



MANATEE COUNTY FLORIDA

September 16, 2013

TO: All Interested Bidders
SUBJECT: Invitation for Bids #13-1542CD
Rehabilitation of Headworks and Clarifier 3 and 4 at the Southwest Water Reclamation Facility

ADDENDUM #1

Bidders are hereby notified that this Addendum shall be acknowledged on page 00300-1 of the Bid Form and made a part of the above named bidding and contract documents. Bids submitted without acknowledgment of the Addendum will be considered incomplete.

The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

1. **CHANGE** Article A.06, Deadline for Clarification, on page 00010-2 of the bid documents to read as follows:

September 23, 2013 at 3:00 PM shall be the deadline to submit all inquiries, suggestions, or requests concerning interpretation, clarification or additional information pertaining to the Invitation for Bids to the Manatee County Purchasing Division.

This deadline has been established to maintain fair treatment for all potential Bidders, while maintaining the expedited nature of the Economic Stimulus that the contracting of this Work may achieve.

2. **ADD** the following to Article B.05, Inspection of Site, on page 00020-2 of the bid documents:

To arrange for site visits, the bidders may contact Anthony Benitez at 941-708-7450 ext 7333 between the hours of 8:00 AM and 4:00 PM (Monday thru Friday).

3. **DELETE** Bid Form pages 00300-2 thru 00300-3 and **INSERT REVISED** Bid Form pages 00300-2 thru 00300-3 that are attached to this Addendum #1.
4. **DELETE** all of Section 01010- Summary of Work in the Headworks Technical Specifications and **INSERT** the Revised Section 01010- Summary of Work in the Headwork Technical Specifications that are attached to this Addendum #1.

Financial Management Department –Purchasing Division
1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205
PHONE: 941.749.3014 * FAX: 941.749.3034
www.mymanatee.org

5. **DELETE** all of Section 01150- Measurement and Payment in the Headworks Technical Specifications and **INSERT** the Revised Section 01150- Measurement and Payment in the Headwork Technical Specifications that are attached to this Addendum #1.
6. **DELETE** all of Section 01150- Measurement and Payment in the Clarifier 3 and 4 Technical Specifications and **INSERT** the Revised Section 01150- Measurement and Payment in the Clarifier 3 and 4 Technical Specifications that are attached to this Addendum #1.
7. **ADD** the following to Key Note 11 on Plan Sheet Number M-01 of the Headworks Plan Set:

The manufacturer of crane to provide mounting details and calculations for each crane with shop drawings and calculations to be signed and sealed by a Registered Professional Engineer in the State of Florida. The Project Engineer will review and approve details and calculations before approving shop drawings.

8. **DELETE** Plan Sheet Numbers S-01, S-02, and T-01 of the Headworks Plan Set and **INSERT** the REVISED Plan Sheet Numbers S-01, S-02, and T-01 of the Headworks Plan Set that are attached to this Addendum #1.
9. **CHANGE** Article 2.03.A.5, Walking Surface, of Section 11353 in the Clarifier 3 and 4 Technical Specifications to read as follows:

5. Walking Surface:

- a. Materials: Aluminum checkered treadplate on center platform and aluminum grating on access bridge.

10. CLARIFICATIONS OF ENGINEER'S CHANGES:

- a. Sheet #S-01, Headworks Rehabilitation Top of Structure Plan:
 - i. Key Note 2 added for work associated with 2 Grit Chambers.
 - ii. Key Note 3 added to show handrail work.
- b. Sheet #S-02, Headworks Rehabilitation Intermediate Plan:
 - i. Added Grit Chambers (2) Repair Sequence.
- c. Sheet #T-01, Headworks Rehabilitation Typical Details:
 - i. Added two details A400, Aluminum Grating Rebate and Seats.
 - ii. Added detail S184, Concrete Curb.
- d. Added grit chamber repair work to Summary of Work and Work Sequence in Section 01010 of the Headworks Technical Specifications.
- e. Bid items were added for the grit chamber repair and bid item numbers changed in Article 1.07 of Section 01150, Measurement and Payment, of the Headworks Technical Specifications.
- f. Bid item numbers changed in Article 1.07 of Section 01150, Measurement and Payment, of the Clarifier 3 and 4 Technical Specifications.

