

ADDENDUM NO. 3

TO THE BIDDING DOCUMENTS FOR THE

**2023 HEARTLAND HILLS AREA WEST WATER MAIN LOOP  
WATERLOO WATER WORKS,  
WATERLOO, IA**

DATE: May 4, 2023

BID DUE DATE AND TIME: 10:00 AM, May 9, 2023

TO ALL BIDDERS ON THE ABOVE PROJECT:

1. Add the attached Sheet 20 Erosion Control Plan and Misc. Details to the Construction Plans and add it to the Table of Contents listing of Sheets on Sheet 1 of the Construction Plans and page 1 of 5 of the General Special Provisions in the Contract Specifications.
2. Add Bid Item 007. Topsoil, Furnish, Haul and Place, 4" Rolled Thickness to Sheet 3 of the Construction Plans and to Page 1 of 5 of the Form of Bid or Proposal in the Contract Specifications. An updated Form of Bid or Proposal is attached herewith for Bidders to use for bidding.
3. Add the following Bid Reference Note for Bid Item 007. Topsoil, Furnish, Haul and Place, 4" Rolled Thickness, to Sheet 3 of the Construction Plans:

ITEM INCLUDES PROCURING, HAULING AND PLACING A UNIFORM 4 INCH ROLLED THICKNESS OF APPROVED TOPSOIL AT THE SURFACE OF OPEN EXCAVATION AREAS WHERE SUFFICIENT TOPSOIL DID NOT EXIST, AS DETERMINED SOLELY BY THE OWNER'S REPRESENTATIVE. PRIOR TO THE OPEN EXCAVATION, THE SUBSOIL AREA OF THE OPEN EXCAVATION SHALL BE UNIFORMLY GRADED TO MATCH ADJOINING UNEXCAVATED AREAS, LESS A UNIFORM THICKNESS OF 4 INCHES PRIOR TO TOPSOIL PLACEMENT. SAID TOPSOIL SHALL MEET THE IOWA SUDAS REQUIREMENTS FOR OFF-SITE TOPSOIL AND SHALL BE PRE-APPROVED BY THE OWNER'S REPRESENTATIVE, PRIOR TO ITS USE.

4. Add the following to the Bid Reference Note for Bid Item 401. Water Main, C900/RJ Restrained Joint DR18 PVC, 8-Inch Dia.:

EXCAVATION MATERIALS IN EXCESS OF THE QUANTITIES NEEDED TO PROPERLY BACKFILL OPEN-CUT EXCAVATIONS THROUGHOUT THE PROJECT SHALL BE HAULED OFF-SITE TO A CONTRACTOR PROVIDED STOCKPILE AREA AT CONTRACTOR'S SOLE EXPENSE.

Any revisions to any of the Contract Documents made by this Addendum shall be considered as the same revision to any and all related areas of the Contract Documents not specifically called out in this Addendum.

The bidder shall acknowledge receipt of this Addendum by inserting the number and date in the spaces provided in the Form of Bid or Proposal, Item 6, Page 4 of 5.

William J. Claassen, P. E.

# FORM OF BID OR PROPOSAL

## 2023 HEARTLAND HILLS AREA WEST WATER MAIN LOOP WATERLOO WATER WORKS, WATERLOO, IA

General Manager and Board of Trustees  
Waterloo Water Works  
Waterloo, Iowa

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 Wayne Claassen Engineering and Surveying, Inc. are now on file in the office of the General Manager of the Waterloo Water Works, 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 this 2023 HEARTLAND HILLS AREA WEST WATER MAIN LOOP project, all in accordance with the above-listed documents and for the unit prices for work in place for the following items and quantities:

ITEM NO.	DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
001.	Mobilization, Clearing and Grubbing	L.S.	L.S.	_____	_____
002.	Seed, Fertilize, and Mulch by Hydroseeding (IDOT Urban Mix)	AC.	0.8	_____	_____
003.	9" Dia., Straw Filled Wattles	L.F.	400	_____	_____
004.	Traffic Control	L.S.	L.S.	_____	_____
005.	Maintenance Bond, 2-Year	L.S.	L.S.	_____	_____
006.	Clearing and Grubbing	L.S.	L.S.	_____	_____
007.	Topsoil, Furnish, Haul and Place, 6" Rolled Thickness	S.Y.	1,500	_____	_____

