirty (30) days' written notice to the Waterloo Community Planning and Development Department.

4. **Care of Property.** Lessee agrees to do what is reasonably necessary to control soil erosion including, but not limited to, providing labor and normal equipment for the maintenance of existing watercourses, waterways, ditches, drainage areas, terraces and tile drains, and abstaining from any practice which will cause damage to the premises.

5. **Indemnity.** In consideration of the extension of this Agreement to the Lessee, Lessee hereby agrees to indemnify, defend, and hold the City harmless from and against any and all claims, demands, actions, causes of action, fines, fees, penalties, damages and liabilities of any type or nature whatsoever, including but not limited to reasonable attorneys' fees, relating to any person or property, arising from in in any way connected with Lessee's use of the Property in any manner, whether directly or indirectly, and shall further indemnify the City for any damage to the Property caused by Lessee, its employees or agents and any environmental remediation or cleanup costs.

a. **Insurance.** General contractors and subcontractors working on the project shall have Commercial General Liability Insurance written on an occurrence basis with limits no less than $1,000,000 combined single limit per occurrence and $1,000,000 aggregate for personal injury and property damage; and Automobile Liability Insurance written on an occurrence basis with limits no less than $1,000,000 combined single limit with respect to bodily injury, property damage, or death. They shall name the City of Waterloo as additional insured on a primary and non-contributory basis including a waiver of subrogation in favor of the City for this project. Proof of such coverage shall be furnished to the City promptly upon request.

b. General contractors and subcontractors shall provide proof of workers compensation insurance coverage for its employees working on the job. Contractors/Subcontractors shall name the City as additional insured on a primary and non-contributory basis including a waiver of subrogation in favor the City. Proof of such coverage shall be furnished to the City prior to the start of the project and promptly upon request thereafter.

6. **Third-Party Rights.** Reserved.

7. **City Access.** The City may enter the Property at any reasonable time for the purpose of consulting with Lessee, viewing the Property, making improvements, or for other reasonable purposes that do not interfere with Lessee's ability to use the Property as provided herein. The lessee is aware of a proposed construction project in the immediate vicinity of the property and agrees to work with the City's contractors regarding staging, storage and access to the property.

8. **No Sublease or Assignment.** Lessee shall not lease or sublet any part of the Property nor assign this Agreement to any other person without the prior written permission of the City.

9. **Condition at End of Term.** Lessee agrees that on termination of the Agreement, Lessee will yield possession of the Property to City without further demand or notice, in as good order and condition as at the beginning of the term of this Agreement. Loss or damage by forces beyond Lessee's reasonable control and ordinary wear and tear to existing improvements are excepted.

10. **No Joint Venture.** Nothing in this Agreement shall, or shall be deemed or construed to, create or constitute any joint venture, partnership, agency, employment, or any other relationship between City and Lessee nor to create any liability for one party with respect to the liabilities or obligations of the other party or any other person.

11. **Default.** If Lessee fails to observe any term or condition of this Agreement, including but not limited to the payment of rent, it shall be in default of this Agreement, and City may then exercise any and all legal remedies available under applicable law. Lessee stipulates and agrees that Lessor may proceed with a forcible entry and detainer action under Chapter 648 upon issuance of a three-day notice described in Section 17 and Lessee hereby waives any defects in notice or service of process otherwise required under Chapter 648. In the event of default Lessee shall be liable for any and all damage or loss suffered or incurred by City, including but not limited to reasonable attorneys' fees and expenses incurred in connection with the exercise of any right or remedy by City.

12. **Notices.** Any notice under this Agreement shall be in writing and shall be delivered in person or by United States certified mail, postage prepaid and addressed to the other party at its last known address or through electronic mail delivery. Delivery of notice shall be deemed to occur (i) on the date of delivery when delivered in person, or (ii) three (3) business days following the date of deposit if mailed by United States certified mail, postage prepaid.

13. **Miscellaneous.** This Agreement contains the entire Agreement between the parties. None of the covenants, provisions, terms or conditions of this Agreement will be in any manner modified, waived, or abandoned, except by written instrument duly signed by both parties. This Agreement is binding upon and shall inure to the benefit of the parties and their respective heirs, personal representatives, successors and assigns.

14. **Severability; Reformation.** Each provision, section, sentence, clause, phrase, and word of this Agreement is intended to be severable. If any portion of this Agreement shall be deemed invalid or unenforceable, whether in whole or in part, the offending provision or part thereof shall be deemed severed from this Agreement and the remaining provisions of this Agreement shall not be affected thereby and shall continue in full force and effect. If, for any reason, a court finds that any portion of this Agreement is invalid or unenforceable as written, but that by limiting such provision or portion thereof it would become valid and enforceable, then such provision or portion thereof shall be deemed to be written, and shall be construed and enforced, as so limited.

IN WITNESS WHEREOF, the parties have executed this Site Lease by their duly authorized representatives as of the date first set forth above.