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11. **CHANGE** the Due Date and Time to **Wednesday, October 2, 2013 at 3:00 PM.**

The following questions have been presented by potential bidders:

QUESTION #1: Will any dewatering be required around clarifiers to prevent uplift once drained?

RESPONSE #1: No. Clarifiers have pressure relief valves in floors. Contractor shall be responsible for removing water from the pressure relief valves inside the clarifiers during construction.

QUESTION #2: Please clarify how crane will attach to Headworks floor-requires 18" anchors and slab is only 8" thick.

RESPONSE #2: See item #7 above in this Addendum #1.

QUESTION #3: How much additional liner will be required at grit chamber?

RESPONSE #3: See revised BID FORM attached to this Addendum #1.


QUESTION #4: What will be the quantity of structural repairs to deck?

RESPONSE #4: See items #3, 5, and 8 above of this Addendum #1.

END OF ADDENDUM #1

Bids will be received at Manatee County Purchasing, 1112 Manatee Avenue West, Bradenton, Florida 34205 until **Wednesday, October 2, 2013 at 3:00 PM.**

Sincerely,


Melissa M. Wendel, CPPO *for*
Purchasing Official

Financial Management Department –Purchasing Division
1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205
PHONE: 941.749.3014 * FAX: 941.749.3034
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BID FORM

(Submit in Triplicate) Section 00300

REHABILITATION OF HEADWORKS AND CLARIFIER 3 AND 4 AT THE SOUTHWEST WATER RECLAMATION FACILITY

Bid "A" Based on Completion Time of 425 Calendar Days

ITEM NO.	DESCRIPTION	EST. QTY.	U/M	UNIT PRICE	EXTENDED PRICE
MOBILIZATION/DEMOBILIATION					
1	MOBILIZATION/ DEMOBILIZATION	1	LS	\$	\$
	SUBTOTAL (MOBILIZATION/DEMOBILIZATION ONLY)				
HEADWORKS REHABILITATION					
2	CONVEYERS	2	EA	\$	\$
3	CLASSIFIERS AND PIPING	2	EA	\$	\$
4	JIB CRANES AND HOISTS	2	EA	\$	\$
5	EXISTING CHANNEL LINER REMOVAL, NEW LINER, AND CONCRETE REPAIRS	1,000	SF	\$	\$
6	REPAIR OF CONCRETE CURB AND REBATE AROUND GRIT CHAMBERS	1	LS	\$	\$
7	COATING SYSTEM INSIDE GRIT CHAMBERS	500	SF	\$	\$
8	EPOXY INJECTION FOR CONCRETE CRACK REPAIR	150	LF	\$	\$
9	ANTI-SLIP SAFETY TREADS FOR STAIRS	180	LF	\$	\$
10	ELECTRICAL AND INSTRUMENTATION	1	LS	\$	\$
11	DISCRETIONARY WORK (USED ONLY WITH COUNTY APPROVAL)				\$100,000.00
	SUBTOTAL (HEADWORKS REHABILITATION ONLY)				\$

Bidder Name: _____

Authorized Signature: _____

BID FORM

(Submit in Triplicate) Section 00300

REHABILITATION OF HEADWORKS AND CLARIFIER 3 AND 4 AT THE SOUTHWEST WATER RECLAMATION FACILITY

Bid "A" Based on Completion Time of 425 Calendar Days

ITEM NO.	DESCRIPTION	EST. QTY.	U/M	UNIT PRICE	EXTENDED PRICE
CLARIFIER 3 AND 4 REHABILITATION					
12	Miscellaneous Work and Cleanup	1	LS	\$	\$
13	Clarifier Mechanisms	2	EA	\$	\$
14	Scum System	2	EA	\$	\$
15	RAS Pumps	3	EA	\$	\$
16	Electrical and Instrumentation	1	LS	\$	\$
17	Structural Inspection and Repair Allowance				\$40,000.00
18	DISCRETIONARY WORK (USED ONLY WITH COUNTY APPROVAL)				\$50,000.00
	SUBTOTAL (CLARIFIER 3 AND 4 REHABILITATION ONLY)				\$
	TOTAL PRICE FOR BID "A" - Based on Completion Time of <u>425</u> Calendar Days				\$