ITEM NO.	DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
401.	Water Main, C900/RJ Restrained Joint DR18 PVC, 8-Inch Dia.	L.F.	1432		
402.	Water Main, Casing, C900/RJ Restrained Joint DR18 PVC, 12-Inch Dia.	L.F.	680		
403.	Water Main, Sager Ave. HDD, C900/RJ Restrained Joint DR18 PVC, 8-Inch Dia.	L.S.	1		
404.	Casing End Seals	EA.	6		
405.	Connection of New 8" Dia. Water Main To Existing 6" Dia. Water Main	EA	1		
406.	Connection of New 8" Dia. Water Main To Existing 8" Dia. Water Main	EA	1		
407.	Tee 8" Dia. X 6" Dia., D.I.P. Complete With Thrust Restraint	EA	5		
408.	Tee 8" Dia. X 8" Dia., D.I.P. Complete With Thrust Restraint	EA	3		
409.	Bend, 90°, 8" Dia., Ductile Iron, Complete With Thrust Restraint	EA	2		
410.	Bend, 45°, 8" Dia., Ductile Iron, Complete With Thrust Restraint	EA	5		
411.	Bend, 22.5°, 8" Dia., Ductile Iron, Complete With Thrust Restraint	EA	2		
412.	Endcap, 8" Dia., Ductile Iron, Complete With Thrust Restraint	EA	1		
413.	Endcap, 6" Dia., Ductile Iron, Complete With Thrust Restraint	EA	4		
414.	Reducer, 8" Dia. x 6" Dia., Ductile Iron, Complete With Thrust Restraint	EA	2		

415.	New Fire Hydrant Assembly, M.J., 6.5' Bury, Complete	EA	2	_____	_____
416.	Remove and Salvage Existing Fire Hydrant Assembly, Complete	EA	2	_____	_____
417.	Install Temporary Hydrant, Complete	EA	2	_____	_____
418.	Gate Valve, AVT EZ Insertion, 8" Dia., M.J., with Valve Box and Mechanical Thrust Restraint	EA	1	_____	_____
419.	Gate Valve, 8" Dia., M.J., with Valve Box And Mechanical Thrust Restraint	EA	13	_____	_____
420.	Gate Valve, 6" Dia., M.J., with Valve Box And Mechanical Thrust Restraint	EA	5	_____	_____
421.	Water Service Connection to New Main, 1" Dia., Complete	EA	8	_____	_____
422.	Water Service Connection to Existing 3/4" Dia. Water Service Line, Complete	EA	7	_____	_____
423.	Water Service, 3/4" Dia. By Open-Cut Excavation	L.F.	224	_____	_____
424.	Water Service, 1" Dia. By Directional Drilling	L.F.	477	_____	_____
425.	Fill Existing 8" Dia. Water Main With Cellular Concrete	L.F.	927	_____	_____
426.	Fill Existing 6" Dia. Water Main With Cellular Concrete	L.F.	1,095	_____	_____
501.	Remove/Replace Existing Composite Street Paving	S.Y.	70	_____	_____
502.	Remove/Replace Existing Portland Cement Concrete Street Pavement	S.Y.	140	_____	_____
503.	Remove/Replace Existing Portland Cement Concrete Sidewalk	S.Y.	22	_____	_____
504.	Remove/Replace Existing Portland Cement				

	Concrete Driveway	S.Y.	40		
505.	Class A Roadstone for Driveways	TON	10		
601.	Remove/Salvage Existing Vinyl Fencing	L.F.	110		
602.	Remove/Salvage Existing Wood Fencing	L.F.	10		

**TOTAL BID** \_\_\_\_\_

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 Waterloo Water Works 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. The bidder is prepared to submit a financial and experience statement upon request.
6. The bidder has received the following Addendum or Addenda:
 

Addendum No.		Date	
7. The bidder has filled in all blanks on this proposal.
8. The bidder has attached all applicable forms.
9. 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. \_\_\_\_\_



Bid Reference Notes

001. MOBILIZATION

ITEM INCLUDES MOBILIZING ALL EQUIPMENT, LABOR AND MATERIALS TO THE SITE FOR ALL ASPECTS OF THE PROJECT, IRREGARDLESS OF HOW MANY MOBILIZATIONS ARE NECESSARY TO COMPLETE THE PROJECT.

002. SEED, FERTILIZE, AND MULCH (IDOT URBAN MIX) BY HYDROSEEDING

BID PRICE SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, SEED, FERTILIZING, MULCHING AND OTHER ITEMS NEEDED FOR COMPLETION IN CONFORMANCE WITH ARTICLE 2601 OF THE IDOT STANDARD SPECIFICATIONS. ITEM IS TO BE COMPLETED BY HYDRO-SEEDING. ALL DISTURBED AREAS EXCEPT FOR PAVED AREAS ARE INCLUDED IN THIS ITEM. ITEM TO BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER NEW WATER SERVICES AND REPACEMENT PAVING HAS BEEN COMPLETED.

003. 9" DIA., STRAW FILLED WATTLES

ITEMS TO BE INSTALLED AND MAINTAINED FOR INLET PROTECTION AND AT LOCATIONS AS DIRECTED IN THE FIELD BY THE ENGINEER WITHIN 24 HOURS OF THE TIME FIRST INSTRUCTED BY THE ENGINEER.