[signatures on next page]CITY OF WATERLOO, IOWA (Lessor) **CROELL, INC. (Lessee)**

By: _____ _____

David Boesen, Mayor Tom E. Schmitt

Attest: _____

Kelley Felchle, City Clerk

Date: _____

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 5/29/2026

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Holmes Murphy & Associates 201 First Street SE, Suite 700 Cedar Rapids IA 52401	**CONTACT NAME:** Isaac Ball **PHONE (A/C, No, Ext):** 319-896-7667 **FAX (A/C, No):** **E-MAIL ADDRESS:** iball@holmesmurphy.com
INSURED CROINCPC Croell, Inc. 2010 Kenwood Avenue New Hampton, IA 50659	**INSURER(S) AFFORDING COVERAGE** / **NAIC #** **INSURER A :** Old Republic Insurance Company — 24147 **INSURER B :** Navigators Insurance Company — 42307 **INSURER C :** Endurance American Specialty Ins Co. — 41718 **INSURER D :** **INSURER E :** **INSURER F :**

COVERAGES **CERTIFICATE NUMBER:** 1404690388 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X **COMMERCIAL GENERAL LIABILITY** CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC OTHER:			MWZY30016625	12/29/2025	12/29/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 2,000,000 $ 300,000 $ 5,000 $ 2,000,000 $ 4,000,000 $ 4,000,000
A	**AUTOMOBILE LIABILITY** X ANY AUTO OWNED AUTOS ONLY / SCHEDULED AUTOS HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY			MWTB30016525	12/29/2025	12/29/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 5,000,000 $ $ $
B	X **UMBRELLA LIAB** X OCCUR **EXCESS LIAB** CLAIMS-MADE DED X RETENTION $ 0			HO25EXC893865IC	12/29/2025	12/29/2026	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		MWC30016425	12/29/2025	12/29/2026	X PER STATUTE / OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
C	Excess Liability			EXC30001410306	12/29/2025	12/29/2026		5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Additional Insured only if required by written contract with respect to General Liability, Automobile Liability and Umbrella/Excess Liability applies on a primary basis and the insurance of the additional insured shall be non-contributory: Certificate Holder, Project Owner and Others as required by written contract, per policy terms and conditions.

Waiver of Subrogation only if required by written contract with respect to General Liability, Automobile Liability, Workers Compensation and Umbrella/Excess Liability applies in favor of: Certificate Holder, Project Owner and Others as required by written contract, per policy terms and conditions.

CERTIFICATE HOLDER

City of Waterloo
715 Mulberry Street
Waterloo IA 50703

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Kari Cooley

© 1988-2015 ACORD CORPORATION. All rights reserved.

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Jamie Knutson, City Engineer
Engineering Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving a Permanent Easement Agreement with Love's Travel & Country Stores, Inc., to serve as a drainage easement, in conjunction with the FY 2024 Sergeant Road Trail Repairs, and authorizing Mayor and City Clerk to execute said document.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

The City has received an IDOT grant to replace five bridges along the Highway 63 Trail corridor between Fletcher Avenue and Shaulis Road. One of the bridges, located adjacent to Love's Travel Stops & Country Stores, is skewed in a manner that requires a minor adjustment to the drainage channel in order to install new pipe culverts.

To accommodate the proposed culvert installation, the City is requesting a small easement from Love’s property. The easement will allow the drainageway to be straightened and properly aligned with the new culvert, improving constructability and facilitating more efficient long-term maintenance of the drainage infrastructure.

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Easement Agreement

Prepared by Austin J. McMahon, 222 1st St. E., Independence, IA 50644 319-334-4488

EASEMENT AGREEMENT

This Easement Agreement (the "Agreement") is entered into as of _____, 2026 by and between Love's Travel Stops & Country Stores, Inc. ("Grantor") and the City of Waterloo, Iowa ("Grantee").

1. **Grant of Permanent Drainage Easement.** In consideration of the mutual promises and covenants contained herein, Grantor does hereby grant and convey unto Grantee, and Grantee does hereby accept, a non-exclusive permanent drainage easement for purposes relating to construction of the Improvements (the "**Permanent Easement**") in, to, upon, over, across, and beneath the real estate (the "**Permanent Premises**") as described and depicted on Exhibit "A" attached hereto and by this reference made a part hereof. The Premises is collectively referred to as the "**Easement Premises**."

2. **Purpose.** The Easement Premises is intended for use by Grantee, its employees, contractors and agents, to construct certain drainage and utility improvements (the "**Improvements**"), and maintain Grantee shall perform, and shall cause its contractors to perform, all work in a good and workmanlike manner, in compliance with applicable laws, and using commercially reasonable efforts to avoid unreasonable interference with Grantor's business operations, parking, access, signage, utilities and use of the remainder of Grantor's property. Grantee shall promptly restore any portion of Grantor's property disturbed by Grantee or its employees, contractors, agents, invitees or representatives to substantially the same condition existing immediately before such disturbance, except for the Improvements installed within the Easement Premises in accordance with this Agreement. It is the intention of the parties that Grantee shall assume all responsibility for the construction, operation, inspection, repair, replacement and maintenance of the Improvements, and that Grantor shall have no liability relating to the Easement or the Improvements except to the extent arising from Grantor's own negligent acts or omissions or willful misconduct. To the fullest extent permitted by applicable law, Grantee shall be responsible for all claims, losses, damages, liens, costs and expenses arising out of or relating to Grantee's use of the Easement Premises, the construction, operation, inspection, repair, replacement or maintenance of the Improvements, or the acts or omissions of Grantee or its employees, contractors, agents, invitees or representatives, except to the extent caused by Grantor's negligence or willful misconduct.

