ADDENDUM NO. 7

TO THE BID DOCUMENTS

Tasmania Court Water Main Extension

CITY OF HOMER, ALASKA

Addendum Issue Date:	November 19, 2021
Bid Submittal Date:	November 30, 2021
Previous Addenda Issued:	6

Issued By: Janette Keiser, PE

Public Works Director

City of Homer

Notice to Bidders:

Bidders must **acknowledge receipt of this Addendum** by including the Addenda Acknowledgement Form with the bid.

Bidders are required to acknowledge each addenda separately on the Addenda Acknowledgement Form. Any bids received without acknowledgment of addenda may be rejected prior to evaluation.

The Bid Documents for the above project are amended as follows (all other terms and conditions remain unchanged):

- 1. On the Bid Form, all expenses for mobilization/demobilization, SWPPP implementation and traffic control have been moved to Scope A of the project.
- 2. Addendum #6 should be disregarded
- 3. Addenda Acknowledgment form is attached.
- 4. New Special Provisions are attached with language regarding invasive plant control.
- 5. Question from bidder.

Question #1: Bid item #14 calls for a 3" PRV, the detail drawing on page C-4 shows 3", but note #1 says 2". We are attaching the PRV to a 2" thread, so I wanted to confirm what size PRV we are really to quote.

Answer #1: Use the 2" thread as described in note #1.

ADDENDA ACKNOWLEDGMENT

Project Name: <u>Tasmania Court Water Main Extension Project</u>			
I hereby acknowledge add	denda numbers:		
	<u> </u>		
			
N (F			
Name of Firm:			
Signature of Bidder:			
Data			
Date:			

This Acknowledgement must be included in the Bid/Proposal for the project if any Addenda are issued or the Bid/Proposal could be considered non-responsive.

CONSOLIDATED BID FORM

Tasmania Court Water & Sewer Main Extension

Scope A: Tasmania Ct. Water Main Extension.

All of the following Bid Items are for the construction of the WATER MAIN & appurtenances.

ITEM NO.	SPEC NO.	BID ITEM DESCRIPTION – Water Main & Appurtenances	UNIT	QUAN TITY	UNIT BID PRICE	TOTAL BID PRICE
1	101	Mobilization/Demobilization (entire project)	LS	1		
2	602	Install 8" HDPE SDR11 Water Pipe	LF	940		
3	603	Furnish & Install 8" Gate Valve	EA	3		
4	604	Furnish & Install Single Pumper Hydrant	EA	3		
5	606	Furnish & Install 1" Water Service Connection	EA	11		
6	_	Excavate & Backfill Structural Trench Section for water line	LF	593		
7	207	Excavate & Backfill Non-Structural Trench Section for water line	LF	752		
8	102	Construction Survey (entire project)	LS	1		
9	221	SWPPP Implementation (entire project)	LS	1		
10	103	Traffic Control (entire project)	LS	1		
11	702	Furnish & Install Geotextile Fabric	SY	600		
12	602	Furnish and install 12" HDPE SDR11 Water Pipe	LF	562		
13	603	Furnish and install 12" Gate Valve	EA	1		
14	503	Furnish and Install ARV Manhole	EA	1		
15	603	Furnish and Install 2" ARV Assembly	EA	1		

Total Bid for Scope A - Water Main: \$_____

Scope B-1: Tasmania Ct. Sanitary Sewer Main Extension

All of the following Bid Items are for the construction of the SEWER MAIN & appurtenances, but not including the installation of the E-One Grinder Pumps.

ITEM NO.	SPEC NO.	BID ITEM DESCRIPTION – Sewer Main & Appurtenances	UNIT	QUAN TITY	UNIT BID PRICE	TOTAL BID PRICE
1	502	Furnish & Install 8"DIP Class 50 Sewer Pipe	LF	1276		
2	518	Furnish & Install 16" HDPE SDR11 Casing	LF	49		
3	503	Furnish & Install Sewer Manhole	EA	2		
4	508	Furnish & Install Cleanout	EA	3		
5	510	Furnish & Install Sanitary Sewer Service Stub-out	EA	9		
6	518	Furnish & Install Pressurized Sewer Service Stub-out	EA	2		
7	207	Excavate & Backfill Structural Trench Section	LF	869		
8	207	Excavate & Backfill Non-Structural Trench Section	LF	723		
9	704	Furnish & Install 2" Thick Insulation	BOARD FOOT	48		

Total Bid for Scope B-1 - Sewer Main: \$_____

Scope B-2: Tasmania Ct. Sewer Main E-One Service Connections

All of the following Bid Items are for the construction of the E-One Grinder Pumps on private property.

