



ADDENDUM NO. 2 for 22-0028-UT East Water Reclamation Facility Screw Pump Clearwater, Florida

DATE: April 22, 2024

SUBJECT: Addendum No. 2

TO: Prospective Bidders and Others Concerned

Bidders on the above project are hereby notified that the following Addenda are made to the Contract Documents:

DRAWING MODIFICATION: See attached modifications of Contract Drawing Sheets S1 and S2 with respect to the addition of access platforms.

All Addenda and Notices will be posted on the City's website: https://www.myclearwater.com/business/bid-information

BIDDER QUESTIONS

- 1. Question: Can the engineer's estimate or the City's budget for this project please be provided?
 - **Answer:** As stated in the Pre-Bid Meeting, an engineer's estimate or detail cost estimate will not be provided. The Bidders are required to be pre-qualified in the amount of 2 million dollars, as detailed in the Pre-Bid Meeting and Agenda.
- **2. Question:** Will the Excel bid tab form be updated to match the revised Bid Form provided in Addendum 1?
 - **Answer:** Since the Bid Form can also be submitted in hand-written format, an updated Excel file will not be provided.
- **3. Question:** Please confirm if hospital grade sound-attenuated bypass pumps will be required for this project.
 - **Answer:** Hospital grade sound attenuation will not be required for this project. Sound attenuation will not exceed 80 dBA at the facility boundary line.





- **4. Question:** During the site visit, it was noticed that the valve tag on the existing slide gates states "80 x 72" and "J8775", however, this does not match the information that was provided in Addendum 1. Can O&Ms consistent with the information provided on the existing valve tags please be provided?
 - Answer: City provided O&M manual from the same manufacturer for a similar installation within the City. The details in the O&M provided are generally accurate for the gates installed at the Clearwater East Facility. There is not an O&M available for the gates specifically installed at this facility. Bidders are directed to reference the O&M from Addendum No. 1 for gate operation and equipment details. See attached Record Drawing of Gate Schedule for East WRF gates.
- 5. Question: During the site visit, there were parts of the existing slide gates that could not be visually observed as the gates were in operation and flow was present. If when the gates are taken out of service, it is identified that there are components to be refurbished that could not have been identified during the site visit, would the refurbishment of these items be considered a change order?
 - **Answer:** See attached revised Bid Form. Allowances were previously not approved for this project, but an exception is being made with regard to the Slide Gate Base Bid item.
- **6. Question:** Can the depth of the suction basin please be confirmed? We are measuring approximately 5'-8" when the drawings are scaled.
 - **Answer:** See sheet D2 of Contract Drawings. Record Drawings indicate the Screw Pump Station Suction Basin Depth is 5'-8" at the eastern and western walls, and slopes down to a depth of 6'-8" around the pipe openings. Awarded Contractor responsible for field-verifying this information in accordance with Sheet G2 of the Contract Drawings.
- 7. Question: Can it be confirmed which gates are operational?

Answer: Bidders are advised to assume none of the gates are operational.





- 8. Question: Can it be confirmed 17.2 MGD is truly the peak flow at the station?
 - Answer: See Response 1 of Addendum No. 1 for an accurate, conservative peak flow through the Screw Pump. This assumes all typical Return Activated Sludge and Internal Recycle Flow that goes through the Screw Pump Station, in addition to a peak hour storm event flow based on historical data observed at the facility. However, Bidders are now advised to Bid for a Bypass system capable of 10 MGD <u>total</u>. Details of bypass control and operation will be coordinated between the City and awarded Contractor in accordance with the notes on Sheet M4 of the Contract Drawings (with exception to flows indicated on Note 6).
- **9. Question:** Please confirm that the peak estimated flow that we are to base the bypass pumping system on is 7.2MGD.
 - Answer: That is incorrect. See Response 8.
- **10. Question:** Please confirm that bypass pumping discharge can be directly pumped to the oxidation reactor in lieu of the screw pump effluent channel.

Answer: Confirmed.

However, Contractor to coordinate details and placement of pumps, hosing, temporary piping, spill prevention, and any other equipment or appurtenances required for bypass and operation maintenance with Owner as part of the Bypass Plan details on Sheet M4 of the Contract Drawings. Contractor may be required to adjust layout to prevent obstruction from plant personnel access, chemical deliveries, or other Contractor access (if applicable).