Bidder Name: _____

Authorized Signature: _____

SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS/REQUIREMENTS INCLUDED

- A. The work included in this contract consists of the following:
 - 1. Selective demolition of the channel and grit chamber liner system and concrete, conveyors, grit cyclones and classifiers, area lighting, and electrical and I&C conduits.
 - 2. Inspection of channels and grit chambers to establish limits of repair.
 - 3. New liner repairs and coatings for channels and grit chambers.
 - 4. Concrete and steel rehabilitation and repair.
 - 5. New concrete curb with rebate around grit chambers.
 - 6. New screenings conveyors and grit cyclones and classifiers.
 - 7. New electrical and I&C wiring and conduits from existing power source for new equipment and new lighting.
- B. The Contractor shall furnish all shop drawings, working drawings, labor, materials, equipment, tools, services and incidentals necessary to complete all work required by these Specifications and as shown on the Contract Drawings.
- C. The Contractor shall perform the work complete, in place and ready for continuous service and shall include any repairs, replacements, and/or restoration required as a result of damages caused prior to acceptance by the Owner.
- D. The Contractor shall furnish and install all materials, equipment and labor which is reasonably and properly inferable and necessary for the proper completion of the work, whether specifically indicated in the Contract Documents or not.

1.02 CONTRACTS

- A. Construct all the Work under a single contract.

1.03 WORK SEQUENCE

- A. Headworks Shutdown:
 - 1. Only one influent channel can be out of service for rehabilitation at a time.
 - 2. Contractor shall complete all work on one influent channel and corresponding grit chamber before beginning construction on the other influent channel and grit chamber. All work on the first influent channel, including the concrete and steel repairs, new liner repairs, concrete curb around grit chamber, cyclone, grit classifier, conveyor, startup and testing, shall be completed prior to beginning work on the second channel.
 - 3. Coordinate with plant staff on sequence of headworks shutdown requirements.
- B. All work done under this Contract shall be done with a minimum of inconvenience to the users of the system or facility. The Contractor shall coordinate his work with

private property owners such that existing utility services are maintained to all users to the maximum extent possible.

- C. The Contractor shall, if necessary and feasible, construct the work in stages to accommodate the Owner's use of the premises during the construction period; coordinate the construction schedule and operations with the Owner's Representative.
- D. The Contractor shall, where feasible, construct the Work in stages to provide for public convenience and not close off public use of any facility until completion of construction to provide alternative usage.

1.04 CONSTRUCTION AREAS

- A. The Contractor shall: Limit his use of the construction areas for work and for storage, to allow for:
 - 1. Work by other Contractors.
 - 2. Owner's Use.
 - 3. Public Use.
- B. Coordinate use of work site under direction of Engineer or Owner's Representative.
- C. Assume full responsibility for the protection and safekeeping of products under this Contract, stored on the site.
- D. Move any stored products under the Contractor's control, which interfere with operations of the Owner or separate contractor.
- E. Obtain and pay for the use of additional storage of work areas needed for Contractor operations.

1.05 OWNER OCCUPANCY

- A. It is assumed that portions of the Work will be completed prior to completion of the entire Work. Upon completion of construction of each individual facility, including testing, if the Owner, at its sole discretion, desires to accept the individual facility, the Contractor will be issued a dated certificate of completion and acceptance for each individual facility. The Owner will assume ownership and begin operation of the individual facility on that date and the three-year guaranty period shall commence on that date. The Owner has the option of not accepting the entire work as a whole until it is completed, tested and approved by the Engineer and Owner.

1.06 PARTIAL OWNER OCCUPANCY

- A. The Contractor shall schedule his operations for completion of portions of the Work, as designated, for the Owner's occupancy prior to substantial completion of the entire work.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01150

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE

- A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Form section of the Contract Documents. Payment will be made based on the specified items included in the description in this section for each bid item.
- B. All contract prices included in the Bid Form section will be full compensation for all shop drawings, working drawings, labor, materials, tools, equipment, and incidentals necessary to complete the construction as shown on the Drawings and/or as specified in the Contract Documents to be performed under this Contract. Actual quantities of each item bid on a unit price basis will be determined upon completion of the construction in the manner set up for each item in this section of the Specifications. Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this Contract.

1.02 ESTIMATED QUANTITIES

- A. The quantities shown are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made. The Owner/Engineer does not assume any responsibility for the final quantities, nor shall the Contractor claim misunderstanding because of such estimate of quantities. Final payment will be made only for satisfactorily completed quantity of each item.