ITEM NO.	SPEC NO.	BID ITEM DESCRIPTION	UNIT	QUAN TITY	UNIT BID PRICE	TOTAL BID PRICE
1	712	Furnish & Install E-One DH071 Grinder Pump	EA	2		
2	502	Furnish & Install 1.25" HDPE SDR11 sewer service pipe	LF	300		
3	220	Excavate & Backfill Asphalt Pavement Trench Section	LF	20		
4	207	Excavate & Backfill Non-Structural Trench Section	LF	280		
5	516	Remove & Dispose of Existing Septic Tank	EA	7		

	Total Scope B-2 – E-1 Grinder Pumps on Private Property: \$	
	Consolidated Bid Amount – All Bid Items (Scope A + Scope B-1 + Scope B-2) : \$	
Note:	Basis of bid will be the Consolidated Bid Amount.	

Name of Bidding Company	
Address of Bidding Company	
Signature of Company Representative	Date
Printed Name of Company Representative	
Phone#/Email	

SPECIAL PROVISIONS

Tasmania Court Water Main Extension

The construction contract for this project will be administered in accordance with the General Provisions of the City's Standard Construction Specifications (2011).

MODIFICATIONS TO GENERAL PROVISIONS

SP - 1: Section 10.02 - Add New Article 2.6 - Anti-Discrimination

The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 40 CFR part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.

SP - 2: Section 10.04 - Add New Article 4.6 - Scope of Work

The Work included under this Contract consists of furnishing all labor, materials, equipment, supervision, and other facilities necessary to successfully complete the Work set forth in the drawings, specifications, and the terms of the Contract, including, but not limited to the following work:

- Excavation required to bury a new water main at a depth of 7 feet and expose an existing water main connection so that the new water main can be connected to it.
- Installation of 940 feet of 8-inch HDPE pipe rated for 125 psi and terminated by a gate valve. The pipe will be provided by the City as shown in the purchase order attached to this bid package. The new pipe will be connected to an existing water main.
- Furnish and install 562 feet of 12-inch HDPE pipe alongside the 8-inch pipe.
- Installation of three fire hydrants.
- Installation of 1-inch diameter copper service pipes to connect each of the properties to be serviced to the new water main.
- Backfilling the trench with Class B Bedding directly around the water main itself. All remaining backfill must be Type II Classified Fill.
- All materials will be provided by the Contractor except for the 8" HDPE pipe.
- Work required by the SWPPP
- Traffic control

<u>SP - 3 Article 5.12 - Temporary Erosion Control During Construction</u>

Add the following language:

"The City has prepared a Storm Water Pollution Prevention Plan (SWPPP), which will be included in an Addenda. The Contractor is required to implement the Best Management Practices in the SWPPP and otherwise comply with the terms of the SWPPP. Compensation will be paid under Bid Item #9, SWPPP Implementation."

SP - 4: Article 5.19 - Easement and Rights-of-way

Add the following language:

"The Contractor will be provided access to a laydown area for material storage, job shack, and other uses. The location of this area will be shown in the site map."

SP - 5: Article 5.25 - Unusual Work Hours

Add the following sentence:

"The noise level from work completed before 8:00 AM and after 8:00 PM cannot exceed 75 db at a distance of 50 feet."

MODIFICATIONS TO STANDARD SPECIFICATIONS

DIVISION 100 GENERAL DIVISION SECTION 102 CONSTRUCTION SURVEYING BY THE CONTRACTOR

SP - 7: 102.1 General

Add the following paragraph:

"The Contractor shall submit all survey data with each pay application; Field Books with sketches, professionally scaled plan set redlines, electronic survey coordinates. These items shall be submitted in entirety within 10 days of the project completion. In addition, the asbuilt information shall also be in NAD 83 datum, the City of Homer will provide the coordinate system at the time of contract award."

DIVISION 200 EARTHWORK SECTION 208 COMPACTION CONTROL BY THE CONTRACTOR

SP - 8: Delete all text within section 208 and replace with:

"The City shall provide field compaction testing for quality control."

SP - 9: Add New Section 222, Invasive Weed Control

All mineral materials, topsoil, and straw or hay erosion control products shall be certified as weed free under the state of Alaska's Division of Agriculture weed free certification program. All questions regarding the weed free certification program should be directed to the Homer Water and Soil Conservation District. They may be reached at (907) 205-0235.

DIVISION 600 WATER SYSTEMS SECTION 601 GENERAL

SP - 10: Add 601.4 Pipe Standards

Reads as follows:

"All pipe, flux, and solder shall be lead free. All water system materials shall be certified by the National Sanitation Foundation (NSF), Underwriter Laboratories, or an equivalent organization that evaluates products using ANSI/NSF Standards 61 approved."

SECTION 602 INSTALL HDPE PIPE

SP - 11: 602.1 General

Add the following language:

"1.01 - Description

- A. This section covers high density polyethylene (HDPE) piping systems for water systems. The requirements of this section are intended to be additional to the other requirements of Section 602 Furnish and Install Pipe. Other requirements of Section 602 shall also apply to HDPE piping systems specified herein.
- B. Due to the world-wide shortage of plastic resin, the City has pre-ordered the HDPE pipe that is identified in the Purchase Order that was issued to Ferguson Waterworks and is attached to these Special Provisions. All other materials are the responsibility of the Contractor.
- C. The pipe system furnished shall be complete with all adapters, fittings, pipe plugs, jointing materials, accessories and all other necessary appurtenances needed for a complete installation. All items shall be properly packaged for shipment to the project location.

1.02 - Governing Standards

Except as modified or otherwise provided herein, the manufacturer of the pipe system shall be governed by the standards listed below:

American Society for Testing and Materials (ASTM) Specifications:

No. F 1248	Polvethylene Plastics M	Molding and Extrusion Material	S
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No. D 3035 Polyethylene Plastics Pipe Based on Controlled Outside Diameter

No. D 3350 Polyethylene Plastics Pipe and Fitting Materials

1.03 - Submittals

- A. The Supplier is required to submit the pipe supplier's written certification of compliance with the requirements of this section including:
 - 1. ASTM D 3350 cell classification.
 - 2. Manufacturer's literature on service life, temperature, and pressures as related to the SDR number, ASTM D 2837 pressure rating.
 - 3. National Sanitation Foundation (NSF) listing for potable water service.
- B. Standard dimensions of pipe and fittings.
- C. Manufacturer's recommended procedures for installation. This should include standard procedures manual for Contractor's use when installing pipe."

SP - 12: 602.2(d) Material

Add the following language:

"Pipe and Fitting Material:

- The pipe shall be extruded with pre-compounded resin. In-plant blending of carbon black, thermal stabilizers and anti-oxidants shall not be allowed.
- The material shall be listed by the Plastic Pipe Institute with a designation P3408.

- All pipe and fittings shall be designed for thermal butt fusion jointing except as otherwise defined in this section.
- The pipe and fittings shall be homogeneous throughout and shall be free of visible cracks, holes, foreign inclusions, or other deleterious defects. Pipe and fittings shall be uniform in color, opacity, density and other physical properties.

Pipe Design:

A. The pipe shall be designed in accordance with the relationships of the ISO - modified formula (See ASTM F714-83).

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2S=DO-1
Pt
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Where: S = hydrostatic design stress (psi), DO = outside diameter (inches), P = design pressure rating (psi) and t = minimum wall thickness (inches).

The design pressure rating shall be expressed in terms of the static working pressure in psi for water at 73 degrees Fahrenheit according to ASTM D 2837.

- B. The minimum design pressure rating for the pipe shall be 160 psi.
- C. The pipe shall be rated SDR 11.

Fittings:

- A. Polyethylene fittings for pipe shall be molded, or fabricated, as specified on the drawings. The fittings shall be the same grade resin as the pipe. Fabricated fittings shall be made from pipe with an SDR 9.3 rating.
- B. All fabricated fittings shall be manufactured, using the thermal butt fusion process, under controlled factory conditions. Fabricated pipe fittings shall be thermal butt fused to the polyethylene pipe unless otherwise specified on the drawings.
- C. Where flanged fittings are specified on the drawings, the Contractor shall provide the proper stainless steel bolts, stainless steel back-up rings, and gaskets for the fittings. Gaskets shall be reinforced black rubber, Buna N, or red rubber.

Butt-Fusion Equipment

The Contractor shall provide butt-fusion equipment compatible with the piping system being used as necessary to complete all joints on the project. All costs in connection with the above equipment shall be included in the unit prices bid for pipe installation.

Flanged Adapter Coupling

Flanged adapter coupling shall be ROMAC FCA501 ductile iron fittings.

Flanged Fittings

Flanged fittings shall be Class 150 Ductile Iron, with minimum design pressure rating of 150 psi.

Inspection on Receipt

The Contractor shall be responsible for certifying upon receipt that the HDPE pipe meets specifications. Any material found not to meet specification or found to have defects, or that have been damaged during transport shall be so indicated and put aside for inspection by the Engineer. Following this inspection, and resolution of any deficiencies, the Contractor shall assume responsibility for the materials as if the Contractor had purchased them."

SP - 13: 602.3 Construction

Add the following language:

"f. System Dimensional Tolerances:

Polyethylene pipe ends shall be dressed for field butt fusion as necessary. End surfaces shall be smooth and their orientation perpendicular to the pipe centerline axis and shall be suitable for field butt fusion.

g. Installation of HDPE Pipe

(1) General:

Installation of all components shall be accomplished using the pipe manufacturer's recommendations. Unless the Contractor's personnel are experienced in the installation of polyethylene piping systems, the pipe suppliers shall be requested to provide personnel to instruct the Contractor in the handling, installation and testing of their products. This shall include, but not be limited to, the Pre-Construction Planning Meeting. The Contractor shall pay for the on-site services of a pipe supplier representative to provide the necessary instruction.

(2) Pipe Laying:

- a. The Contractor shall provide machinery, tools, and facilities for the safe and efficient execution of the work. Pipe and accessories shall be lowered into the trench in a manner that will prevent damage to pipe and fittings. Pipe and accessories shall be inspected for defects prior to their being lowered into the trench. Any defective, damaged or unsound material shall be repaired or replaced as directed by the Engineer. All foreign matter or dirt shall be removed from the interior and ends of pipe and accessories before they are lowered into position in the trench. Pipe shall be kept clean during and after laying.
- b. The pipe may be joined above ground, and lowered in the trench afterwards.
- c. Radius of bends shall not be less than the minimum set by the pipe manufacturer. Bedding and backfill shall be as shown on the drawings and specified in the Contract Documents.
- d. After pipe is laid, care shall be taken to avoid the entrance of dirt or water from the trench into the pipe by the use of tight pipe seals. No pipe shall be laid when the trench bottom is under water, or when, in the Engineer's opinion, the trench conditions or the weather are unsuitable for such work. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.
- e. Any pipe which has floated shall be removed from the trench and be re-laid as directed by the Engineer.
- f. After each section of joined pipe has been laid in the trench and all connections made, the Engineer and Contractor shall perform a joint visual inspection to ensure that the pipe is completely intact, and all mechanical connections have been made according to supplier's recommendations and specifications.
- g. Grade tolerance on water lines shall be +/- 0.05ft/40ft and +/- 0.10ft cumulatively.

3. Pipe Location Tape

- a. The detectable tape shall be installed directly above the pipe in the trench and shall be approximately 12 inches above the pipe. The tape shall be placed during backfill operations.
- b. Tape installation shall be performed in a continuous operation. A 4 foot overlap shall be provided between the ends of rolls.
- 4. Locator Wire

- a. The wire shall be installed directly above the pipe in the trench and shall be approximately 24 inches below finish grade. The wire shall be placed during backfill operations.
- b. Locator wire installation shall be performed in a continuous operation. Wire shall be spliced as required to form a continuous strand along the length of the pipeline. The locator wire shall be brought to the surface at the point of connection at each end of the 8" HDPE pipeline and at the 8" gate valve at Station 22+14.00."

SP-14: Section 602.4 Flushing and Testing

Make the following changes to item (b):

- 1. In the second paragraph, delete the sentence: "The Contractor, at its option, can either use a pressure test or a leakage test" and substitute the following in its place: "The Contractor shall perform a pressure test."
- 2. In the fifth paragraph, delete the words "test copper", and substitute the following language:
 - "...a 3/4 inch polyethylene pipe, installed at the main according to the typical water service detail. Test section shall be run to the surface, adjacent to the water main, for testing."

Add the following language to item (c):

- 1. Disinfection tests will be performed by the City.
- 2. The Contractor must submit a disinfection plan to the engineer before work begins on the project.

Disinfection water shall not be released overland or to any creeks, streams, temporary or permanent drainage swales or ditches. Disinfection water shall be flushed into the City of Homer sanitary sewer system through a sanitary sewer manhole or cleanout located within 100 feet of the disinfection water discharge point. Alternatively, if no City sanitary sewer manhole or cleanout is located within 100 feet of the disinfection water discharge point, the disinfection water shall be retained in tank truck or other transportable container and discharged into the City of Homer sanitary sewer system at a location to be determined by the engineer.

SP-15: Section 606.5 Basis of Payment

Change the following language:

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
606	Water Service Connection	Each"

To:
"

ITEM DESCRIPTION
606 Water Service Connection

(Per Detail on Sheet C-4 of the Construction Drawings)"

SP-16: Add new Section 609 Connection to Existing Water Main

SECTION 609 CONNECTION TO EXISTING WATER MAIN

609.1 General

There is an 8" water main and a 12" water main running along the south side of South Slope Drive. The new 8" and 12" water mains will be connected to the existing ones of their respective sizes. This item consists of furnishing all labor, equipment and materials necessary to expose the existing water main stub-outs, modify the ends of the stub-outs as required and connect the new mains to the stub-outs.

UNIT

Each

609.2 Construction

- A. Rinse all pipe, fittings, and couplings to be used in the connection with a 5% solution of sodium hypochlorite or calcium hypochlorite immediately prior to installation.
- B. Leave the entire reconnection assembly exposed to view until water pressure has been applied, and all joints have been examined for leaks.