- **11. Question:** The Waterman representative came out to the site visit. They noticed Valve Tag stated 80 x 72 & J8775 on the existing gates. This doesn't match what the city provided in the Addendum 1. Addendum 1 stated the "Screw Lift Pump Station Mark 12 has a qty of 4 and the sizes are 74 x 66 for Job Number J-8039-2. Can you provide the correct submittal data sheet for these slide gates 80 x 72 & J8775?
 - Answer: See Response 4.





- 12. Question: After reviewing Addendum 1 and participating in the site visit, there still is not enough information to provide accurate pricing for the crack repair. For crack repair the plans state to perform crack injections at all "active leaks" after filling the structure. However the west side screw pump is not in operation and that side of the structure is not full. Also "active leaks" is not defined anywhere that we can see. After visiting the site we observed cracks over the entire structure. We cannot get quotes or accurately provide pricing based on "a minimum of 200 LF of cracks". Besides this, crack injection is done based on the volume of material used. Without knowing how deep each crack is we would have to base our bid on worst-case-scenario and could end up costing the City a lot of money. Recent bids we have participated in with crack injection have included bid items such as "200 LF of crack repair, assuming ½" depth at each crack". I would ask that unit price bid items be added for this bid in a similar way. This will allow all participating bidders to get accurate quotes and bid the same work without a difference of opinion.
 - **Answer:** See attached revised Bid Form. Bidders shall provide crack injection for crack which is leaking. Leaking is defined as the presence of moisture (wet to the touch) on the exterior of the structure when in service. If a crack is leaking then that means the crack extends through the well thickness. Contractor shall estimate the volume based on standard practice and experience.
- **13. Question:** After reviewing Addendum 1 and participating in the site visit, there still is not enough information to provide accurate pricing for the spall repair. For spall repair the plans state to repair "damaged, degraded and spalled surfaces". However, "damaged, degraded and spalled" is not defined anywhere that we can see. After visiting the site we observed some damage over the entire structure. This observed damage though only appears to be damaged in our opinion. We cannot get quotes or accurately provide pricing based on "a minimum of 10 SF", especially when terms aren't defined and are open to interpretation. Besides this, spall repair is done based on the volume of material used. Without knowing how deep each area is we would have to base our bid on worst-case-scenario and could end up costing the City a lot of money. Example: for the effluent channel we would have to assume, for bidding purposes, that the entire channel needs repair in order to mitigate our risk. Recent bids we have participated in with spall repair have included bid items such as "10 SF of spall repair, assuming 1/2" depth" and "10 SF of spall repair, assuming 1" depth and exposed reinforcing steel", etc. I would ask that unit price bid items be added for this bid in a similar way. This will allow all participating bidders to get accurate quotes and bid the same work without a difference of opinion.
 - **Answer:** See attached revised Bid Form. Bidders shall provide the spall repair in accordance with Detail B. This detail requires the saw cutting of the edge of spalls (1-1/2" deep) and the removal of concrete around existing reinforcement to 3/4" clear behind the





reinforcement. The reinforcement shall be assumed to have 2" of concrete cover. The areas to be repaired will be specifically identified by the EOR during construction.

- 14. Question: Please confirm that the only 2 areas requiring expansion joint repair are the 2 vertical areas called out on page S2 of the plans. Please provide the number of linear feet of expansion joint requiring repair. Again, the need for repair is a matter of opinion and what requires repair and what doesn't is open to interpretation and could be evaluated differently by the bidders.
 - Answer: See attached revised Bid Form.
- **15. Question:** Sheet S2 of the plans show a "Sikagard" coating system only at the lower concrete pump pedestals. However, the specs have systems called out for submerged concrete, submerged metals, etc. Please provide a detailed finish schedule outlining any other required coating on any of the surfaces for the interior of the structure.
 - Answer: None of the concrete needs to be coated except where explicitly stated in the Drawings (at the pump pedestal and at the possible damaged areas). No stainless steel metal needs to be coated. Equipment shall be painted and coated in accordance with the specification and requirements of the manufacturer.
- **16. Question:** Please confirm that we are to re-paint the exterior of the existing structure only and not remove any existing coatings.
 - **Answer:** The existing surface must be prepared as needed to properly apply the proposed painting system which may involve removal of the existing system. The proposed painting system must be applied per the Manufacturer's written instruction and as indicated in Specification 09900, Painting and Coating.
- **17. Question:** During the Site visit it was noted that multiple bypass pumps are already in place. Is the Contractor allowed to assume these will be used to offset the Contractor's bypass pumping?
 - **Answer:** No. Contractor responsible for providing Bypass capability as if no other pumps were present onsite.