004. TRAFFIC CONTROL

BID PRICE SHALL INCLUDE ALL LABOR, EQUIPMENT, FLAGGERS, SIGNS, BARRICADES AND APPURTENANT ITEMS NEEDED FOR TRAFFIC CONTROL.

THE I.D.O.T. CURRENT SPECIFICATIONS SHALL APPLY TO ALL TRAFFIC CONTROL. PAY WILL BE BY LUMP SUM PAYMENT FOR EVERYTHING NEEDED TO CARRY OUT TRAFFIC CONTROL ON THIS PROJECT. THE CONTRACTOR SHALL BE ENTIRELY RESPONSIBLE FOR THE SAFETY AND PROPER TRAFFIC CONTROL WITHOUT FURTHER DIRECTION FROM THE ENGINEER OR INSPECTOR.

CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SIGNS AND FLASHERS THROUGHOUT THE ENTIRE TIME THEY ARE IN PLACE.

CONTRATOR'S WORK SHALL BE COMPLETED IN A MANNER THAT DOES NOT CLOSE STREETS COMPLETELY TO TRAFFIC. ALL EQUIPMENT WITHIN ROADWAY AREAS SHALL BE REMOVED AND ALL EXCAVATIONS WITHIN ROADWAY SECTIONS SHALL BE BACKFILLED TO SAFELY ALLOW THRU TRAFFIC BETWEEN SUNSET AND SUNRISE EVERY DAY.

CONTRACTOR SHALL SUBMIT HIS/HER PROPOSED TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO THE PRE-CONSTRUCTION CONFERENCE.

005. MAINTENANCE BOND, 2-YEAR

ITEM INCLUDES PROVIDING A TWO-YEAR MAINTENANCE BOND TO THE WATERLOO WATER WORKS FOR ALL WORK PERFORMED BY THE CONTRACTOR AND HIS/HER SUBCONTRACTORS ON THIS PROJECT.

SAID BOND SHALL BE OF A FORM THAT IS ACCEPTABLE TO THE WATERLOO WATER WORKS. SAID TWO YEAR PERIOD SHALL BEGIN AFTER THE PROJECT IMPROVEMENTS ARE ACCEPTED BY THE WATERLOO WATER WORKS.

006. CLEARING AND GRUBBING

ITEM INCLUDES CLEARING AND GRUBBING OF BRUSH, TREES AND DEBRIS THAT IS IN THE WAY OF CONSTRUCTION. SAID MATERIALS SHALL BE REMOVED TO A CONTRACTOR PROVIDED OFF-SITE DISPOSAL AREA.

DESIRABLE TREES AND SHRUBS, AS IDENTIFIED AT THE TIME OF CONSTRUCTION BY THE OWNER'S REPRESENTATIVE, SHALL BE PROTECTED FROM THE CONTRACTOR'S ACTIVITIES BY THE CONTRACTOR AT HIS/HER SOLE COST.

007. TOPSOIL, FURNISH, HAUL AND PLACE, 4" Rolled Thickness

ITEM INCLUDES PROCURING, HAULING AND PLACING A UNIFORM 4 INCH ROLLED THICKNESS OF APPROVED TOPSOIL AT THE SURFACE OF OPEN EXCAVATION AREAS WHERE SUFFICIENT TOPSOIL DID NOT EXIST, AS DETERMINED SOLELY BY THE OWNER'S REPRESENTATIVE. PRIOR TO THE OPEN EXCAVATION, THE SUBSOIL AREA OF THE OPEN EXCAVATION SHALL BE UNIFORMLY GRADED TO MATCH ADJOINING UNEXCAVATED AREAS, LESS A UNIFORM THICKNESS OF 4 INCHES PRIOR TO TOPSOIL PLACEMENT. SAID TOPSOIL SHALL MEET THE IOWA SUDAS REQUIREMENTS FOR OFF-SITE TOPSOIL AND SHALL BE PRE-APPROVED BY THE OWNER'S REPRESENTATIVE, PRIOR TO ITS USE.

401. WATER MAIN, C900/RJ RESTRAINED JOINT DR18 PVC, 8-INCH DIA.

BID PRICE SHALL INCLUDE ALL MATERIALS AND EQUIPMENT NECESSARY TO INSTALL DR 18 AWWA C-900/RJ RESTRAINED JOINT PVC WATER MAIN PIPE, OF THE INDICATED SIZE, BY CONVENTIONAL, OPEN TRENCH CONSTRUCTION. PIPE SHALL BE CERTA-LOK BY CERTAINTED OR APPROVED EQUAL WITH STANDARD STYRENE BUTADIENE RUBBER GASKETS. ITEM INCLUDES COPPERHEAD COPPER CLAD STEEL OR APPROVED EQUAL TRACING WIRES.

ITEM INCLUDES 1" CLEAN, CLASS 1 EMBEDMENT MATERIAL. SEE DETAIL FOR BEDDING, BACKFILL AND OTHER REQUIREMENTS.