1.03 WORK OUTSIDE AUTHORIZED LIMITS

- A. No payment will be made for work constructed outside the authorized limits of work.

1.04 MEASUREMENT STANDARDS

- A. Unless otherwise specified for the particular items involved, all measurements of distance shall be taken horizontally or vertically.

1.05 AREA MEASUREMENTS

- A. In the measurement of items to be paid for based on area of finished work, the lengths, and/or widths to be used in the calculations shall be the final dimensions measured along the surface of the completed work within the neat lines shown or designated.

1.06 LUMP SUM ITEMS

- A. Where payment for items is shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum items.

Lump sum contracts shall be complete, tested and fully operable prior to request for final payment. Contractor may be required to provide a breakdown of the lump sum totals.

1.07 UNIT PRICE ITEM

- A. Separate payment will be made for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the work shall be considered to be included in the scope of the appropriate listed work items.
- B. No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work. Final payments shall not be requested by the Contractor or made by the Owner until as-built (record) drawings have been submitted and approved by the Engineer.
 - 1. Shop Drawings, Working Drawings.
 - 2. Clearing, grubbing, and grading except as hereinafter specified.
 - 3. Trench excavation, including necessary pavement removal and rock removal, except as otherwise specified.
 - 4. Dewatering and disposal of surplus water.
 - 5. Structural fill, backfill, and grading.
 - 6. Replacement of unpaved roadways, and shrubbery plots.
 - 7. Cleanup and miscellaneous work.
 - 8. Foundation and borrow materials, except as hereinafter specified.
 - 9. Testing and placing system in operation.
 - 10. Any material and equipment required to be installed and utilized for the tests.
 - 11. Pipe, structures, pavement replacement, asphalt and shell driveways, and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
 - 12. Maintaining the existing quality of service during construction.
 - 13. Maintaining or detouring of traffic.
 - 14. Appurtenant work as required for a complete and operable system.
 - 15. Seeding and hydromulching.
 - 16. As-built Record Drawings.

BID ITEM NO. 1- MOBILIZATION/DEMobilIZATION

Measurement and payment for this Bid Item shall include full compensation for the required 100 percent (100%) Performance Bond, 100 Percent (100%) Payment Bond, all required insurance for the project and the Contractor's mobilization and demobilization costs as shown in the Bid Form.

Payment for mobilization shall not exceed 10 percent (10%) of the total Contract cost unless the Contractor can prove to the Owner that his actual mobilization cost exceeds 10 percent (10%).

BID ITEM NO 2 - CONVEYORS

Payment for all work included under this Bid Item shall represent full compensation in accordance with the unit price bid for the removal and replacement of two screening conveyors, and installation of associated piping and valves; and all other materials and equipment necessary for a complete and fully operable system, including testing and start-up, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this unit price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO 3 – CLASSIFIERS AND PIPING

Payment for all work included under this Bid Item shall represent full compensation in accordance with the unit price bid for the removal and replacement of two classifiers and cyclones; removal and replacement of plant service water and grit slurry piping and valves; and all other materials and equipment necessary for a complete and fully operable system, including testing and start-up, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this unit price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO 4 – JIB CRANES AND HOISTS

Payment for all work included under this Bid Item shall represent full compensation in accordance with the unit price bid for two manual jib cranes and hoists; and all other materials and equipment necessary for a complete and fully operable system, including testing and start-up, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this unit price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO 5 – EXISTING CHANNEL LINER REMOVAL, NEW LINER, AND CONCRETE REPAIRS

Payment for all work under this Bid Item shall represent full compensation in accordance with the unit price bid per square foot of concrete channel liner removed, new liner system, and 2-inches in depth of concrete repairs as shown on the Bid Form. CONTRACTOR shall cut out the T-Lock in areas where the liner is damaged, repair damaged concrete to a maximum depth of 2-inches, replace liner, and dispose of demolition waste. Concrete shall be repaired with materials as specified in 03926, paragraph 2.01 with bonding agent as specified in 03926, paragraph 2.03 applied as instructed in 03926, paragraph 3.05C.