3. **Grantor Duties and Privileges.** Grantor shall deliver possession of the Easement Premises to Grantee, "as is, where is," without any representation or warranty as to the condition of same. Grantor shall have no duty to prepare the Easement Premises in any way for Grantee's use. This easement is subject to any matters of record affecting the Property or that would be shown by a current survey of the Permanent Premises. Following transfer of possession of the Easement Premises, Grantor shall have no

further duty or obligation with respect to the Easement Premises, except as expressly set forth herein. Grantor reserves the right to use, maintain, landscape, mow, cross over and otherwise conduct activities upon the Easement Premises and Grantor's surrounding property in any manner that does not materially interfere with Grantee's rights under this Agreement. Grantee shall not unreasonably condition, delay or withhold any consent requested by Grantor for activities within the Easement Premises that would not materially impair the drainage function of the Improvements.

4. **Entry; Notice**. Grantee shall coordinate all non-emergency work with Grantor in advance and shall use commercially reasonable efforts to minimize disruption to Grantor's business operations, parking, access, signage, utilities and use of the remainder of Grantor's property.

5. **No Expansion or Additional Improvements**. Grantee shall not expand, relocate, assign or materially change the use of the Permanent Easement, and shall not install any additional utilities or improvements within the Easement Premises, without Grantor's prior written consent, except for the repair, replacement or maintenance of the Improvements within the Easement Premises in accordance with this Agreement.

6. **Insurance.** Grantee shall require each contractor performing work on the Easement Premises to maintain commercially reasonable insurance coverage for the work performed on the Easement Premises.

7. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Iowa.

8. **Successors and Assigns**. This Agreement and the easements, rights, obligations, restrictions and covenants contained herein shall run with the land and shall be binding upon and inure to the benefit of the parties and their respective permitted successors and assigns.

[signatures on next page]

IN WITNESS WHEREOF, the parties have executed this Easement Agreement by their duly authorized representatives as of the date first set forth above.

LOVE'S TRAVEL STOPS & COUNTRY STORES, INC.

_____

By: Tim Doty
Authorized Representative

CITY OF WATERLOO, IOWA

By: _____
David Boesen, Mayor

Attest: _____
Kelley Felchle, City Clerk

STATE OF OKLAHOMA)
) ss.
OKLAHOMA COUNTY)

Acknowledged before me on May 29th, 2026, by Tim Doty, as an authorized representative for Love's Travel Stops & Country Stores, Inc.

Annanette Reece
Notary Public

ANNTANETTE REECE NOTARY #25001636 EXP. 02/10/2029 PUBLIC STATE OF OKLAHOMA

STATE OF IOWA)
) ss.
BLACK HAWK COUNTY)

Acknowledged before me on _____, 2026, by David Boesen and Kelley Felchle as Mayor and City Clerk, respectively, of the City of Waterloo, Iowa.

_____
Notary Public

Index Legend	
Location Description:	Lot 1 Greenbelt Centre Plat No. 7 Waterloo, Iowa
Requestor:	City of Waterloo Engineering Department
Proprietor:	Love's Travel Stops & Country Store, Inc.
Surveyor:	William W. Castle
Surveyor Company:	City of Waterloo Engineering Department 715 Mulberry Street, Waterloo, IA 50703
Return To:	715 Mulberry St, Waterloo, IA 50703 291-4312

Exhibit "A"