_OT DATE: 4/9/2024 11:10 AM JOHN SOBCZAK **GENERAL STRUCTURAL NOTES**

GENERAL CONDITIONS

- 1. ALL STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE MECHANICAL, CIVIL, ELECTRICAL, AND SHOP DRAWINGS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL REVIEW AND VERIFY DIMENSIONS SHOWN IN ALL PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT THE WORK DEPICTED ON THE DRAWINGS. SHOULD DISCREPANCIES APPEAR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING TO OBTAIN ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH THE WORK.
- FOR ALL ITEMS EMBEDDED IN OR PASSING THROUGH CONCRETE, THE CONTRACTOR SHALL INITIALLY REFER TO MECHANICAL DRAWINGS FOR TYPE, SIZE, LOCATION, AND SPECIAL INSTALLATION REQUIREMENTS FOR THESE ITEMS.
- 4. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT EXISTING STRUCTURES FROM DAMAGE WHEN WORKING IN AND AROUND EXISTING STRUCTURES PERFORMING WORK SUCH AS DEMOLITION, FOUNDATION EXCAVATIONS, AND OTHERS.
- 5. SIZE AND LOCATION OF EQUIPMENT PADS AND ANCHOR BOLTS SHALL BE PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.
- 6. ANY EQUIPMENT THAT MAY INDUCE VIBRATION TO THE STRUCTURE SHALL BE ADEQUATELY ISOLATED FROM THE STRUCTURE.
- 7. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.

DESIGN CRITERIA

BUILDING CODES AND REFERENCES:

- 1. 2020 FLORIDA BUILDING CODE (FBC), SEVENTH EDITION
- 2. REINFORCED CONCRETE:

WATER RETAINING ENVIRONMENTAL STRUCTURES: ACI 350-20 "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES"

ALL OTHER STRUCTURES: ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"

3. STRUCTURAL STEEL: AISC MANUAL OF STEEL CONSTRUCTION, 14TH EDITION

4. ALUMINUM: ADM1-2015, ALUMINUM DESIGN MANUAL

WATERTIGHTNESS OF REINFORCED CONCRETE WATER **RETAINING STRUCTURES**

HYDROSTATICALLY TEST REINFORCED CONCRETE STRUCTURES WHICH WILL CONTAIN WATER PER SPECIFICATIONS AND IN ACCORDANCE TO ACI 350.1-TIGHTNESS TESTING OF ENVIRONMENTAL ENGINEERING STRUCTURES. ALL REPAIRS AND RETESTING OF TANKS SHALL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE OWNER.

ALUMINUM

- ALUMINUM DESIGN, DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO THE LATEST EDITION OF THE ALUMINUM DESIGN MANUAL.
- 2. ALUMINUM IN CONTACT WITH OR EMBEDDED IN CONCRETE OR MASONRY SURFACES SHALL BE COATED WITH A HEAVY COATING OF ALKALI RESISTANT BITUMINOUS PAINT
- ALL BOLTS USED IN CONNECTIONS WITH ALUMINUM MEMBERS SHALL BE STAINLESS STEEL TYPE 316, UNLESS NOTED OTHERWISE.
- ALL WELDING OF ALUMINUM STRUCTURES SHALL CONFORM TO "STRUCTURAL WELDING CODE -ALUMINUM", AWS D1.2, LATEST EDITION.

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&	AND
@	AT
#	NUMBER
ADDTL	ADDITIONAL
AFF	ABOVE FINISHED
	FLOOR
ALUM	ALUMINUM
AEWS	AUTOMATIC END
	WELDED STUD(S)
ALT	ALTERNATE
APROX	APPROXIMATE(LY)
BLD	BUILDING
BM	BEAM
BOT	BOTTOM
CJ	CONTROL JOINT
CL	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY
	UNII
COL	COLUMN
CONC	CONCRETE
CONSTIT	
CUNT	
	DEGREE(S)
DWG	DRAWING
DWI	DOWEL (S)
(E)	EXISTING
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL

		SIRUCI
		EARTH FILL
		UNDISTURBED EAF
		COMPACTED GRAM
)		GROUT OR SAND (A
)		GRATING
) <u> </u>		
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4								
707		RECORD	DRAWINGS					
/ A /	SURVEYED BY:		DRAWN BY:					CI
+	REVIEWED BY:							
VEU:		PROJECT ENGINE	ER	DATE				
AC	APPROVED BY:				ADDENDUM NO. 1	JVS	04/09/24	
- AU	CIT	Y ENGINEER, PUBLIC WORKS TAR	A KIVETT, P.E. #86611	DATE	REVISION	BY	DATE	