Measurement for the liner removal shall be per actual square foot with a maximum of 2-inches in concrete repairs as shown on the Contract Drawings sheet S-2 General Notes. If concrete repairs are deeper than 2-inches, the cost will be prorated in half inch increments for the area affected based on approval of the ENGINEER. Payment shall represent full compensation for all labor, materials, and equipment necessary to complete the work, ready for approval and acceptance by the Engineer/Owner.

BID ITEM NO 6 – CONCRETE CURB AND REBATE AROUND GRIT CHAMBERS

Payment for all work under this Bid Item shall represent full compensation in accordance with the unit price bid for removal and disposal of existing rebate; installation of new concrete curbing and rebate; and removal and replacement of existing handrail.

Measurement for periodic payments of this unit price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO 7 – COATING SYSTEM INSIDE GRIT CHAMBERS

Payment for all work under this Bid Item shall represent full compensation in accordance with the unit price bid per square foot of new coating system as shown on the Bid Form. New coating system shall be as noted on Drawing S-02.

Measurement for the coating system shall be per actual square footage applied as shown on the Contract Drawings or as ordered by the Engineer in writing. Payment shall represent full compensation for all labor, material, and equipment to complete the work ready for approval and acceptance by the Engineer/Owner.

BID ITEM NO 8 – EPOXY INJECTION FOR CONCRETE CRACK REPAIR

Payment for all work under this Bid Item shall be made at the applicable Contract unit price bid per linear foot of concrete crack repair as shown on the Bid Form for furnishing and injection of the installing the miscellaneous concrete, measured in place. Any crack repair necessary for replacing defective work or damaged caused by the Contractor shall be at the expense of the Contractor. Epoxy injection specifically included under any other Bid Item will not be measured or paid for under this Bid Item.

Measurement for the epoxy injection shall be per actual linear foot of crack repaired as shown on the Contract Drawings or as ordered by the Engineer in writing. For payment purposes, depth of crack shall be assumed to be a uniform 2-inch over the measured linear foot of crack repaired. Payment shall represent full compensation for all labor, materials, and equipment for mixing and injection of the epoxy, and all incidentals necessary to complete the concrete work, ready for approval and acceptance by the Engineer/Owner.

BID ITEM NO 9 – ANTI-SLIP SAFETY TREADS FOR STAIRS

Payment for all work under this Bid Item shall be made at the applicable Contract unit price bid per linear foot of anti-slip safety threads on stairs, and all other materials and equipment necessary for a complete and fully operable system, as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

BID ITEM NO 10 – ELECTRICAL AND INSTRUMENTATION

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid for the Electrical and Instrumentation work including new conduit and wiring; new area lighting; removal and replacement of classifier and conveyor control panels, modification of existing MCC (motor control center), and all other materials and equipment necessary for a complete and fully operable system, including testing and start-up, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO 11 - DISCRETIONARY WORK

Payment for all work under this Bid Item and listed in the Bid Form shall be made only at the Owner's discretion in order to satisfactorily complete the project in accordance with the Plans and Specifications.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01150

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE

- A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Form section of the Contract Documents. Payment will be made based on the specified items included in the description in this section for each bid item.
- B. All contract prices included in the Bid Form section will be full compensation for all shop drawings, working drawings, labor, materials, tools, equipment, and incidentals necessary to complete the construction as shown on the Drawings and/or as specified in the Contract Documents to be performed under this Contract. Actual quantities of each item bid on a unit price basis will be determined upon completion of the construction in the manner set up for each item in this section of the Specifications. Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this Contract.

1.02 ESTIMATED QUANTITIES

- A. The quantities shown are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made. The Owner/Engineer does not assume any responsibility for the final quantities, nor shall the Contractor claim misunderstanding because of such estimate of quantities. Final payment will be made only for satisfactorily completed quantity of each item.

1.03 WORK OUTSIDE AUTHORIZED LIMITS

- A. No payment will be made for work constructed outside the authorized limits of work.

1.04 MEASUREMENT STANDARDS

- A. Unless otherwise specified for the particular items involved, all measurements of distance shall be taken horizontally or vertically.

1.05 AREA MEASUREMENTS

- A. In the measurement of items to be paid for based on area of finished work, the lengths, and/or widths to be used in the calculations shall be the final dimensions measured along the surface of the completed work within the neat lines shown or designated.

1.06 LUMP SUM ITEMS

- A. Where payment for items is shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum items.