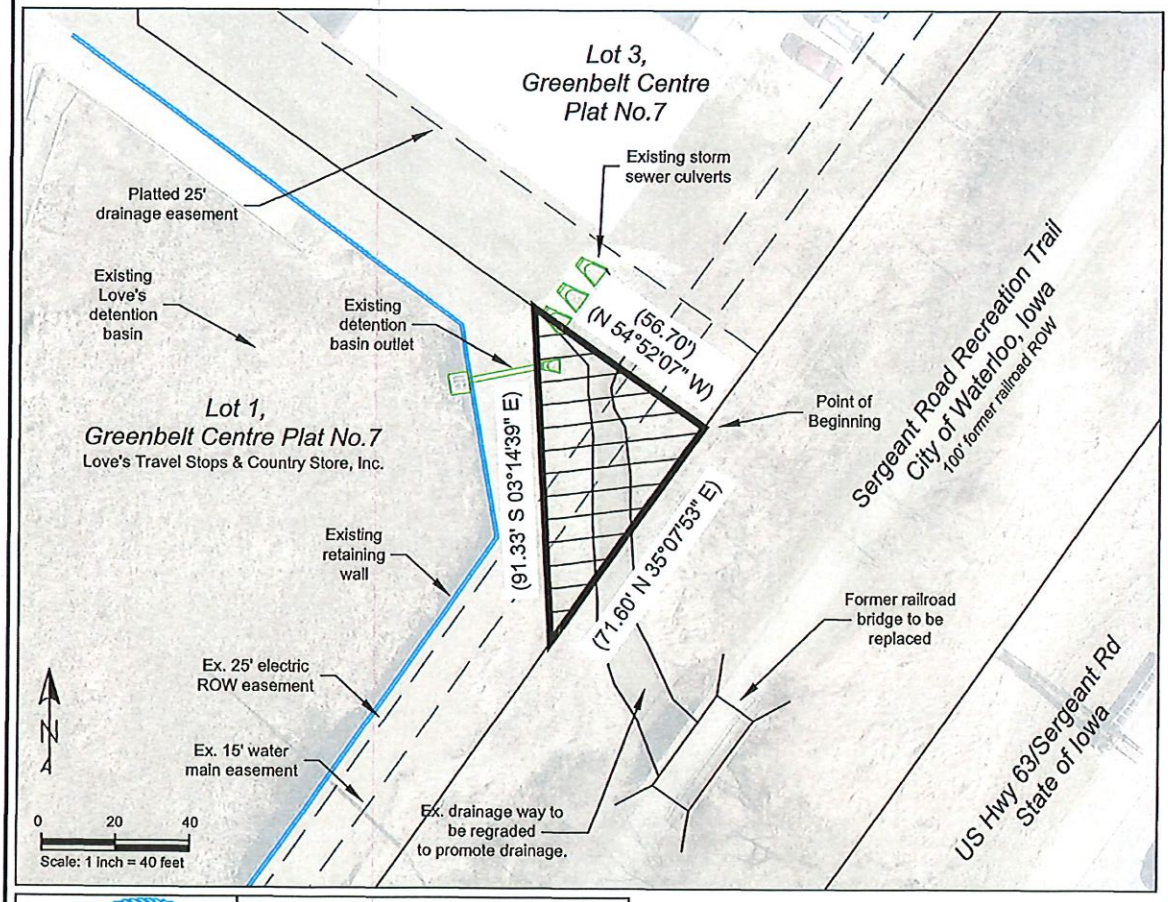
Plat of Drainage Easement

Lot 1, Greenbelt Centre Plat No. 7
City of Waterloo, Black Hawk County, Iowa

Drainage Easement Description:

An easement for drainage and related maintenance over, under, upon, and across, that part of Lot 1, Greenbelt Centre Plat No.7, City of Waterloo, Black Hawk County, State of Iowa, described as follows:

Beginning at the easterly most corner of said Lot 1; thence North 54°52'07" West along a northeasterly line of said Lot 1 56.70 feet; thence South 03°14'39" East 91.33 feet to the southeasterly line of said Lot 1; thence North 35°07'53" East along said southeasterly line 71.60 feet to the point of beginning containing 2,015 square feet.



LICENSED PROFESSIONAL LAND SURVEYOR
WILLIAM W. CASTLE 19715
IOWA

I hereby certify that this surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly licensed Land Surveyor under the laws of the State of Iowa.

William W. Castle 5/8/2026

William W. Castle, PLS — Date
License Number 19715
My License Renewal Date is December 31, 2027.
Pages or sheets covered by this seal : 1/1

Survey Notes:

1. No field boundary survey was performed for this easement. Parcel lines and bearings shown hereon are based on Black Hawk County parcel line data and Greenbelt Centre Plat No. 7.
2. All dimensions are in US Survey feet and decimals thereof.
3. Easement area: 2,015 square feet.

City of Waterloo Engineering Department 715 Mulberry Street, Waterloo, Iowa 50703 Phone: (319) 291-4312 Fax: (319) 291-4262	Drawn By: WWC Scale: Field Work Date: Date Drawn: 5-8-2026	Sheet No. 1 of 1

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Jamie Knutson, City Engineer
Engineering Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Resolution approving an Improvement Fund Award Agreement with the Iowa Flood Mitigation Board in the amount of $1,315,000.00, for repairs to the Virden Creek Dam, and authorizing the Mayor to execute said document.

RECOMMENDED COUNCIL ACTION

SUMMARY STATEMENT AND BACKGROUND INFORMATION

The City owns a large dam north of the intersection of Airline Hwy. and Moline Rd. The dam is part of the City's overall flood control system. It is a dry dam and the spillway is deteriorating and in need of replacement. The IDNR and the Corps of Engineers inspect the dam every two years and are recommending repairs to the spillway. This grant will pay for approximately 50% of the total cost of the spillway replacement. This project will help to keep our insurance low as the reports are given to our insurance agent during renewals. The project will also keep us in good standing with the Corps of Engineers and the maintenance of the flood control system.

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

1. Award Agreement City of Waterloo S21
2. Internal Authorized Representative Form 2025.03 (Project S17)

IOWA LEVEE IMPROVEMENT FUND AWARD AGREEMENT

Between

Iowa Flood Mitigation Board

And

City of Waterloo

PROJECT TITLE: City of Waterloo Virden Creek Dry Dam Spillway Replacement

AGREEMENT NO: S21

FIPS NUMBER: 013-82425-00

AWARD DATE: 05/22/2026

DATE OF FUNDING AGREEMENT: 6/1/2026

PERFORMANCE PERIOD START DATE: 3/2/2026

PERFORMANCE PERIOD END DATE: 12/31/2028

STATE FUNDS OBLIGATED AMOUNT: $1,315,000

I. SCOPE OF WORK:

This Award Agreement (AGREEMENT) is to provide the City of Waterloo (SUBRECIPIENT) with financial assistance from the Iowa Levee Improvement Fund. Total Project Budget is $2,630,000. The total award is **$1,315,000.**

Project Costs – The state share shall not exceed **$1,315,000** or **(50%)** of actual allowable award costs, whichever is less.

These funds are to assist the SUBRECIPIENT with completing the approved scope of work in accordance with the work schedule, milestones, and budget that were submitted to and approved by Iowa Department of Homeland Security and Emergency Management (HSEM) and the Iowa Flood Mitigation Board (FMB). Any modifications to the approved scope must be submitted and approved by HSEM and changes to budget must be submitted to and approved by the FMB prior to executing the changes. The SUBRECIPIENT is required to obtain all necessary permits before any construction begins.

The Award Agreement must be signed and returned within 90 calendar days of the Date of Funding Agreement; otherwise, the funds will be de-obligated and returned to the Levee Improvement Fund.

EHP Standard Conditions:

Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

Acceptance of funding obligates the subrecipient to comply with all applicable federal, state, and local requirements. If the subrecipient is subject to regulations from a federal agency or other cognizant agencies, they must ensure compliance accordingly. If not, they are only required to meet state and local requirements. Failure to secure the necessary environmental permits and clearances at any required level may put state funding at risk.

II. AGREEMENTS

HSEM will provide financial oversight and management in the role of recipient/pass-through entity based on the grant guidance in 2 CFR, Part 200, the grant financial guide and other state and federal guidelines. HSEM will provide technical assistance and direction to the SUBRECIPIENT on programmatic and financial requirements. HSEM will provide agreement documents and quarterly reporting documents. all appropriate documents and forms and make payments to the SUBRECIPIENT to complete the approved scope of work.

HSEM is responsible for monitoring the SUBRECIPIENT's activities to provide reasonable assurance that the SUBRECIPIENT administers this award in compliance with HSEM requirements. Responsibilities include reviewing the SUBRECIPIENT's records that support receipts and expenditures, financial records are maintained and adequate for audit, proper cash management, and expenditures are eligible and allowable. A pre-award risk assessment is completed for each subrecipient to assist HSEM in determining the minimum level of monitoring that will be needed throughout the life of this award.

Additionally, the SUBRECIPIENT will be monitored periodically by HSEM to ensure that the program goals, objectives, timelines, budgets, and other related program criteria are being met. Monitoring will be accomplished through a combination of office-based and on-site monitoring visits. Monitoring will involve the review and analysis of the financial, programmatic, and administrative records relative to each program, and will identify areas where technical assistance and other support may be needed.

The SUBRECIPIENT will allow HSEM and auditors to access any necessary records and financial information.

The SUBRECIPIENT must disclose in writing any potential conflicts of interest to HSEM.

The SUBRECIPIENT must disclose in writing to HSEM all violations of Federal and State criminal law involving fraud, bribery, or gratuity violations potentially affecting the state award. Failure to make required disclosures can result in any of the remedies described in 2 CFR, Part 200, Subpart D, Section 200.339, Remedies for noncompliance, including suspension or debarment. (See also 2 CFR, Part 180 and 31 U.S.C. 3321.)

The SUBRECIPIENT and the SUBRECIPIENT's authorized representative agree to provide all supervision, inspection, accounting, and other services necessary to complete the scope of work from inception to closeout with the requirements set forth below.

III. PERIOD OF PERFORMANCE

The approved Period of Performance for this award is from **March 2, 2026 through December 31, 2028.** All work must be completed prior to the end of the Period of Performance. HSEM will not reimburse the SUBRECIPIENT for costs that are encumbered before the award period of performance date or after the project close date.

If a time extension is needed, one must be requested at least 90 days prior to the end of the Period of Performance. All requests must be supported by adequate justification submitted to HSEM in order to be processed. This justification is a written explanation of the reason or reasons for the delay; an outline of remaining funds available to support the extended performance period; milestones that are unmet; and a description of performance measures necessary to complete the award. Without the justification, time extension requests will not be processed.

IV. AUTHORITIES AND REFERENCES

The SUBRECIPIENT shall comply with all applicable laws and regulations. A non-exclusive list of laws and regulations commonly applicable to state grants follows hereto for reference only.

- 2 CFR, Part 200 - https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200?toc=1
- Iowa Code CH 418A- Iowa Levee Improvement Program
- SUBRECIPIENT's application that was received and approved by HSEM

V. GRANT MANAGEMENT SYSTEM

To ensure state funds are awarded and expended appropriately, the SUBRECIPIENT will establish and maintain a grant management system as outlined in 2 CFR, Part 200, Subpart D, Section 200.302 and internal controls in section 200.303. The standards for SUBRECIPIENT organizations stem from the Office of Management and Budget's (OMB) uniform administrative requirements and the cost principles in 2 CFR, Part 200, Subpart E. State, local and tribal organizations must follow the uniform administrative requirements standards in 2 CFR Part 200. These standards combined with the audit standards provided within 2 CFR, Part 200, Subpart F plus the requirements of the Generally Accepted Accounting Principles constitute the basis for all policies, processes and procedures set forth in this grant management system for the SUBRECIPIENT.

The SUBRECIPIENT's grant management system must include:

- internal controls based on the American Institute for Certified Public Accountants (AICPA) definitions and requirements in the government-wide administrative requirements and cost principles

- a chart of accounts that includes a separate cost center, fund, or accounting codes for each federal grant, program, or funding source
- procedures to minimize cash on hand in compliance with the Cash Management Improvement Act (CMIA) and good business processes
- the ability to track expenditures on a cash or accrual basis
- the ability to track expenditures in both financial and program budgets
- procedures to document all grant-related expenditures, broken down by budget line items
- procedures to ensure expenditures are eligible and allowable
- the ability to fulfill government-required financial reporting forms

VI. PROCUREMENT

This AGREEMENT requires that all procurement be executed by the SUBRECIPIENT within the guidelines of 2 CFR, Part 200 Subpart D, Section 200.318 through Section 200.326 including Appendix II which coinsides with Iowa Department of Administrative Services (DAS) guidelines. Procurement standards must be in accordance with the written adopted procedures of the SUBRECIPIENT, provided that the local procurement standards conform to applicable State and Federal law and the standards identified in 2 CFR, Part 200. The SUBRECIPIENT must maintain written standards of conduct covering conflicts of interest as outlined in 2 CFR, Part 200 Subpart D, Section 200.318. The SUBRECIPIENT will ensure that every purchase order or other contract includes clauses required by Federal statutes and executive orders and their implementing regulations. **The SUBRECIPIENT must submit copies of its own written procurement guidelines, written conflict of interest guidelines, bid documents and contract documents to HSEM prior to awarding or executing contracts. No contract will be accepted without HSEM's prior review.**

VII. PAYMENT REQUEST PROCESS

The SUBRECIPIENT may submit a payment request up to 30 days prior to an anticipated expenditure or disbursement. The SUBRECIPIENT must be able to account for the receipt, obligation, and expenditure of funds.

Payments to subrecipients are based on eligible expenditures that are specifically related to the approved award budget and scope of work. The SUBRECIPIENT has two options available to them when requesting payments from HSEM. Subrecipients can request **Reimbursement** for allowable expenditures already paid, or request an **Advance** for expenditures to be paid within 30 days.

Payments shall be limited to the documented cash requirements submitted by the SUBRECIPIENT. The SUBRECIPIENT must submit a completed Payment Request Form and provide supporting documentation of eligible award costs to receive payment of funds.

- **Reimbursement** requests must include payment verification (i.e. paid invoices, receipts, payroll records with personnel activity reports, cancelled checks, general ledger print outs, etc.). HSEM reserves the right to request that the SUBRECIPIENT submit additional expenditure documentation upon request.

- **Advance** payment requests must include the detailed costs the SUBRECIPIENT is obligated to pay (i.e. invoices, accepted quotes, executed contracts, or other documents). Payment verification documents (same documents required for a Reimbursement request) for the advance must be submitted to HSEM within 30 days after the advance, and before future advances are made. If the SUBRECIPIENT is unable to demonstrate; the willingness to maintain written procedures that minimize the time elapsing between the transfer of funds and disbursement by HSEM; a financial management system that meets the standards for fund control and accountability as established in 2 CFR, Part 200; or is considered a High Risk subrecipient; then reimbursement requests will be required.

  No more than thirty (30) days should elapse between the date of receipt of a warrant and pay out of the funds by the SUBRECIPIENT. All supporting documentation must be submitted to HSEM immediately following the SUBRECIPIENT's pay out of the funds.

Required documents prior to payments from HSEM. Payment of funds will not be made to the SUBRECIPIENT until HSEM has on file the following documents:

- Award Notification (attached to this AGREEMENT)
- Pre-Award Risk Assessment (attached to this AGREEMENT)
- Signed Award Agreement
- Substitute W9/Vendor Update Form (if not already on file at HSEM)
- Chart of Accounts verifying that unique revenue and expenditure accounts, cost centers or account codes have been established within the SUBRECIPIENT's cash management/accounting system for each program included in this AGREEMENT.
- Procurement documents: written procurement and conflict of interest documents, method of procurement, bid specifications reviewed by HSEM, copy of approved and executed contracts between the SUBRECIPIENT and contractor.
- Signed certification from the SUBRECIPIENT's authorized representative for the payment request as outlined in 2 CFR, Part 200, Subpart D, Section 200.415.

VIII. REPORTING REQUIREMENTS

Quarterly programmatic and financial reports are required on the progress relative to the approved scope of work as outlined in 2 CFR, Part 200, Subpart D, Section 200.328. Subrecipients are required to complete the quarterly progress report forms that are provided by HSEM and submit them by the due dates stated by HSEM. **Due dates are January 15, April 15, July 15, and October 15. The first report is due following the end of the reporting period in which the funding was awarded by FMB. The reporting periods are January-March, April-June, July-September, and October-December.**

IX. CLOSE OUT

The SUBRECIPIENT must prepare and submit by the end of the Period of Performance, and/or within 60 days of the completion of the approved scope of work, whichever comes first, all required financial, performance and other reports as outlined in 2 CFR, Part 200 Subpart D, Section 200.344 and Section 200.345. The SUBRECIPIENT must liquidate all obligations

incurred under the award by the end of the Period of Performance. All accounts must be settled, including reimbursements for any remaining allowable costs and refunds to HSEM of any unobligated cash that was advanced.

X. RECORD RETENTION

The SUBRECIPIENT must retain records pertinent to the state award for three years after the date of the final expenditure report is submitted.

XI. WAIVERS

No conditions or provisions of this AGREEMENT can be waived unless approved by HSEM and the SUBRECIPIENT, in writing. Unless otherwise stated in writing, HSEM's failure to insist upon strict performance of any provision of this AGREEMENT, or to exercise any right based upon a breach, shall not constitute a waiver of any right or obligation specified under this AGREEMENT.

XII. AMENDMENTS AND MODIFICATIONS

This AGREEMENT may be amended or modified in reference to the award funds provided, administrative procedures, or any other necessary matter, but not to take effect until approved, in writing, by FMB and the SUBRECIPIENT.

XIII. COMPLIANCE, TERMINATION AND OTHER REMEDIES

Unless otherwise stated in writing, HSEM requires strict compliance by the SUBRECIPIENT and its authorized representative(s) with the terms of this AGREEMENT, and the requirements of any applicable local, state and federal statute, rules, regulations.

FMB may suspend or terminate any obligation to provide funding or demand return of any unused funds, following notice from FMB, if the SUBRECIPIENT fails to meet any obligations under this AGREEMENT or fails to make satisfactory progress toward administration or completion of said subaward. The SUBRECIPIENT is responsible for repayment of funds as a result of subsequent refunds, corrections, overpayments, or disallowed costs for ineligible expenditures.

The SUBRECIPIENT understands and agrees that FMB may enforce the terms of this AGREEMENT by any combination or all remedies available to FMB under this AGREEMENT, or under any other provision of law, common law, or equity.

XIV. INDEMNIFICATION

It is understood and agreed by FMB, HSEM, and the SUBRECIPIENT and its agents that this AGREEMENT is solely for the benefit of the parties to this award and gives no right to any other party. No joint venture or partnership is formed as a result of this AGREEMENT.

The SUBRECIPIENT, on behalf of itself and its successors and assigns, agrees to protect, save, and hold harmless FMB, HSEM, and the State of Iowa, and their authorized agents and employees, from all claims, actions, costs, damages, or expenses of any nature whatsoever by reason of the negligent acts, errors, or omissions of the SUBRECIPIENT or its authorized representative, its contractors, subcontractors, assigns, agents, licensees, arising out of or in connection with any acts or activities authorized by this AGREEMENT. The SUBRECIPIENT's obligation to protect, save, and hold harmless as herein provided shall not extend to claims or causes of action for costs, damages, or expenses caused by or resulting from the negligent acts, errors, or omissions of FMB, HSEM, the State of Iowa, or any of their authorized agents or employees.

The SUBRECIPIENT further agrees to defend FMB, HSEM, the State of Iowa, and their authorized agents and employees against any claim or cause of action, or to pay reasonable attorney's fees incurred in the defense of any such claim or cause of action, as to which the SUBRECIPIENT is required to protect, save, or hold harmless said parties pursuant to paragraph 2 of this part. The SUBRECIPIENT's obligation to defend, or to pay attorney's fees for the defense of such claims or causes of action as herein provided, shall not extend to claims or causes of action for costs, damages, or expenses caused by or resulting from the negligent acts, errors, or omissions of FMB, HSEM, the State of Iowa, or any of their authorized agents or employees.

XV. ACKNOWLEDGMENTS

The SUBRECIPIENT shall include, in any public or private release of information regarding the activities supported by this award, language that acknowledges the funding contribution by HSEM and the Flood Mitigation Board.

XVI. INDEPENDENT CONTRACTOR STATUS OF APPLICANT

The SUBRECIPIENT, its officers, employees, agents and council members shall all perform their obligations under this AGREEMENT as an independent contractor and not in any manner as officers, employees or agents of FMB, HSEM or the State of Iowa. All references herein to the SUBRECIPIENT shall include its officers, employees, city council/board members, and agents.
FMB shall not withhold on behalf of any such officer, employee, city council/board member, or agent, or pay on behalf of any such person, any payroll taxes, insurance, or deductions of any kind from the funds paid to the SUBRECIPIENT for administrative purposes.

XVII. GOVERNING LAW, VENUE AND SEVERABILITY

The laws of Iowa shall govern this AGREEMENT and venue for any legal action hereunder shall be in the Polk County District Court of Iowa. If any provision under this AGREEMENT or its application to any person or circumstances is held invalid by any court of rightful jurisdiction, said invalidity does not affect other provisions of this AGREEMENT which can be given effect without the invalid provision.

XVIII. NOTICES

The SUBRECIPIENT shall comply with all public notices or notices to individuals as required by applicable state and federal laws, rules, and regulations and shall maintain a record of such compliance.

XIX. RESPONSIBILITY FOR SUBAWARD

While HSEM undertakes to provide technical assistance to the SUBRECIPIENT and its authorized representative in the administration of the award, said award remains the sole responsibility of the SUBRECIPIENT in accomplishing award objectives and goals. HSEM undertakes no responsibility to the SUBRECIPIENT, or any third party, other than what is expressly set out in this AGREEMENT.

XX. NOTICES AND COMMUNICATIONS BETWEEN HSEM AND SUBRECIPIENT

All written notices and communications to the SUBRECIPIENT by HSEM shall be to:

Jamie Knutson, City Engineer
City of Waterloo
715 Mulberry Street
Waterloo, IA 50703

Or the Alternate Point of Contact,

Wayne Castle, Assistant City Engineer
City of Waterloo
715 Mulberry Street
Waterloo, IA 50703

All written communications to HSEM by the SUBRECIPIENT and its authorized representative shall be to:

Jeff Jackson
Office of Levee Safety
Iowa Department of Homeland Security and Emergency Management
7900 Hickman Road, Suite 500
Windsor Heights, IA 50324

ENTIRE SUBAWARD AGREEMENT

This AGREEMENT sets forth the entire AGREEMENT between FMB and the SUBRECIPIENT with respect to subject matter hereof. Commitments, warranties, representations and understandings or agreements not contained, or referred to, herein or amended thereto shall not be binding on either FMB or the SUBRECIPIENT. Except as may be expressly provided herein,

no alteration of any of the terms or conditions of this AGREEMENT will be effective without written consent of both parties.

IN WITNESS WHEREOF, FMB and the SUBRECIPIENT have executed this AGREEMENT by the signatures of authorized persons of both entities and on the dates indicated below:

Iowa Flood Mitigation Board:	**SPONSOR:**
_____	_____
John Benson, Chair	City Engineer
_____	_____
Date	Date
	_____
	Signature of Authorized Representative (optional)
	_____
	Date

Attachments: Exhibit A: Award Notification
Exhibit B: Scope of Work

Exhibit A: Award Notification

Award Letter

JOHN R. BENSON, HOMELAND SECURITY ADVISOR
AND EMERGENCY MANAGEMENT DIRECTOR

May 27, 2026

Jamie Knutson
City Engineer
City of Waterloo
715 Mulberry Street
Waterloo, IA 50703

SUBJECT: **Iowa Levee Improvement Fund**

Dear Mr. Knutson:

The Iowa Flood Mitigation Board, on May 22, 2026, approved the Levee Improvement Fund project application submitted by the City of Waterloo awarding the district **$1,315,000** in matching funds for the approved project. Per the application you have requested:

- **$1,315,000** from the Levee Improvement Fund (**$2,630,000** total project cost) to complete the replacement of the Virden Creek Dry Dam spillway.

We will be reaching out in the near future with a Funding Agreement and other required documents that must be signed prior to the issuance of funds. Funds will be disbursed as reimbursement for project costs incurred. Any modifications to the scope of work or budget must have prior approval of the Flood Mitigation Board. Please notify us if there are any anticipated changes.

If you have any questions or need assistance, please do not hesitate to call us at 515-725-3231, or e-mail us at officeofleveesafety@iowa.gov.

Sincerely,

John R. Benson
Flood Mitigation Board Chair

Exhibit B: Scope of Work

Scope of Work from Application

Scope of Work: Description of the Solution & Mitigation Proposed:

This project will provide for the replacement of the existing spillway on the Virden Creek Dam. The dam was constructed by the Army Corps of Engineers and the City is responsible for maintenance. The latest inspection by the Army Corps of Engineers and the Iowa DNR shows large amounts of spalling and cracking of the spillway. In discussions with the Army Corps of Engineers their recommendation is to replace the spillway in kind. This is a dry dam and only has water behind it during flood events.

Description of the Proposed Project:

Repairs to the levee system are mandated by the Army Corps of Engineers to maintain levee accreditation. The dam is located approximately 2,000 feet north of the intersection of E. Airline Hwy and Moline Road.

Approved Budget

Cost Type	Description	Amount
Engineering PE	Geotechnical, engineering design, permitting.	$290,000
Construction	Project Construction	$2,080,000
Engineering CE	Inspection	$260,000
Total Project Cost:		$2,630,000
Total Award	**State Cost Share/Funding Request**	**$1,315,000**

STATE OF IOWA

DESIGNATION OF APPLICANT'S **INTERNAL** AUTHORIZED REPRESENTATIVE

For the purpose of obtaining, complying with requirements of, and/or managing financial assistance under IOWA CODE 29C, 29D, 418 and 418A as well as the Robert T. Stafford Disaster Relief and Emergency Assistance Act (PL 100-707, as amended), the National Flood Insurance Reform Act of 1994 (PL 103-325, as amended), or the High Hazard Potential Dam Program, 33 U.S.C. § 467f-2.

(Print Name of Authorized Representative) *(Signature and Date)*

is hereby authorized to execute the functions initialed below on behalf of

City of Waterloo

(Applicant Entity)

Project Title City of Waterloo Hawthorne Relief Wells Project S17

(Describe the project for which these activities are authorized)

Initial	**Authorized Activities** *(Only initial next to the activities being assigned)*
_____	Sign application forms (SF-424, SF-424[A-D], GG &/or FF-104 [lobbying etc.], W9, SF-LLL, & Minority Impact Statement) (does not include local match resolution)
_____	Submit applications in online portals (e.g., EMGrants, FEMA GO, eGrants)
_____	
_____	Submit Quarterly Reports to Iowa HSEM and/or FEMA
_____	Submit Requests for Reimbursement or Advance Payment for subgrantee
_____	Request Grant Closeout and confirm compliance with grant requirements
_____	Request Grant Time Extensions
_____	Request Grant Scope/Budget Adjustments

Chief Executive Officer (Print Name and Title)

Attested (Print Name and Title)

Signature and Date

Signature and Date

COMMUNICATION TO THE WATERLOO CITY COUNCIL

NAME AND DEPARTMENT

Jamie Knutson, City Engineer
Engineering Department

MEETING DATE

June 15, 2026

AGENDA ITEM TITLE

Ordinance establishing grades for the City of Waterloo FY 2026 Sidewalk Repair Assessment Program – Zone 5A, Contract No. 1127.

RECOMMENDED COUNCIL ACTION

It is recommended these grades be adopted to comply with the State Code of Iowa so that the sidewalk assessment program can continue in a timely manner.

SUMMARY STATEMENT AND BACKGROUND INFORMATION

This is being submitted for Council approval as advised by the bonding attorneys. As per Section 384.39 of the State Code of Iowa, official grades shall be adopted for assessment purposes.

NEIGHBORHOOD IMPACT

DATA, ANALYSIS, AND STRATEGIES

IMPLEMENTATION, ACCOUNTABILITY, AND COMMUNICATION

COMMUNITY ENGAGEMENT METHODS

SOURCE OF EXPENDITURES

ALTERNATIVE ACTION

LEGAL DESCRIPTION

ATTACHMENTS

None