ITEM INCLUDES REMOVING ALL EXCESS EXCAVATION MATERIALS FROM THE WORK AREAS AND HAULING THEM TO A CONTRACTOR PROVIDED OFF-SITE AREA.

ITEM INCLUDES BACTERIOLOGICAL, PRESSURE, AND LEAKAGE TESTING AND ALL OTHER ITEMS NECESSARY TO COMPLETE THIS CONSTRUCTION AND TO PROVIDE A PROPERLY OPERATING WATER MAIN. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR TESTING THE WATER MAIN. THIS SHALL INCLUDE RESTRAINED JOINTS ON PIPE AND FITTINGS AT DEADENDS, PLUGS, PIPE AND CORP STOPS OF SUFFICIENT SIZE FOR FLUSHING AFTER TESTING. ALL TESTS SHALL BE CONSIDERED INCIDENTAL TO WATER MAIN CONSTRUCTION.

WATER MAIN TO BE DISINFECTED, FLUSHED AND TESTED FOR BACTERIA AND CHLORINE PRIOR TO HYDROSTATIC TESTING. TWO CONSECUTIVE BACTERIOLOGICAL TESTS MUST PASS AT 24 HOUR MINIMUM INTERVALS TO BE ACCEPTED AS PASSING.

PRESSURE TEST SHALL BE 1 1/2 TIMES NORMAL WORKING PRESSURE, BUT NOT LESS THAN 150 P.S.I.

401. WATER MAIN, C900/RJ RESTRAINED JOINT DR18 PVC, 8-INCH DIA. (CONTINUED)

ALL SECTIONS OF AWWA STANDARD 651 SHALL APPLY, INCLUDING SECTION 4.6, WHICH IS NOT OPTIONAL. NEW WATER MAIN SHALL BE ISOLATED FROM THE EXISTING WATER MAIN UNTIL ACCEPTANCE OF THE PRESSURE, LEAK AND BACTERIOLOGICAL TESTING OF EACH SEGMENT OF NEW MAIN.

ITEM INCLUDES SHOCK DISINFECTING THE EXISTING HYDRANTS AND PIPING TO BE RE-LOCATED WITH CONCENTRATED SOLUTIONS AS PER AWWA C651, SEC.4.7, INCLUDING SEC. 4.7.4 AND SEC 4.7.5.

EXCAVATION MATERIALS IN EXCESS OF THE QUANTITIES NEEDED TO PROPERLY BACKFILL OPEN-CUT EXCAVATIONS THROUGHOUT THE PROJECT SHALL BE HAULED OFF-SITE TO A CONTRACTOR PROVIDED STOCKPILE AREA AT CONTRACTOR'S SOLE EXPENSE.

WATER FOR FILLING, FLUSHING AND TESTING WATER MAINS SHALL BE FURNISHED BY THE WATERLOO WATER WORKS AT NO COST TO THE CONTRACTOR UNLESS THE NEW WATER MAIN DOES NOT PASS TESTING ON THE FIRST TRIAL. IF THE WATER MAIN DOES NOT PASS TESTING ON THE FIRST TRIAL, THE ADDITIONAL WATER THAT IS NECESSARY FOR SUBSEQUENT ADDITIONAL DISINFECTION, FLUSHING AND/OR TESTING SHALL BE MEASURED BY THE WATERLOO WATER WORKS AND PAID TO THE WATERLOO WATER WORKS AT ITS NORMAL RATE. THE FLOW RATES AT WHICH WATER IS FURNISHED SHALL BE CONTROLLED BY THE WATERLOO WATER WORKS. THE CONTRACTOR SHALL FURNISH SATISFACTORY BACKFLOW PREVENTION DEVICES, HOSES AND ALL OTHER MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE SAID FILLING, FLUSHING AND TESTING AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL LOCATE AND SHALL AVOID ALL EXISTING UTILITIES, SEWER AND WATER SERVICES AND SHALL COMPLETE THIS ITEM IN A MANNER THAT DOES NOT DISTURB SAID ITEMS.

402. WATER MAIN, CASING, C900 RESTRAINED JOINT DR18 PVC, 12-INCH DIA.

BID PRICE SHALL INCLUDE ALL MATERIALS AND EQUIPMENT NECESSARY TO INSTALL DR 18 AWWA C-900/RJ RESTRAINED JOINT PVC WATER MAIN PIPE, OF THE INDICATED SIZE, BY CONVENTIONAL, OPEN TRENCH CONSTRUCTION AS A CASING PIPE AROUND THE NEW 8" PVC WATER MAIN TO BE CONSTRUCTED FROM STA. 10+70± TO 17+50±, EXCEPT AT VALVES AND FITTINGS. PIPE JOINTS SHALL BE STANDARD STYRENE BUTADIENE RUBBER GASKETS. ITEM INCLUDES INSTALLING THE COPPER CLAD STEEL TRACING WIRES PAID FOR UNDER ITEM 401 ON THE OUTSIDE OF SAID CASING PIPE.

ITEM INCLUDES 1" CLEAN, CLASS 1 EMBEDMENT MATERIAL. SEE DETAIL FOR BEDDING, BACKFILL AND OTHER REQUIREMENTS.

ITEM INCLUDES REMOVING ALL EXCESS EXCAVATION MATERIALS FROM THE WORK AREAS AND HAULING THEM TO A CONTRACTOR PROVIDED OFF-SITE AREA.

403. WATER MAIN, SAGER AVE. HDD, C900/RJ RESTRAINED JOINT DR18 PVC, 8-INCH DIA.

BID PRICE SHALL INCLUDE ALL MATERIALS AND EQUIPMENT NECESSARY TO INSTALL AN 8" DIA. DR 18 AWWA C-900/RJ RESTRAINED JOINT PVC WATER MAIN BY DIRECTIONAL DRILLING. PIPE SHALL BE CERTA-LOK BY CERTAINTED OR APPROVED EQUAL WITH STANDARD STYRENE BUTADIENE RUBBER GASKETS. ITEM INCLUDES TWO COPPERHEAD COPPER CLAD STEEL OR APPROVED EQUAL TRACING WIRES.

DRILLING FLUIDS SHALL BE CONTAINED TEMPORARILY WITHIN THE STREET RIGHT-OF-WAY, COLLECTED AND HAULED OFF-SITE TO AN APPROVED DISPOSAL AREA AT NO ADDITIONAL COST TO THE WATER WORKS.

ITEM INCLUDES BACTERIOLOGICAL, PRESSURE, AND LEAKAGE TESTING AND ALL OTHER ITEMS NECESSARY TO COMPLETE THIS CONSTRUCTION AND TO PROVIDE A PROPERLY OPERATING WATER MAIN. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR TESTING THE WATER MAIN. THIS SHALL INCLUDE RESTRAINED JOINTS ON PIPE AND FITTINGS AT DEADENDS, PLUGS, PIPE AND CORP STOPS OF SUFFICIENT SIZE FOR FLUSHING AFTER TESTING. ALL TESTS SHALL BE CONSIDERED INCIDENTAL TO WATER MAIN CONSTRUCTION.

WATER FOR FILLING, FLUSHING AND TESTING WATER MAINS SHALL BE FURNISHED BY THE WATERLOO WATER WORKS AT NO COST TO THE CONTRACTOR UNLESS THE NEW WATER MAIN DOES NOT PASS TESTING ON THE FIRST TRIAL. IF THE WATER MAIN DOES NOT PASS TESTING ON THE FIRST TRIAL, THE ADDITIONAL WATER THAT IS NECESSARY FOR SUBSEQUENT ADDITIONAL DISINFECTION, FLUSHING AND/OR TESTING SHALL BE MEASURED BY THE WATERLOO WATER WORKS AND PAID TO THE WATERLOO WATER WORKS AT ITS NORMAL RATE. THE FLOW RATES AT WHICH WATER IS FURNISHED SHALL BE CONTROLLED BY THE WATERLOO WATER WORKS. THE CONTRACTOR SHALL FURNISH SATISFACTORY BACKFLOW PREVENTION DEVICES, HOSES AND ALL OTHER MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE SAID FILLING, FLUSHING AND TESTING AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES BY POTHOLING WITH NO OPEN EXCAVATIONS AND SHALL AVOID ALL EXISTING UTILITIES, SEWER AND WATER SERVICES AND SHALL COMPLETE THIS ITEM IN A MANNER THAT DOES NOT DISTURB SAID ITEMS.

ITEM INCLUDES RESTORING THE BORE HOLES AT THE BORE ENTRY AND EXIT LOCATIONS SUCH THAT OPEN HOLES ARE NOT LEFT AHEAD OF AND BEHIND THE WATER MAIN TIE-IN LOCATIONS. HDD PIPE SHALL BE REMOVED TO A MINIMUM OF 4' VERTICAL DEPTH BELOW EXISTING GRADE AT THE BORE EXIT AND ENTRY POINTS AND THE REMAINING UNDERGROUND HDD PIPE FROM SAID REMOVAL DEPTH TO THE WATER MAIN TIE-IN LOCATIONS SHALL BE FILLED WITH CELLULAR CONCRETE. ITEM INCLUDES BACKFILLING ALL OPEN EXCAVATIONS WITH SUITABLE MATERIALS TO A MINIMUM OF 95% OF THE MATERIALS OPTIMUM DENSITY AT -2 TO +4% OF ITS OPTIMUM MOISTURE. ITEM INCLUDES RESTORATION OF ALL DISTURBED AREAS TO PRE-CONSTRUCTION CONDITIONS AFTER TIE-INS ARE COMPLETED. FURNISHING, TRANSPORTING AND INSTALLATION OF A 6' (MINIMUM) THICKNESS OF TOPSOIL AT ALL DISTURBED AREAS THAT ARE NOT ROCKED OR PAVED IS INCIDENTAL TO THIS ITEM. SAID TOPSOIL MATERIAL SHALL BE PRE-APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO ITS USE ON THIS PROJECT.

THE CONTRACTOR SHALL LOCATE AND MARK THE DRILL-OUT BORE PATH CENTERLINE LOCATION WITH TILE FLAGS IMMEDIATELY AFTER OR DURING THE BORE-OUT. SAID FLAGS SHALL BE SET AT A MAXIMUM SPACING OF 25' AND SHALL BE MARKED WITH THE DEPTH OF THE DRILL PIPE.

404. CASING END SEALS

BID PRICE SHALL INCLUDE ALL MATERIALS AND EQUIPMENT NECESSARY TO INSTALL MODULAR LINKS AT CASING ENDS TO CLOSE THE ANNULAR SPACE BETWEEN THE 8" PVC WATER MAIN AND THE 12" PVC CASING PIPE WATERTIGHT AND SOILTIGHT, AT LOCATIONS SHOWN ON THE PLANS AND/OR AS IDENTIFIED BY THE OWNER'S REPRESENTATIVE AT THE TIME OF CONSTRUCTION.

Estimated Project Quantities

EROSION CONTROL AND MISCELLANEOUS

ITEM NO.	DESCRIPTION	UNITS	EST. QTY.	ASBUILT QTY
001.	MOBILIZATION	LUMP SUM	1	
002.	SEED, FERTILIZE AND MULCH (IDOT URBAN MIX) BY HYDROSEEDING	ACRES	0.8	
003.	9" DIA., STRAW FILLED WATTLES	L.F.	400	
004.	TRAFFIC CONTROL	LUMP SUM	LUMP SUM	
005.	MAINTENANCE BOND, 2-YEAR	LUMP SUM	LUMP SUM	
006.	CLEARING AND GRUBBING	LUMP SUM	LUMP SUM	
007.	TOPSOIL, FURNISH, HAUL AND PLACE, 4" Rolled Thickness	S.Y.	1,500	

WATER CONSTRUCTION

ITEM NO.	DESCRIPTION	UNITS	EST. QTY.	
401.	WATER MAIN, C900/RJ RESTRAINED JOINT DR18 PVC, 8-INCH DIA.	L.F.	1432	
402.	WATER MAIN, CASING, C900 RESTRAINED JOINT DR18 PVC, 12-INCH DIA.	L.F.	680	
403.	WATER MAIN, SAGER AVE. HDD, C900/RJ RESTRAINED JOINT DR18 PVC, 8-INCH DIA.	L.S.	1	
404.	CASING END SEALS	EACH	6	
405.	CONNECTION OF NEW 8" DIA. WATER MAIN TO EXISTING 6" DIA. WATER MAIN	EACH	1	
406.	CONNECTION OF NEW 8" DIA. WATER MAIN TO EXISTING 8" DIA. WATER MAIN	EACH	1	
407.	TEE, 8" DIA. X 6" DIA., D.I.P. COMPLETE WITH THRUST RESTRAINT	EACH	5	
408.	TEE, 8" DIA. X 8" DIA., D.I.P. COMPLETE WITH THRUST RESTRAINT	EACH	3	
409.	BEND, 90°, 8" DIA., DUCTILE IRON, COMPLETE WITH THRUST RESTRAINT	EACH	2	
410.	BEND, 45°, 8" DIA., DUCTILE IRON, COMPLETE WITH THRUST RESTRAINT	EACH	5	
411.	BEND, 22.5°, 8" DIA., DUCTILE IRON, COMPLETE WITH THRUST RESTRAINT	EACH	2	
412.	ENDCAP, 8" DIA., DUCTILE IRON, COMPLETE WITH THRUST RESTRAINT	EACH	1	
413.	ENDCAP, 6" DIA., DUCTILE IRON, COMPLETE WITH THRUST RESTRAINT	EACH	4	
414.	REDUCER, 8" X 6", DUCTILE IRON, COMPLETE WITH THRUST RESTRAINT	EACH	2	
415.	NEW FIRE HYDRANT ASSEMBLY, M.J., 6.5' BURY, COMPLETE	EACH	2	
416.	REMOVE AND SALVAGE EXISTING FIRE HYDRANT ASSEMBLY, COMPLETE	EACH	2	
417.	INSTALL TEMPORARY HYDRANT	EACH	2	
418.	GATE VALVE, AVT EZ INSERTION, 8" DIA., M.J., WITH VALVE BOX AND MECHANICAL THRUST RESTRAINT	EACH	1	
419.	GATE VALVE, 8" DIA., M.J., WITH VALVE BOX AND MECHANICAL THRUST RESTRAINT	EACH	13	
420.	GATE VALVE, 6" DIA., M.J., WITH VALVE BOX AND MECHANICAL THRUST RESTRAINT	EACH	5	
421.	WATER SERVICE CONNECTION TO NEW WATER MAIN, 1" DIA., COMPLETE	EACH	8	
422.	WATER SERVICE CONNECTION TO EXISTING 3/4" DIA. WATER SERVICE LINE, COMPLETE	EACH	7	
423.	WATER SERVICE, 3/4" DIA. BY OPEN-CUT EXCAVATION	L.F.	224	
424.	WATER SERVICE, 1" DIA. BY DIRECTIONAL DRILLING	L.F.	477	
425.	FILL EXISTING 8" DIA. WATER MAIN WITH CELLULAR CONCRETE	L.F.	927	
426.	FILL EXISTING 6" DIA. WATER MAIN WITH CELLULAR CONCRETE	L.F.	1095	

PAVING CONSTRUCTION

ITEM NO.	DESCRIPTION	UNITS	EST. QTY.	
501.	REMOVE AND REPLACE EXISTING COMPOSITE STREET PAVEMENT	S.Y.	70	
502.	REMOVE/REPLACE EXISTING PORTLAND CEMENT CONCRETE STREET PAVING	S.Y.	140	
503.	REMOVE/REPLACE EXISTING PORTLAND CEMENT CONCRETE SIDEWALK	S.Y.	22	
504.	REMOVE/REPLACE EXISTING PORTLAND CEMENT CONCRETE DRIVEWAY	S.Y.	40	
505.	CLASS A ROADSTONE FOR DRIVEWAYS	TON	10	

FENCING

ITEM NO.	DESCRIPTION	UNITS	EST. QTY.	
601.	REMOVE AND SALVAGE EXISTING VINYL FENCING	L.F.	110	
602.	REMOVE AND SALVAGE EXISTING WOOD FENCING	L.F.	10	

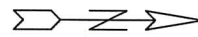
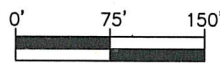
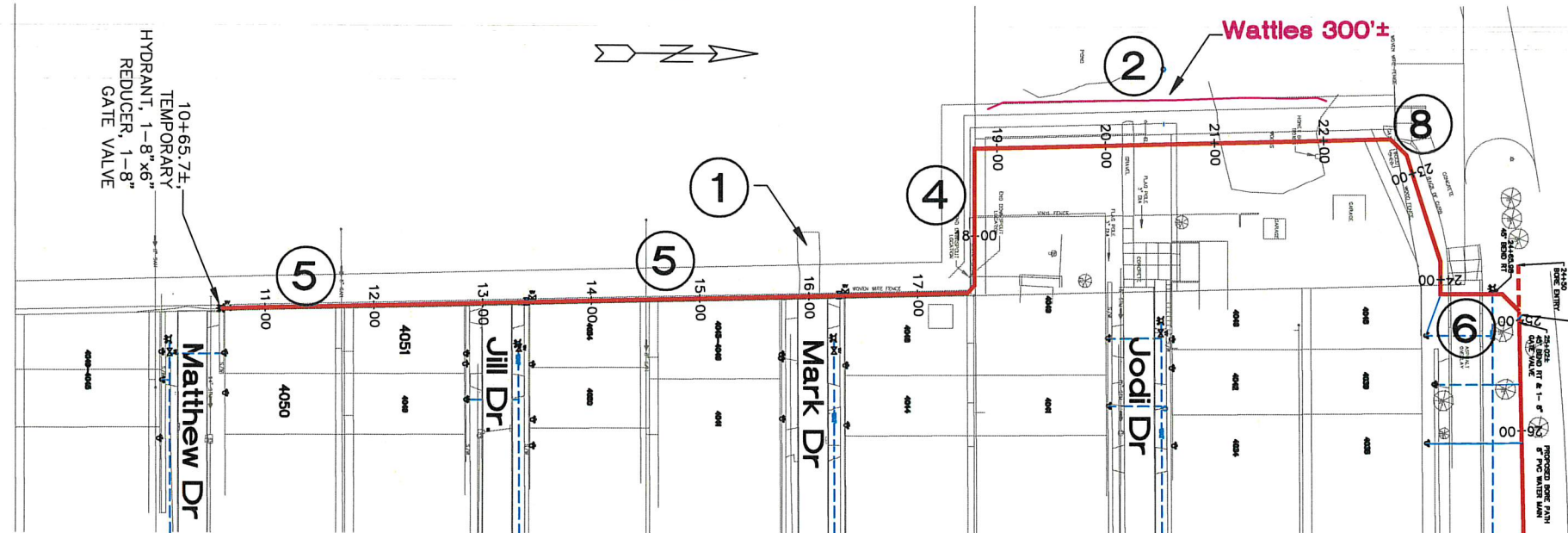
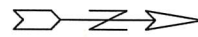
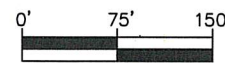
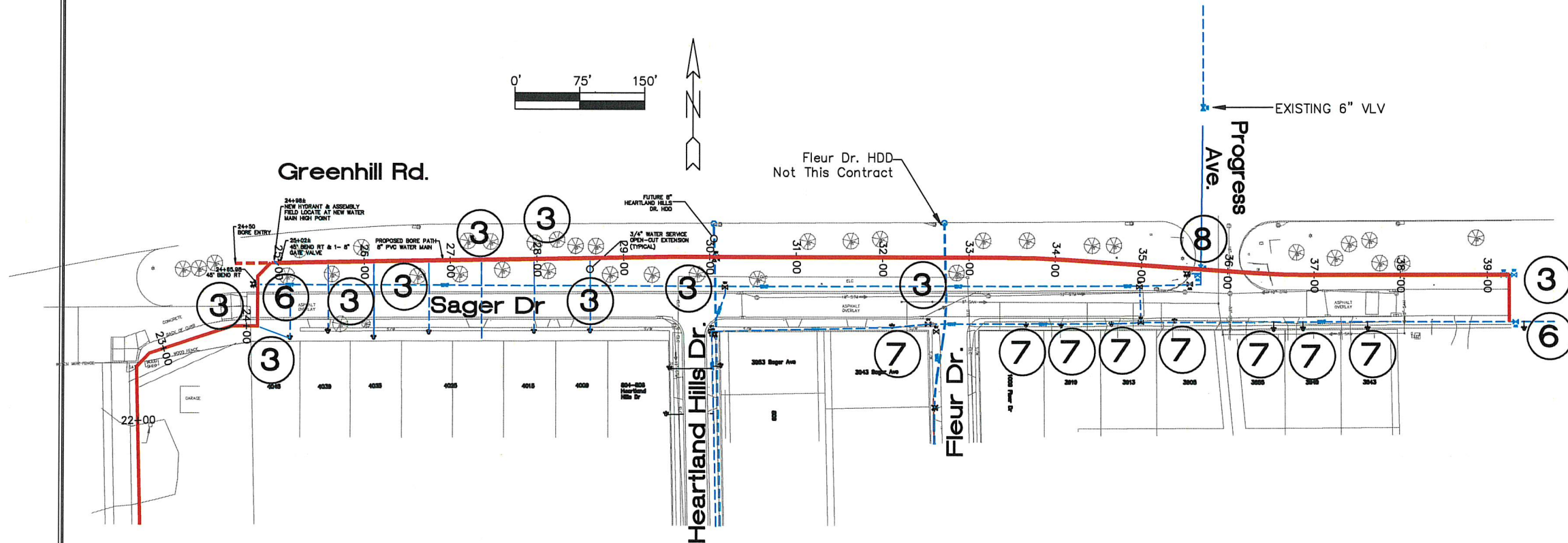
Wayne Claassen Engineering and Surveying, Inc.  
2705 University Avenue • P.O. Box 898 • Waterloo, Iowa 50701  
Phone: (319) 235-6294 • Fax: (319) 235-0028



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REVISIONS  
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Construction Plans for the 2023  
Heartland Hills West Area Water Main Loop  
Waterloo Water Works, Waterloo, Iowa  
Estimated Quantities an Bid Reference Notes





# LEGEND:

1. ACCESS FOR ALL CONTRACTOR EQUIPMENT AND MATERIALS AND VEHICLE CLEAN-OFF AREA FOR WORK FRM 10+60± TO 24+50±.
2. PLACE WATTLES AS NECESSARY TO PROTECT THE SMALL POND.
3. PLACE WATTLES AS NECESSARY TO PROTECT TIE-IN OPEN EXCAVATIONS.
4. REMOVE, SALVAGE, STOCKPILE VINYL FENCING.
5. PROTECT EXISTING FENCING.
6. REMOVE/REPLACE EXISTING COMPOSITE PAVING, INCLUDING CURB AND GUTTER FULL DEPTH SAW-CUTS REQUIRED.
7. REMOVE/REPLACE EXISTING P.C.C. SIDEWALK AND DRIVEWAYS, FULL DEPTH SAW-CUTS REQUIRED.
8. REMOVE/REPLACE EXISTING P.C.C. PAVING, INCLUDING CURB AND GUTTER FULL DEPTH SAW-CUTS REQUIRED.

Construction Plans for the 2023  
Heartland Hills West Area Water Main Loop  
Waterloo Water Works, Waterloo, Iowa  
Erosion Control Plan and Misc. Details

sheet

20



Wayne Claassen Engineering and  
Surveying, Inc.

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