Lump sum contracts shall be complete, tested and fully operable prior to request for final payment. Contractor may be required to provide a breakdown of the lump sum totals.

1.07 UNIT PRICE ITEM

- A. Separate payment will be made for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the work shall be considered to be included in the scope of the appropriate listed work items.

- B. No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work. Final payments shall not be requested by the Contractor or made by the Owner until as-built (record) drawings have been submitted and approved by the Engineer.
 - 1. Shop Drawings, Working Drawings.
 - 2. Clearing, grubbing, and grading except as hereinafter specified.
 - 3. Trench excavation, including necessary pavement removal and rock removal, except as otherwise specified.
 - 4. Dewatering and disposal of surplus water.
 - 5. Structural fill, backfill, and grading.
 - 6. Replacement of unpaved roadways, and shrubbery plots.
 - 7. Cleanup and miscellaneous work.
 - 8. Foundation and borrow materials, except as hereinafter specified.
 - 9. Testing and placing system in operation.
 - 10. Any material and equipment required to be installed and utilized for the tests.
 - 11. Pipe, structures, pavement replacement, asphalt and shell driveways, and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
 - 12. Maintaining the existing quality of service during construction.
 - 13. Maintaining or detouring of traffic.
 - 14. Appurtenant work as required for a complete and operable system.
 - 15. Seeding and hydromulching.
 - 16. As-built Record Drawings.

BID ITEM NO 12 - MISCELLANEOUS WORK AND CLEANUP

Payment for all work included under this Bid Item shall be made at the Contract lump sum price bid listed in the Bid Form and shall represent full compensation for all labor, materials and equipment required to perform all the work as shown on the Contract Drawings and specified herein and any other miscellaneous work not specifically included for payment under other Bid Items obviously necessary to complete the Contract. Partial payments will be based on the breakdown of the Bid Item in accordance with the Schedule of Values submitted by the Contractor and approved by the Engineer. Payment shall also include full compensation for project photographs, as-builts record drawings, project signs, traffic control, rubbish and spoil removal, repair, replacement or relocation of all related items and any and all other items required to complete the project in accordance with Contract Documents.

BID ITEM NO 13 – CLARIFIER MECHANISMS

Payment for all work included under this Bid Item shall represent full compensation in accordance with the unit price bid for all the labor, materials, and equipment required for the demolition and

replacement of the Clarifiers 3 and 4 mechanisms, inboard effluent trough, and scum baffle; applying coating to clarifier tanks; installation of new clarifier mechanisms; installation of inboard effluent trough and scum baffle ; installation of blind flange; and installation of miscellaneous piping and valves and all other materials and equipment necessary for a complete and fully operable system, including testing and start-up, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this unit price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO 14 – SCUM SYSTEM

Payment for all work included under this Bid Item shall represent full compensation in accordance with the unit price bid for all the labor, materials, and equipment required for the demolition of scum ejectors and associated piping; installation of new scum pumps; and installation of miscellaneous piping and valves and all other materials and equipment at Clarifier 3 and 4 necessary for a complete and fully operable system, including testing and start-up, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this unit price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO 15 – RAS PUMPS

Payment for all work included under this Bid Item shall represent full compensation in accordance with the unit price bid for all the labor, materials, and equipment required for the demolition of three (3) RAS pumps and associated piping; installation of new three (3) RAS pumps; and installation of miscellaneous piping and valves and all other materials and equipment necessary for a complete and fully operable system, including testing and start-up, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this unit price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO 16 – ELECTRICAL AND INSTRUMENTATION

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid for the Electrical and Instrumentation work including new conduit and wiring; control panels; MCC (motor control center) modifications, new electrical distribution equipment, variable frequency drives; lighting, manhole, and all other materials and equipment necessary for a complete and fully operable system, including testing and start-up, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO 17 – STRUCTURAL INSPECTION AND REPAIR ALLOWANCE

Contractor will contract with Crom Corporation to complete structural inspection and repairs for Clarifier 3 and 4 under this bid item. Payment for any structural repairs that are identified by Crom Corporation will be completed by Crom Corporation under this allowance.

BID ITEM NO. 18 - DISCRETIONARY WORK

Payment for all work under this Bid Item and listed in the Bid Form shall be made only at the Owner's discretion in order to satisfactorily complete the project in accordance with the Plans and Specifications.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION