

ADDENDUM #1 EASTERN PRATER WAY STORM DRAIN BID #20/21-002 / PWP #WA-2020-319 BIDS DUE NO LATER THAN: 1:45 PM ON AUGUST 26, 2020 PUBLIC BID OPENING: 2:00 PM ON AUGUST 26, 2020

This addendum is to notify all potential proposers of clarifications made to the Bid documents as stated below.

REMINDER TO BIDDERS:

Due to issues discovered in previous bids for this and similar construction projects, the City wishes to direct bidders to re-read and observe the following items:

COVID-19 Precautions – Due to the City's response to the COVID-19 virus and associated reduction in staff, in-person staff availability is limited. Bidders wishing to physically deliver their bids on the bid due date shall note that the Purchasing Office will open at 1PM on August 26th for the purpose of receiving bids. Bids may also be delivered via USPS, UPS, FEDEX at any time prior to the bid deadline. Bids are due no later than 1:45PM on August 26, 2020. The public bid opening will be available to all bidders via Zoom as detailed in the Notice to Bidders. A complete bid recap will be available on the City's website no later than 5PM on August 26, 2020.

RFI RESPONSES

Question #1:

Can you specify the asphalt type you want for bid items 34 - Permanent Bituminous Patch and item 35 - 2" Grind and Overlay.

Response:

Bid Item 34 – Permanent Bituminous Patch – Type 2, 50-blow, 4% voids, PG64-22 or PG64-28NV

Bid Item 35 – 2-1/2" Grind and Overlay – Type 2, 75-blow, 4% voids, PG64-28NV.

Question #2:

Bid item 35 indicates that all final adjustment of all valves and manholes to finish grade is included in this bid item. The next bid item 36 seems to cover the same scope as stated above – Protect and adjust utility valve boxes and manholes. Please clarify which bid item this work is to be completed in.

Response:

Adjusting valves and manholes to finished grade will be covered under Bid Item 36.

Question #3:

Have the underground specifications been provided?

Response:

The provided special provisions supplement and modify the "Standard Specifications for Public Works Construction" (Orange Book), 2012 version. The Orange Book can be found on the RTC Washoe website.

Question #4:

Bid item 28 for TMWA Water Line Replacement is listed as lump sum; however, should it be changed to an each basis?

Response:

Will update bid item 28 to an each basis and update the bid schedule to reflect change. Please see revised Bid item clarification below.

Question #5:

Sheet P9 and P10 shows relocation of an 8" effluent line and relocate if necessary for a 1" electrical, 4" fiber optic, and a 1.25" gas line. What item will be used to pay for these relocations?

Response:

Bid item 51 will be added as a contingent item to the bid schedule to cover the cost of these relocations (and the 4" FO on sheet P7) if they are needed. The bid item clarification as noted below.

Question #6:

What traffic control restrictions are there for the intersection of Vista Boulevard and Prater Way?

Response:

Please refer to Special Provisions Section 21.

Question #7:

How will the typical roadway section of 6" on 10" work with the low cover situation of the 42" RCP on sheet P10?

Response:

The 42" RCP will be changed to Class V RCP and the invert elevation of the upstream end of the pipe may be lowered at the time of construction if field conditions permit.

Question #8:

Borings near the pump station don't extend to the bottom. What is the expected level of ground water?

Response:

Ground water is expected at approximately 10 feet below grade.

SPECIAL PROVISION MODIFICATIONS

SECTION 19: WORKING DAY, WORK HOURS, SATURDAY, SUNDAY, HOLIDAY AND OVERTIME WORK

Add the following text to the first paragraph of this section:

1. Work to be performed in the Vista Blvd, and E. Prater Way intersection shall be performed as night work, between the hours of 7:00 P.M. until 6:00 A.M.

BID ITEM CLARIFICATION MODIFICATIONS

BID ITEM 26: CONSTRUCT PUMP STATION

Stormwater Utility Pumping Station Specifications have been provided.

BID ITEM 28: TMWA WATER LINE REPLACEMENT

Measurement of this bid item shall be by the each.