STRUCTURAL ABBREVIATIONS

EMBED EQ EW EXIST EXP FE FF	EMBEDMENT EQUAL EACH WAY EXISTING EXPANSION FIRE EXTINGUISHER FAR FACE, FINISHED FLOOR
FG FRP	FINISHED GRADE FIBER REINFORCED PLASTIC
FT	FOOT
FTG	FOOTING
FV	FIELD VERIFY
GA	GAGE
GALV	GALVANIZED
НК	HOOK
HORIZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL
	SECTION
HP	HIGH POINT
ID	INSIDE DIAMETER
JT	JOINT
LB(S)	POUND(S)
LONG	LONGITUDINAL
LP	LOW POINT
MANUF	MANUFACTURER
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	
MISC	MISCELLANEOUS
	METAL
NTS	
00	

OD OH OPNG PCS PEMB	OUTSIDE DIAMETER OPPOSITE HAND OPENING PIECES PRE-ENGINEERED
PERP PL PLF	METAL BUILDING PERPENDICULAR PLATE POUND PER LINEAR
PT PROJ	FOOT PRESSURE TREATED PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE
PVC R	POLYVINYL CHLORIDE
REINF	REINFORCING
REQD	REQUIRED
RO	ROUGH OPENING
SCHED	SCHEDULE(D)
SIM	SIMILAR
SJ	SAWCUT JOINT
SMS	SHEET METAL SCREW
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
Τ/	TOP OF
ТВ	TIE BEAM
T&B	TOP AND BOTTOM
ТНК	THICK
THRU	THROUGH
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TYP	IYPICAL
UNO	OTHERWISE
VERT	VERTICAL
WT	WEIGHT
WWF	WELDED WIRE FABRIC



- 3. PAINT ALL AFFECTED SURFACES TO MATCH EXISTING

LEGEND

STRUCTURAL LEGEND APPLIES TO "S" SHEETS ONLY

	CONCRETE
EARTH	 EXISTING CONCRETE
RANULAR FILL	DEMOLITION
D (AS NOTED)	STEEL
	ALUMINUM

SYMBOLS





ITY OF CLEARWATER, FLORIDA ENGINEERING DEPARTMENT 100 SOUTH MYRTLE AVENUE CLEARWATER, FL 33756



JonesEdmunds SCREW PUMP STRUCTURAL N 730 NE WALDO ROAD, GAINESVILLE, FLORIDA 32641 / (352) 377-5821 324 S. HYDE PARK AVE., SUITE 250 TAMPA, FLORIDA 33606 / (813) 258-0703 SYMBOLS AND

WDD	DWG NAME:	FIELD BOOK:	SURVEYED BY:	SCALE:
'WRF'	S1.DWG			VERT.
	CONTRACT NO .:	DATE DRAWN:	DRAWN BY:	1
REPLACEMENT		OCTOBER 2023	J. MORRIS	HORIZ.
	JOB NO.:	DESIGNED BY:	CHECKED BY:	SHEET NO.: C1
		J. SOBCZAK	D. MORRIS	51
ABBREVIATIONS	APPROVED FOR CONSTRUCTION			
		JOHN V. SOBCZAK, PE #	71407	DATE







HAND-LIFT ALUMINUM STOP GATE DETAILS



EMBEDDED GATE

SLIDE GATE DETAILS

and the

ala



SLUICE GATE-DETAIL

GATE SCHEDULE

ITEM	LOCATION	OPERATOR TYPE	TYPE	QUANT.	CHANNEL WIDTH 'A'	FRAME HGT, 181	GATE HGT. 'C'	MAX. WATER DEPTH @ GATE	REMARKS
1	INFLUENT PUMP STA.	CRANK /FLOORSTAND	SLUICE	1	N.A.	18'-6"	SEE REMARKS	15'-6*	36° DIA. UNSEATING HEAD
2	INFLUENT STRUCT. SCREEN CHANNELS	WHEEL /BENCHSTAND	SLIDE	2	3'-0"	9'-0"	4'-0"	4'-0"	EMBEDDED
3	INFLUENT STRUCT. GRIT BYPASS	WHEEL /BENCHSTAND	SLIDE	1	4'-0"	10'-3*	4'-9"	4'-9"	EMBEDDED
4	INFLUENT STRUCT. OUTLET BOX	CRANK /FLOORSTAND	SLUICE	2	N.A.	1@ 19'-3" 1@12'-2 1/2"	SEE REMARKS	1@16'-3* 1@9'-3*	30° DIA. SEATING HEAD
5	AERATION TANK #9 OUTLET BOX	CRANK /FLOORSTAND	SLUICE	3	N.A.	16'-11"	SEE REMARKS	13'-11"	42° DIA, SEATING HEAD
6	AERATING TANK #9 EAST CHANNEL	HANDLE	STOP	1	2'-10*	3'-10 1/2"	3'-4"	3'-4"	
7	INTERNAL RECYCLE PUMPING STATION	WHEEL /BENCHSTAND	SLIDE	3	6'-8"	13'-0"	6'-0"	6'-0*	EMBEDDED
8	OXIC REACTOR EFFLUENT	CRANK /BENCHSTAND	WEIR	3	20'-0*	N.A.	1'-9"	2'-6"	MOVABLE WEIRS-SEE SHT.66
9	EFFLUENT FILTER CLEARWELL OUTLET	CRANK /FLOORSTAND	SLUICE	1	N.A.	15'-0"	SEE REMARKS	10'-0"	4'X4' UNSEATING HEAD
10	CHLORINATION TANKS INLETS	CRANK /FLOORSTAND	SLUICE	2	N.A.	17'-0"	SEE REMARKS	14'-0"	3'X3' SEATING HEAD

NOTE: SUBMIT DETAILS FOR ADEQUACY RE

		1		B 3-17-89	
	ENGINEER	EAST ADVANCED POLLUTION CONTROL FACILITY	DESIGNED LAS PROJ. NO. 87072-2		Briley, I
PEWER PERSON	ACCEPTED: COPTRIGHT (C) 19 ALL RIGHTS RESERVED	GATE SCHEDULE & DETAILS	DRAWN GIS DATE: OCT. 1988	SHEET NO. 170 OF 202	and A
REVISION DESCRIPTION BY	Briley, Wild and Associates, inc.	CLEARWATER, FLORIDA	SPS SCALE NONE	SULC NO 17716	Consulting Engineers

BIDDER'S PROPOSAL

PROJECT: CLEARWATER EAST WRF SCREW PUMP REPLACEMENT (22-0028-UT)

CONTRACTOR: _____

BIDDER'S GRAND TOTAL: \$______(Numbers)

BIDDER'S GRAND TOTAL: _____

_____(Words)

Item No.	Spec. No.	Item Description	Qty.	Unit	Unit Price	Amount				
BASE BI	BASE BID									
1	01200	Mobilization/Demobilization and General Conditions (not to exceed 8% of the Base Bid)	1	LS	\$	\$				
2	01200	Screw Lift Station Upgrades	1	LS	\$	\$				
3	01200 Refurbishment of Slide Gates		1	AL	\$144,000	\$144,000				
4	01200	Crack Repair	300	LF	\$	\$				
5	01200	0 Spall Repair		SF	\$	\$				
6	01200	0 Expansion Joint Repair		LF	\$	\$				
7	01200 Owner's Contingency		1	LS	\$	\$				
		Total (Bid Items 1-7)			\$	\$				
DEDUCT	DEDUCTIVE BID ALTERNATE									
А	01200	Slide Gate Replacement	1	LS	- \$	- \$				
В	01200	Individual Bypass	1	LS	- \$	- \$				

C 01200 Omitting Concrete Repair of Effluent Channel	1	LS	- \$	- \$
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THE BIDDER'S GRAND TOTAL ABOVE IS HIS TOTAL BID BASED ON HIS UNIT PRICES AND LUMP SUM PRICES AND THE ESTIMATED QUANTITIES REQUIRED FOR EACH SECTION. THIS FIGURE IS FOR INFORMATION ONLY AT THE TIME OF OPENING BIDS. THE CITY WILL MAKE THE TABULATION FROM THE UNIT PRICES AND LUMP SUM PRICE BID. FOR DETERMINATION OF APPARENT LOW BIDDER, BIDS WILL BE COMPARED ON THE BASIS OF THE AGGREGATE AMOUNT OF THE BASE BID, PLUS ANY COMBINATION OF THE DEDUCTIVE ALTERNATES AS DETERMINED BY THE OWNER. IF THERE IS AN ERROR IN THE TOTAL BY THE BIDDER, IT SHALL BE CHANGED AS ONLY THE UNIT PRICES AND LUMP SUM PRICE SHALL GOVERN.

THE CONTRACTOR SHALL PROVIDE COPIES OF A CURRENT CONTRACTOR LICENSE/REGISTRATION WITH THE STATE OF FLORIDA <u>AND</u> PINELLAS COUNTY IN THE BID RESPONSE.

SECTION 01200 MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. This Section covers methods of measurement and payment for items of work under this Contract.
- B. The total Contract Price shall cover all work required by the Contract Documents. All cost in connection with the proper and successful completion of the work including furnishing all materials, equipment, and tools and performing all necessary labor and supervision to fully complete the work, shall be included in the unit price and lump-sum Bid prices. All work not specifically set forth as a pay item in the Bid Form or Bid Schedule shall be considered a subsidiary/ ancillary obligation of the Contractor and all costs in connection with these subsidiary/ancillary obligations shall be included in the Bid(s) to provide a complete and functional Project.

1.02 EXCAVATION, TRENCHING, AND CLEARING

A. Except where otherwise specified, the unit price or lump-sum price bid for each item of work which involves excavation, trenching, clearing, grubbing, or disposal of cleared and grubbed materials shall include all costs for such work. No direct payment shall be made for clearing, grubbing, disposal of cleared or grubbed materials, excavation, trenching, disposal of surplus excavated material, handling water (and groundwater), and purchasing and hauling of required fill material. All excavation and trenching shall be unclassified as to materials which may be encountered; in addition, trenches shall be unclassified as to depth, unless otherwise stated.

1.03 LUMP SUM

A. For lump-sum items, payments shall be made to the Contractor in accordance with an accepted Progress Schedule of Values on the basis of actual work completed and accepted by the Owner at the final completion of the Project.

1.04 UNIT PRICE

A. For unit price items, payment shall be made based on the actual amount of work accepted by the Owner and for the actual amount of materials in place at the final completion of the Project, as confirmed by the final measurements.

B. After the work is completed and before final payment is made, the Engineer will make final measurements, with all required assistance from the Contractor, to determine the quantities of various items of work accepted as the basis for the final unit price payment.

1.05 PAYMENT FOR INCREASED OR DECREASED QUANTITIES

- A. When alterations in the quantities of unit price work not requiring a Change Order(s), as herein provided for, are ordered and performed, the Contractor shall accept payment in full at the Contract unit price multiplied by the actual quantities of work constructed and accepted by the Owner at the completion of the project.
- B. The actual percentage of each lump-sum bid item completed by the Contractor and accepted by the Owner at the final completion of the Project will be paid to the Contractor.

1.06 DELETED ITEMS

A. Should any items contained in the Bid Schedule(s) be found unnecessary for the proper completion of the work contracted, the Engineer may eliminate such items from the Contract. This action shall in no way invalidate the Contract and no financial allowance or compensating payment for anticipated profit, overhead, etc., will be made for items so eliminated in making final payment to the Contractor.

1.07 PARTIAL PAYMENTS

A. Partial payments will be made monthly as the work progresses. Partial payment will be made subject to the provisions of the General and Supplementary Conditions.

1.08 PAYMENT FOR STORED MATERIAL DELIVERED TO THE PROJECT

A. When requested by the Contractor and at the discretion of the Owner, payment may be made for all or part of the value of acceptable materials and equipment to be incorporated into bid items, which have not been used, and which have been delivered to the construction site or placed in storage places acceptable to the Owner. The Contractor shall provide receipts for all stored material items requested for reimbursement which clearly identify the stored material item, where it is to be constructed, the unit cost of the item, as well as the total cost of the delivered item(s), the quantity of the item, the brand name of the item, and the supplier. Note that there are additional documentation requirements and storage requirements within the Contract Documents that must also be met before the Contractor can be reimbursed for these stored materials.

B. No payment shall be made for fuels, supplies, installation or connection hardware, lumber, false work, or other similar materials or on temporary structures or other work (items) of any kind which are not a permanent part of the Contract. Items having a value of less than \$2,500 shall not be compensated for as a stored material item.

1.09 FINAL PAYMENT

A. If requested by the Engineer, the Contractor shall field verify all quantities in dispute by using visual observation, taped measurements, or other methods designated by the Engineer. The field verification shall be made in the presence of the Engineer and agreed to by both the Engineer and the Contractor. The Engineer will prepare a final adjusting Change Order that will adjust the final quantities of the project Bid Schedule to reflect the actual work accepted by the Owner and for which the Contractor will be compensated.

1.10 SCHEDULE OF VALUES

A. A schedule of values for the lump-sum bid items and some of the unit-price bid items as required by the Engineer shall be submitted and accepted before the first pay request is approved by the Engineer. The schedule of values shall be based on the prices bid in the Bid Schedule(s). Prices bid in the Bid Schedule(s) cannot be changed in the schedule of values; they can only be broken down into more detail so that the Engineer can more accurately review and approve the Contractor's pay application for the completed work.

1.11 MISCELLANEOUS CONSTRUCTION ITEMS

- A. When pipe/service lines are constructed across a road, the road shall not be cut to perform this construction unless authorized in writing by the Engineer. Service lines are to be bored, jack and bored, or horizontally directionally drilled (HDD) under the road. Jetting of water lines or water service lines will not be allowed.
- B. The Contractor shall take all precautions necessary to protect existing utilities, roads, and miscellaneous items from damage during construction.
- C. The Contractor shall repair, relocate, or replace existing utilities, roadways, and miscellaneous items to pre-construction conditions.
- D. All repairs, relocations, and replacements necessary are considered incidental to the work and will be at the Contractor's cost, with no cost to the Owner.

PART 2 PAY ITEM DESCRIPTIONS

2.01 BID

The descriptions provided in the following Paragraphs are to be used by the Bidder in preparing the Bid Schedule(s). They generally indicate how the major workscope items and their respective costs are to be separated into the line items listed in the Bid Schedule(s). These descriptions are not fully representative nor all-inclusive of the work required to complete the project in accordance with the Contract Documents. It is the Bidder's responsibility to include all required costs within the most appropriate line item(s).

2.02 BASE BID

Item 1. <u>Mobilization/Demobilization and General Conditions (not to exceed 8% of the Base</u> <u>Bid</u>)—This lump-sum item shall include and cover the costs for performing construction, preparatory, and overhead operations, including but not limited to moving personnel and equipment to and from the site; providing sanitary facilities and temporary utilities; providing project administration and management, insurance, bonds, and Owner and Engineer indemnification; and all other similar activities and facilities necessary for executing this project. This item shall not exceed 8% of the Base Bid amount. The Contractor will be paid 20% of this item upon completion of mobilization and 10% upon demobilization; the remainder will be prorated equally over the construction period.

Item 2. <u>Screw Lift Station Upgrades</u>—The Contractor shall furnish all labor, materials, equipment, and services for the improvements to the screw lift station at the East Water Reclamation Facility in accordance with the Contract Documents including but not limited to:

- Unload, move, and adjust the screw pumps.
- Install all coffer dams, pump-down equipment, piping, and valves.
- Remove three existing screw pumps and all associated supports, lubrication systems, and appurtenances.
- Demolish existing grease pumps and local safety switches for the three screw pumps.
- Load, transport, and dispose of demolished materials in an approved disposal facility in accordance with applicable federal, state, and local regulations and in accordance with the Contract Documents.
- Furnish and install three screw pumps, all associated supports, lubrication systems, and appurtenances. The Bid item is to include any anchor bolts, equipment, components, etc., that are not specifically included but are necessary to place the replacement screw pump into service.
- Install new electrical conduit, wire, starter panels, and related components and modify the existing motor control center associated with the three new screw pumps.

- Reconnect the proposed signal wiring to the existing control panel and supervisory control and data acquisition (SCADA) system to match existing.
- Include the costs for all other work, material, equipment, and items not included in other Bid items.
- Perform testing and startup.

All work shall be performed in accordance with the Contract Documents. Payment for this item will be on a lump-sum basis in accordance with a percentage of completion, in accordance with the Contractor's approved schedule of bid-item breakdown and upon Engineer verification.

Item 3. <u>Refurbishment of Slide Gates</u>—This includes refurbishing the existing three slide gates. The Contractor shall be responsible for coordinating the refurbishment requirements with the slide gate manufacturer including but not limited to removing, shipping, repairing, and replacing. This item is an allowance and shall be coordinated in accordance with the Contract Documents and specifically Specification 01290, Schedule of Values, and as directed by the Owner. The Owner/Engineer will approve refurbishment items for this Work on a case-by-case basis. Reimbursement will be made by the Owner at the actual invoice amount for approved items and meeting acceptance criteria. The Contractor shall coordinate the refurbishment, and invoices shall be submitted to the Owner and Engineer for review and payment. Copies of invoices from the manufacturer must accompany the Contractor's invoices. The Owner will not reimburse any unapproved work resulting from actions of the Contractor.

Item 4. <u>Crack Repair</u> – This item includes providing crack injection on the Screw Pump Structure. The Contractor shall be responsible for repairing any crack which is leaking, where leaking is defined as the presence of moisture, wet to the touch, on the exterior of the structure when in service. If a crack is leaking then that means the crack extends through the wall thickness. Payment for this item will be based on actual unit quantity of cracks injected in accordance with the Contractor's Bid Item and Approved Schedule of Values and upon City verification.

Item 5. <u>Spall Repair</u> – This item includes providing spall repair in accordance with detail B on Sheet S1 of the Contract Drawings. The Contractor shall be responsible for saw-cutting the edge of spalls 1.5-inches deep and removing the concrete around existing reinforcement to 0.75-inches clear behind the reinforcement. The reinforcement shall be assumed to have 2-inches of concrete cover. The areas to be repaired will be specifically identified by the engineer of record during construction. Payment for this item will be based on actual unit quantity of spall repair performed in accordance with the Contractor's Bid Item and Approved Schedule of Values and upon City verification.

Item 6. <u>Expansion Joint Repair</u> – This item include the repair of expansion joints in accordance with detail A on Sheet S1 of the Contract Drawings. Payment for this item will be based on actual unit quantity of expansion joint repaired in accordance with the Contractor's Bid Item and Approved Schedule of Values and upon City verification.

Item 7. <u>Owner's Contingency</u>—The Contractor shall furnish all labor, materials, equipment, and services to perform unforeseen work not included in the other Bid items that may be requested and approved by the Engineer and Owner. The scope of work and cost of this additional work shall be agreed on in writing and approved by the Engineer and Owner before the work begins. The Contractor will be paid based on the agreed-on schedule of values for the approved work.

2.03 DEDUCTIVE BID ALTERNATE

The Bidder shall submit its Bid on the basis of the Base Bid and shall provide separate negative Bid prices for the relative cost reduction for each deductive alternate, if any, described in the Bid Documents and as provided for on the Bid Form.

For determining the apparent low Bidder, Bids will be compared on the basis of the aggregate amount of the Base Bid, plus any combination of the deductive alternates as determined by the Owner.

Item A. <u>Slide Gate Replacement</u>—The cost for the lump-sum deductive bid alternate item in the Bid Form shall include full compensation for furnishing all labor, materials, equipment, and services related to replacing the three slide gates in kind with new slide gates in lieu of refurbishing the three gates as required in the Base Bid. This work shall include but not be limited to the gates, appurtenances, and structural modifications required to replace and secure the gates, warranties, testing, etc. If the Owner elects to include this optional deductive bid alternate, the relative cost reduction shall be applied to Bid Item 3, and payment for this item will be on a lump-sum basis in accordance with a percentage of completion, in accordance with the Contractor's approved schedule of bid-item breakdown and upon the Engineer's verification.

Item B. <u>Individual Bypass</u>—The cost for the lump-sum deductive bid alternate item in the Bid Form shall include full compensation for furnishing all equipment and services related to an alternate bypass plan used to bypass and/or isolate individual screw pumps for replacement in lieu of the bypassing the entire screw pump station as required in the Base Bid. This work shall include but not be limited to any isolation materials (coffer dam, inflatable devices, etc.), bypass pumps (if required), accessories, etc. The approval of this deductive bid alternate shall depend on Owner and Engineer approval of a formally submitted alternate bypass plan that shall be required to be submitted alongside the Bid. If the Owner elects to include this optional deductive bid alternate, the relative cost reduction shall be applied to Bid Item 2, and payment for this item will be on a lump-sum basis in accordance with a percentage of completion, in accordance with the Contractor's approved schedule of bid-item breakdown and upon the Engineer's verification. Item C. <u>Omitting Concrete Repair of Effluent Channel</u>—The cost for the lump-sum deductive bid alternate item in the Bid Form shall include full reduction of cost for furnishing all equipment and services related to the concrete repair of the effluent channel as indicated in the Contract Documents. This reduction of work shall include reduced bypass, coating, inspection, crack repair, and any other efforts as indicated in the Contract Documents to complete the repair of the effluent channel. If the Owner elects to include this optional deductive bid alternate, the relative cost reduction shall be applied to Bid Item 2, and payment for this item will be on a lump-sum basis in accordance with a percentage of completion, in accordance with the Contractor's approved schedule of bid-item breakdown and upon the Engineer's verification.

END OF SECTION