This item shall include all labor, equipment, tools, and supplies and materials (to be supplied by TMWA) necessary for working around as well as replacing and/or relocating TMWA water lines at storm drain crossings (to include excavation, bedding preparation, slurry, backfill, and thrust blocks) in accordance with the plans and specifications.

All work and materials affecting TMWA facilities shall be in accordance with the current Truckee Meadows Water Authority (TMWA) Construction and Design Standards and Details. TMWA facilities shall be inspected and approved by a TMWA inspector. Complete TMWA specifications and standards can be located at www.tmwa.com. CONTRACTOR shall obtain, become familiar with and keep TMWA standards available on the project site.

Reference attached technical specification, SECTION 700 – SUPPLEMENTAL WATER SPECIFICATIONS FOR WATER CONSTRUCTION

BID ITEM 35: 2-1/2" GRIND AND OVERLAY

Measurement for this bid item will be on a Square Yard basis.

This item shall include providing all labor, materials, supplies, equipment, services and other incidentals necessary for the removal and disposal of 2-1/2 inches of existing roadway paving and the construction of a new 2-1/2 inches of roadway paving (bituminous plantmix). Excavation trenches shall be backfilled and patched per plans prior to removal of existing 2-1/2 inches of existing roadway. Roadway removal and construction limits are shown on plans.

Final adjustment of all valves and manholes to finished grade is included in this bid item.

BID ITEM 51: RELOCATION OF UTILIITIES (CONTINGENT ITEM)

Measurement of this bid item shall be by the each.

This item shall include all labor, equipment, tools, and supplies and materials necessary to relocate utilities that are found to be in conflict in accordance with the plans and specifications.

The CONTRACTOR shall immediately notify the Engineer of any conflicts identified in a timely fashion. The unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment, and incidentals for excavating, trenching, relocating, and backfilling, complete in place.

BID ITEM SCHEDULE REPLACEMENT

The original Bid Item Schedule found on Pages 4-7 of the original Bid Book shall be replaced in it's entirety with the Bid Item Schedule included in this addendum (the three pages that follow this one).

Please note and adjust your bid according to the revisions, additions, deletions, clarifications or modifications as presented on this Addendum #1, which are made a part of this bid. NOTE: To avoid disqualification, this Addendum 1 (and any other addenda) must be signed by an authorized representative of the bidding firm in the space provided and must be submitted with your firm's sealed proposal. Failure to return this addendum, duly signed, may be cause for rejection of the bid. ALL ADDENDA SHOULD BE SIGNED AND PLACED IN SEQUENTIAL ORDER AND ATTACHED TO THE FRONT OF THE BID PACKAGE, COMPLETE WITH ALL REQUIRED DOCUMENTS.

CONTRACTOR BUSINESS NAME

Dan Marran, C.P.M., CPPO Contracts and Risk Manager

X______Authorized Signature

August 21, 2020

Printed Name of Person Signing

CITY OF SPARKS BID ITEM SCHEDULE – <u>REVISED BY ADDENDUM 1</u>

BID TITLE: Eastern Prater Way Storm Drain BID #20/21-002 PWP#WA-2020-319

PRICES must be valid for 90 calendar days after the bid opening.

<u>COMPLETION</u> of this project is expected PURSUANT TO CONTRACT DOCUMENTS.

<u>BIDDER</u> acknowledges receipt of _____ Addenda.

Bidder Name					(signature)	
Item No.	Quantity	Unit	Description		Unit Price	Total Price
1	1	LS	Mobilization/Demobilization	\$	/LS	\$
2	1	LS	Traffic Control	\$	/LS	\$
3	1	LS	Dewatering	\$	/LS	\$
4	3	LF	Install 12" SDR-35 PVC	\$	/LF	\$
5	2	LF	Install 18" SDR-35 PVC	\$	/LF	\$
6	197	LF	Install 24" C900PVC (DR 18)	\$_	/LF	\$
7	2,994	LF	Install 24" Force Main	\$	/LF	\$
8	11	LF	Install 18" Class III RCP	\$	/LF	\$
9	58	LF	Install 24" Class III RCP	\$	/LF	\$
10	249	LF	Install 30" Class III RCP	\$	/LF	\$
11	239	LF	Install 42" Class V RCP	\$	/LF	\$
12	84	LF	Install 53"x34" Class III HERCP	\$_	/LF	\$
13	3	EA	Install 24" 11.25° Elbow Fitting	\$_	/EA	\$
14	9	EA	Install 24" 22.5° Elbow Fitting	\$_	/EA	\$
15	9	EA	Install 24" 45° Elbow Fitting	\$	/EA	\$
16	4	EA	Install 4" Flush Valve Assembly	\$_	/EA	\$
17	5	EA	Install 1" Air Release Valve Assembly	\$_	/EA	\$
18	3	EA	Construct Concrete Collar	\$	/EA	\$
19	250	LF	Remove Storm Drain Pipe	\$	/LF	\$
20	4	EA	Construct High Capacity Curb Inlet (Double Grate)	\$_	/EA	\$

21	2	EA	Construct High Capacity	\$/EA	\$
22	4	EA	Curb Inlet (Quadruple Grate) Construct Type CM2 Drop	\$	\$
22	7	LA	Inlet (Single Unit Frame)	\$/LA	Φ
23	3	EA	Construct NDOT Type 4 Storm Drain Manhole	\$/EA	\$
2.1	_	T 4	Construct Type V Storm	ф /Б •	
24	5	EA	Drain Manhole	\$/EA	\$
			Pump Station Electrical and		
25	1	LS	Instrumentation and Control	\$/LS	\$
20	1	τc	Connections	\$ /LS	¢
26	1	LS	Construct Pump Station	\$/LS	\$
27	1	LS	Construct Concrete Pad and Bollards	\$/LS	\$
			TMWA Water Line		
28	1	LS	Replacement	\$/LS	\$
20	1	IC	TMWA Water Main Support	¢ /IC	¢
29	1	LS	and Slurry Backfill	\$/LS	\$
			Remove and Replace P.C.C.		
30	625	SF	Sidewalk, Driveway Apron,	\$/SF	\$
			or Valley Gutter		
31	88	LF	Remove and Replace P.C.C.	\$/LF	\$
			Curb (Median) Remove and Replace P.C.C.		
32	420	LF	Curb and Gutter (Type 1, 1A,	\$ /LF	\$
52	120	L 1	& Rolled)		Ψ
			Remove Existing and		
33	112	SF	Construct Portland Cement	\$/SF	\$
			Concrete Pedestrian Ramp		
34	3,523	LF	Permanent Bituminous	\$ /LF	\$
			Pavement Patching		· · · · · · · · · · · · · · · · · · ·
35	9,975	SY	2-1/2" Grind and Overlay	\$/SY	\$
26	1	IC	Protect and Adjust Utility	¢ /IC	¢
36	1	LS	Valve Boxes and Manholes to Finished Grade	\$/LS	\$
			Preformed Thermoplastic		
37	176	LF	Pavement Markings, 12" and	\$ /LF	\$
			24" Stop Bar and Yield	·	*
			Preformed Thermoplastic		
38	374	LF	Pavement Markings, 24" by	\$/LF	\$
			10' Long Crosswalk		
20		.	Preformed Thermoplastic	ф /¬	Φ
39	2	EA	Pavement Markings, Bike	\$/EA	\$
			Symbol Preformed Thermonlastic		
40	12	LF	Preformed Thermoplastic Pavement Markings,	\$/LF	\$
			r a, ement markings,		

			Triangles		
41	11	EA	Preformed Thermoplastic Pavement Markings, Arrow (Turn or Straight or Combination)	\$/EA	\$
42	511	LF	Pavement Marking 4" Double Solid Yellow or White Paint	\$/LF	\$
43	1,724	LF	Pavement Marking 4" Single Solid Yellow or White Paint	\$/LF	\$
44	3,192	LF	Pavement Marking 4" Single Dashed Yellow or White Paint (10' Stripe 30' Gap)	\$/LF	\$
45	130	LF	Pavement Marking 4" Single Dashed Yellow or White Paint (2.5' Stripe 3.5' Gap)	\$/LF	\$
46	1	LS	Remove and Replace Loop Detectors	\$/LS	\$
47	1	LS	Landscape Restoration (Contingent Item)	\$15,000/LS	\$15,000
48	250	CY	Over Excavation of Unsuitable Material & Backfill (Contingent Item)	\$/CY	\$
49	25	LF	Lateral Pipe Damage (Contingent Item)	\$/LF	\$
50	1	LS	Force Account	\$400,000/LS	\$400,000
51	5	EA	Relocation of Utilities (Contingent Item)	\$/EA	\$

Total Price for Eastern Prater Way Storm Drain	
\$	
(written total bid price)	\$



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STORMWATER UTILITY PUMPING STATION SPECIFICATIONS

- PART 1 GENERAL
- 1.1 PRECAST PUMPING STATIONS DESIGN CRITERIA
- 1.2 Description: Site assembled precast stormwater utility pumping
- 1.3 SECTION INCLUDES
 - A. Site assembled and tested precast stormwater utility pumping stations, including:
 - 1. Precast concrete wet-well and valve vault.
 - 2. Pumps and mountings.
 - 3. Piping integral to pumping station.
 - 4. Ventilation system.
- 1.4 ACTION SUBMITTALS
 - A. Product Data: Provide manufacturer's technical data including station capacities and operating characteristics.
 - B. Pump Performance Curves.
 - C. Shop Drawings: Show fabrication and installation details.
- 1.5 CLOSEOUT SUBMITTALS
 - A. Field Reports: Provide quality-control test reports documenting station operation performance.
 - B. Warranty: Signed copy of manufacturer's warranty.
 - C. Operation and Maintenance Manual: Include approved submittals and schedule for maintenance requirements.
- 1.6 QUALITY ASSURANCE
 - A. Manufacturer Qualifications: NPCA-certified plant, with experience and demonstrated capability to produce work specified in this Section
 - B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.



1.7 WARRANTY

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- A. Manufacturer's Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of pumping stations that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures including precast concrete structures, hatches, and other accessories.
 - b. Faulty operation of pumps or pumping and piping system accessories.
 - c. Deterioration of metals, metal finishes, and other materials beyond normal use.
 - 2. Warranty Period for Complete Packaged Pump Station provided by a Single Source Supplier (Including Concrete, Pumps, and Control Panel): One year from date of Substantial Completion.

PART 2 - PRODUCTS

2.

2.1 MANUFACTURER

A. Basis of Design: Provide site assembled precast stormwater utility pumping station, including specified pumps, valves, internal piping, and precast concrete well and valve vault to be manufactured and furnished by **Jensen Precast**, (855) 468-5600, <u>PumpStations@jensenprecast.com</u>, <u>www.JensenEngineeredSystems.com</u>.

2.2 PRECAST PUMPING STATIONS DESIGN CRITERIA

- A. Description: Site assembled precast stormwater utility pumping station including controls, pumps, valves, internal piping, precast concrete well, and valve vault.
 - 1. Pump Station Peak Design Flow: 16,494 gpm.
 - Force Main: New, as shown on Drawings.
 - a. Length: 3050 feet.
 - b. Inlet Pipe Size: 24" NPS.
 - c. Discharge Pipe Size: 24" NPS.
 - d. Pipe Type: Ductile PVC.
 - e. Discharge Elevation: 4397.15 feet
 - 3. Design Elevations: As indicated.
 - a. Inlet Piping: 4398.71 feet
 - b. Wet Well Finish Grade: 4403.0 feet
 - c. Wet Well Rim: 4403.0 feet
 - 4. Wet Well: Precast concrete.



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- a. Capacities and Characteristics: Provide base, barrel, and flat top precast sections to correspond to height of precast structures indicated, as shown on Drawings:
 - 1) Diameter or Dimensions: 192 inches.
 - 2) Inlet Pipe Size: 24 NPS.
 - 3) Discharge Spool Pipe Size: 18 NPS.
- 5. Valve Vault: Precast concrete.
 - a. Capacities and Characteristics: Provide precast sections, as shown on Drawings:
 - 1) Dimensions: 12 x 14 feet.
 - 2) Height: 10 feet.
 - 3) Inlet Pipe Size: 18 NPS.
 - 4) Discharge Spool Pipe Size: 24 NPS.

2.3 PRECAST CONCRETE STRUCTURES

- A. General: Size indicated, with provision for sealant at joints, meeting ASTM C 913, designed according to ASTM C 890 for A-16 (AASHTO HS20-44), heavy traffic, structural loading.
- B. Round Precast Concrete Wells: ASTM C890, precast, reinforced concrete.
 - 1. Joint Sealant: ASTM C 990, bitumen or butyl rubber.
 - 2. Flexible Resilient Pipe Connectors: ASTM C 923:
- C. Precast Concrete Vaults: ASTM C 858, precast, reinforced concrete.
 - 1. Resilient Pipe Connectors: ASTM C 890, cast or fitted into manhole walls, for each pipe connection.
- D. Joint Sealant: ASTM C 990, bitumen or butyl rubber.
- 2.4 PRECAST CONCRETE MATERIALS AND MIX DESIGN
 - A. General: Precast concrete according to ACI 318/318R.
 - B. Concrete Design Mix: 4,000 psi minimum, with 0.45 maximum water/cementitious materials ratio.
- 2.5 ACCESS DOORS AND FRAMES
 - A. Access Door: Triple-leaf opening. 63" X 153" Steel access hatch manufactured by Jensen MetalTech, or USF Fabrication, angle frame. Includes: lift assist, bituminous paint, flush lifting handle, 316 stainless steel nuts & bolts, hinges, slamlock, and hold-open arm.
 - 1. Loading Capacity: Support incidental H20 traffic loading.
- 2.6 WET-WELL ACCESSORIES
 - A. Pipe Supports: Manufacturer's standard.



- B. Guide Rail Assembly: Guide rails, stainless steel, Type 316, with pump guide brackets configured to match requirements of selected pumps.
- C. Flexible Resilient Pipe Connectors: Flexible connector, ASTM C 923.
- D. Ventilation: PVC piping, with internal insect screening.

2.7 PUMPS

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- A. Scope: Furnish Qty. 3 HOMA Model AKX1266-470/170HUFM, 12-inch discharge, electric submersible stormwater pumps, each consisting of a single stage, non-clog, centrifugal pump, close-coupled to a squirrel cage induction type electric motor assembled in a single-body, watertight aggregate, capable of maintaining its watertight integrity submerged under 65 feet of water. The pumps shall be designed to handle raw, unscreened sewage, storm water, sludge, or similarly contaminated liquid at an operating point of 5498 GPM at 83 ft. TDH with a hydraulic efficiency of at least 58 %. Shut-off head shall be 130 ft. minimum. As this pump is utilized for solids handling, it must be capable of repeatedly passing non-compressible, spherical solids up to 6 inch in diameter. The motor shall be 170.3 HP designed for operation with a 3 phase, 60 HZ, 480-volt electrical supply. Each motor shall be connected for operation with 50 feet of power and control cable.
- B. When the application requires, the motor shall be approved for operation in Class 1 Division 1, Groups C & D Areas by Factory Mutual (FM).
- C. Motor cooling shall be accomplished through a cooling jacket encircling the motor housing. The jacket is filled during operation with the pumped liquid to provide sufficient cooling of the motor at any operating point on the selected performance curve. Directly utilizing the pumped liquid for cooling ensures the best possible transfer of heat. Impeller back vanes shall force circulation throughout the cooling jacket, and an air vent shall ensure air is not entrapped within the jacket. Cooling shall not require the use of external heat exchangers, fans, or an external supply of cooling liquid.
- D. Sealing design between castings shall incorporate Nitrile (Buna-N) O-rings in controlled compression in two planes of the sealing interface. The interfaces shall be machined, metal-to-metal contacts and shall not require a specific torque on the securing fasteners to ensure sealing. Rectangular cross sectioned gaskets which require specific torque limits to achieve compression are susceptible to uneven compression and may be compressed beyond the point of permanent deformation; therefore, they shall not be acceptable.
- E. Materials of Construction: Major castings: ASTM A48 Class 40B Cast Iron. Wear Ring: ASTM B505 Bronze. Shaft: AISI 420 Stainless Steel. Fasteners: AISI 304 Stainless Steel. O-Rings: Nitrile Rubber. Shaft Seals: Silicon Carbide/Silicon Carbide (impeller and motor side). Cable Jacket: Neoprene. Cable Entry: elastomer grommet, stainless steel washers. Protective Coating: High Solids Epoxy
- F. Pump System Characteristics: As required to meet performance requirements.
 - 1. Number of Pumps: Three.



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- 2. Capacity: 16,494 gpm.
- 3. Motor Size: 170.3 hp.
- 4. Total Dynamic Head: 83 feet.
- 5. Speed: 1160 rpm.
- 6. Hydraulic Operating Efficiency: 58 percent, minimum.
- 7. Shut-off Head: 130 feet.
- G. Pumping Station Electrical Characteristics:
 - 1. Electrical Service:
 - a. Volts: 480 V.
 - b. Phases: Three.
 - c. Frequency: 60Hz.
 - 2. Full-Load Amperes: 218A.

2.8 PIPING

- A. Ductile-Iron, Mechanical-Joint Pipe and Fittings:
 - 1. Ductile-Iron Pipe: AWWA C151/A21.51, with mechanical-joint bell and plain spigot end unless flanged ends are indicated.
 - a. Provide flanged ends within well and vault.
 - 2. Ductile-Iron Fittings: AWWA C110/A21.10, mechanical-joint, ductile- or gray-iron standard pattern or AWWA C153/A21.53, ductile-iron compact pattern.
 - 3. Glands, Gaskets, and Bolts: AWWA C111/A21.11, ductile- or gray-iron glands, rubber gaskets, and steel bolts.
 - 4. Application: Buried service between well and vault.
- B. Stainless-Steel Pipe and Fittings:
 - 1. Pipe and Fittings: ASME A112.3.1, socket and spigot ends.
 - 2. Application: Within submersed portion of well where indicated on approved Shop Drawings.
- C. Check Valves: Flanged swing check valves
- D. Isolation Valves: Flanged eccentric plug valves.



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2.9 FABRICATION

- A. Precast Concrete Structures:
 - 1. ASTM C 478 for precast wells.
 - 2. ASTM C 478 for precast vaults.
 - 3. Fabricate structures with continuous joints to provide watertight construction.
 - 4. Prepare valve and meter vaults with factory installed piping, valves, sleeves and other devices required.
- PART 3 EXECUTION
- 3.1 PRECAST CONCRETE STRUCTURES
 - A. Install precast concrete structure sections with sealants per ASTM C 891.
- 3.2 FIELD QUALITY CONTROL
 - A. Perform tests and inspections and prepare test reports.
 - 1. Manufacturer's Field Service: Engage a pump station manufacturer's authorized service representative to assist in testing and startup.
 - B. Tests and Inspections:
 - 1. Test completed piping systems according to requirements of authorities having jurisdiction. Submit reports.
 - 2. After installing stormwater pumping stations and after electrical circuitry has been energized, test pumps and controls for compliance with requirements.
 - 3. After electrical circuitry has been energized, start units to confirm the station can run at pre-specified design parameters.
 - 4. Test piping for leaks and defects.
 - 5. Test and adjust controls and safeties.
 - 6. Force Main: Test at pressure not less than 1-1/2 times the maximum system operating pressure, but not less than 150 psig.
 - C. Remove and replace components of the stormwater pumping stations that do not pass tests and inspections and retest as specified above.