

Financial Management Department Procurement Division 1112 Manatee Ave W Suite 803 Bradenton, FL 34205-7804 Phone: (941) 745-3730 www.mymanatee.org

# August 15, 2017

TO:

All Interested Bidders

SUBJECT:

IFB 17-1514CB - SLS N1H Rehabilitation & Emergency Backup Pump

## **ADDENDUM #2**

Bidders are hereby notified that this Addendum shall be acknowledged on <u>Bid Form Page 1</u> 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 bid and contract documents. Cost involved shall be included in the bid prices. Bids to be submitted by the specified bid opening time date due and shall conform to the additions and revisions listed herein.

- 1. CHANGE the Bid Opening time and date to 2:00pm on August 23, 2017.
- 2. **DELETE** Bid Form pages 3 through 6 and **INSERT** REVISED Bid Form pages 3 through 6 that are attached to this Addendum 2.
- 3. **DELETE** Plan sheets 3, 4, 5, 8, and 9 and **INSERT** REVISED Plan sheets 3, 4, 5, 8, and 9 dated 8/1/17 that are attached to this Addendum 2.
- 4. **DELETE** the Measurement and Payment pages 32 through 44 of the Technical Specifications and **INSERT** REVISED Measurement and Payment section pages 32 thru 43 that are attached to this Addendum 2.
- 5. **DELETE** page 164 for Section 11215 of the Technical Specifications and **INSERT** REVISED page 163 for Section 11215 that is attached to this Addendum 2.

#### 6. CLARIFICATIONS OF ENGINEER'S CHANGES:

- a. Technical Specifications:
  - i. Section 01150 Measurement and Payment
    - 1. Revised Bid Item 11
    - 2. Removed Original Bid Item 12
    - 3. Revised Quantity, Bid Item 13
    - 4. Revised Quantity, Bid Item 27
    - 5. Revised Quantity, Bid Item 31
    - 6. Revised Quantity, Bid Item 39
    - 7. Revised Quantity, Bid Item 44
    - 8. Revised Bid Item 45
    - 9. Added Bid Item 52 & 53
    - 10. Revised Quantity, Bid Item 54
    - 11. Added Bid Item 61

- 12. Renumbered Bid Items as needed.
- 13. Section 11215 Diesel Backup Pump, page 164, 1.02. A Ratings; revised to:

This pump is to have a primary capacity of 500 gpm at a TDH of 66 feet, with a maximum capacity of 150% the primary capacity. This site shall be diesel fueled with a sub-base fuel tank. This site is in a flood zone and a flood certification is required.

#### b. Plans:

- i. Revised Sheet 3: updated table.
- ii. Sheet 4:
  - 1. Revised callouts regarding the odor control units and removable bollards.
  - 2. Contractor shall install required stub outs into the existing structures to allow ease of connection for the odor control piping.

#### iii. Sheet 5:

- 1. Existing liner is to remain. Existing liner shall be cleaned and inspected. Any necessary repairs shall be per the manufacturer's recommendation.
- 2. Added repair concrete bottom and fillet, as needed.
- 3. Added additional stilling well and pressure transducer.
- iv. Sheet 8: Revised 2" cam coupling and bollard details.
- v. Sheet 9: Replaced odor control system detail with current version provided by Evoqua.

# The following questions have been presented by potential bidders:

- Question 1: Bid Item 53: Will Manatee County accept an as equal backup pump or shall we stay with the three listed?
- Response 1: Bidders shall utilize the three approved manufactures listed.
- Question 2: On site plan, it says relocate Hydrogen Peroxide Tank by others. Does that include any plumbing or concrete pad? It also says relocate Hydrogen Peroxide Pump by others Contractor to install 55' of 2" Schedule 90 PVC Conduit. No plumbing required.
- Response 2: The Evoqua equipment and components will be relocated by others. The County will coordinate with the awarded bidder and Evoqua at the time of construction to allow Evoqua to install all conduits/plumbing required for the odor control equipment. The awarded bidder shall be responsible for installing stub outs into the structure walls.
- Question 3: On Page 164/193, Pump capacity 500 GPM at 66 TDH with maximum capacity of double the primary. Is that 1000 GPM at 66 TDH or 1000 GPM at 132 TDH?
- Response 3: The specification, by this addendum, shall revise the emergency backup pump to have a maximum capacity to be 150% of the original lift station design capacity. The emergency backup pumps shall be able to ramp up to a capacity of 750 gpm @ 99 TDH.
- Question 4: Bid Item #51 Do you require one emergency receptacle at fence line and one on the Control Panel or the fence only?
- Response 4: We only require one emergency generator receptacle on the fence line. We do not require one on the panel for this project.

- Question 5: Bid Item #58 Do you want one transducer for control panel and one level transducer for backup pump or both?
- Response 5: Two separate level transducers are required. One for the normal station operation and one for the backup pump.
- Question 6: Bid Item #11 and #12 Do you want to remove all liner or repair as needed and then coat with Raven 405?
- Response 6: The existing Duraplate liner shall be cleaned and inspected. Any repairs required shall be confirmed with County personnel. The liner shall be repaired per the Duraplate manufacturer's recommendations. Copies of the procedures shall be provided to the County.

#### END OF ADDENDUM 2

Bids will be received at Manatee County Purchasing, 1112 Manatee Avenue West, Bradenton, Florida 34205 until Wednesday, August 23, 2017 at 2:00 PM.

Sincerely,

Chris Daley, CPPO CPPB

Buyer Manager

(Submit in Duplicate)

SLS N1H Rehabilitation & Emergency backup Pump
Bid "A" Based on Completion Time of 150 Calendar Days

	Bid "A" Based on Completion Time	Of 150 C		Days	
ITEM	DECODINE IOU		EST.		EXTENDED
NO.	DESCRIPTION	U/M	QTY.	UNIT PRICE	PRICE
	REHABILITATIO				
1	Wetwell Cleaning	SF	1,350	\$	\$
2	Wetwell Discharge Piping, HDPE DR-11, 8"	LF		\$	\$
3	Pump Base Ells, BPIU.14	EA	3	\$	\$
4	Pump Base Elbow Mounting Plate	EA	3	\$	\$
5	S.S. Pipe Bracing, 12 ft dia., triplex	EA	4	S	\$
6	PVC Stilling Well, 6"	LF	28	\$	\$
7	Replace Ex. Wetwell Top Slab	EA	1	\$	\$
8	Vent, PVC Sch 80, 6" (to odor control system)	LF	15	\$	\$
9	Aluminum Hatch Cover, (Wetwell)	EA	1	\$	\$
10	2" S.S.Pump Guide Rail System	LF	90	\$	\$
11	Repair Existing Liner, as needed	SF	675	\$	\$
12	Grout Fill Ex. Drain, Abandon	EA	1	\$	\$
13	PVC Drain Line for Odor Control, 2" PVC	LF	5	\$	\$
14	Gate Valve, Flanged, 8"	EA	5	\$	\$
15	Swing Check Valve, Flanged, 8"	EA		\$	\$
16	Gate Valve, MJ, 12"	EA		\$	\$
17	Gate Valve, MJ, 2"	EA		\$	\$
18	PVC Pipe (C900), 12"	LF		\$	\$
	Ductile Iron Pipe				
	8" DI Pipe, FLG	LF			5
	12" DI Pipe, FLG	LF		\$	¢
	Ductile Iron Fittings				
	4"x8" Ecc. Reducer, DI, FLG	EA			\$
	8" Tee, DI, FLG	EA		7	\$
	8" Cross, DI, FLG	EA			\$
	8"x12" Red. 90 Bend, DI, FLG	EA			\$
	12" 90 Bend, DI, MJ	EA			\$
	12" 45 Bend, DI, MJ	EA			\$
	Coupling Adapters, D.I., FLG, 12"	EA			\$
	Quick Coupler Adapter, male, alum., 6"	EA			\$
	Quick Coupler Adapter, male, alum., 2"; w/ PVC filled conc.				
2.4	support	EA	1	\$	\$
	S.S. Adjustable Valve Supports, flange attachment	EA	7	\$	\$
	Remove Existing Structure, Valve Vault	EA			\$
	Remove Existing Structure, Meter Vault	EA	1		\$
	Concrete Slab	SY	50	\$	\$
	Influent Line Plug, 18"	EA	2		S
	By-Pass Pumping	LS	1		\$
30	Water Line, PE, 3/4"	LF	50	\$	\$
	Water Line, PE, 2"	LF			\$
	PVC Casing, 3"	LF			\$
	Relocated Ex. Meter, Backflow, & Hose Blbb Assembly	LS			\$
	Remove & Replace Electric Meter Can	EA			\$
	Remove & Replace Fused Safety Switch (disconnect)	EA			\$
	Remove & Replace Control Panel	EA	1		\$
37	TCU & Fiberglass Enclosure, DFS	EA			\$

Bidder Name:	
Authorized Signature:	

(Submit in Duplicate)

SLS N1H Rehabilitation & Emergency backup Pump
Bid "A" Based on Completion Time of 150 Calendar Days

	Bid "A" Based on Completion Time of 150 Calendar Days					
ITEM			EST.		EXTENDED	
NO.	DESCRIPTION	U/M	QTY.	UNIT PRICE	PRICE	
38	Junction Box, 304 SS	EA	1	<b>C</b>	S	
39	Remove & Replace Sch 80 PVC Conduit, 2"	LF	125	\$	\$	
40	Replace Electrical Service	LF	10	\$	\$	
41	Remove & Replace Electrical Mounting Structure	EA	1	\$	\$	
42	Washed Shell with Weed Barrier	SY	340	S	\$	
43	Driveway, 6" thick reinf. concrete	SY	210	\$	\$	
44	Concrete Repair, 2" thick	SF	338	\$	\$	
45	Removable 4" Dia, Steel Bollards w/ Yellow PVC Covers	EA	4	S	\$	
46	Storm Pipe, PVC, 10"	LF	38	S	\$	
47	Concrete Storm Mitered End Section	EA	1	\$	\$	
48	Emergency Shower & Eyewash, Speakman S.S. SE-1255	EA	1	\$	\$	
49	Flow Meter, 8" Ulta Mag (UM06)	EA	1	\$	\$	
50	Generator Receptacle (JRSB2044FR) & Support	EA	1	\$		
51	Level Transducer, GSX3-PP100-A49-B49-XX-C01-D49	EA		\$	\$	
		CY		\$	\$	
52 53	New concrete wetwell fillet (3,000 psi, Type II, no reinf.)	CY		\$	\$	
	New concrete wetwell bottom (4,000 psi, Type II, with reinf.)  Rehabilitation SubTotal			T.	\$	
15-16				少。	\$	
	EMERGENCY BACK U		1.00			
54	Reinforced Concrete Slab (poured in place)	SY		\$	\$	
55	Emergency Backup Pump & Fuel Tank	LS		\$	\$	
56	PVC Pipe (C900, DR-18), 6" (Pump Discharge Line)	LF		\$	\$	
	HDPE DR-11, 8" (Pump Suction Line)	LF	32	\$	\$	
	Ductile Iron Fittings				(27), (5-7), (36), (3-1), (3-1)	
	4"x6" Red., DI, FLG	EA			\$	
	4"x8" Red., DI, FLG	EA			\$	
	6" 45 deg., DI, FLG	EA			\$	
	6" 90 deg., Di, FLG	EA			\$	
	8" 45 deg., Di, FLG	EA			\$	
	8" 90 deg., DI, FLG	EA		\$	\$	
	8" 90 deg., DI, MJ	EA		\$	\$	
59	Sch 80 PVC Conduit, 2"	LF	15		\$	
60	Level Transducer, GSX3-PP100-A49-B49-XX-C01-D49	EA	1		\$	
61	PVC Stilling Well, 6"	LF	28	\$	\$	
62	Permits	LS	1		\$	
TANT T	Emrgency Back-up Pump Subtotal	47.45			\$	
63	Mobilization	LS	1	\$	\$	
64	Miscellaneous Work & Clean Up	LS	1		\$	
65	Record Drawings	LS	1	\$	\$	
FREE	TOTAL BASE BID "A" - Based on Completion Time of 150					
	Calendar Days				\$	
334	COLUMN OF COLUMN	H A				
66	CONTRACT CONTINGENCY WORK (USED ONLY WITH	#1	10% O	F TOTAL BASE	s	
			- · · · · · · · · · · · · · · · · · · ·	BID		
<b>37 11</b>	TOTAL OFFER FOR BID "A" with Contrast Continents	11.	- 1 × 1			
14.0 Y	TOTAL OFFER FOR BID "A" with Contract Contigency - Based on Completion Time of 150 Calendar Days		4		\$	
	Dased on Completion Time of 130 Calendar Days					

Bidder Nam	16;
Authorized	Signature:

# (Submit in Duplicate)

SLS N1H Rehabilitation & Emergency backup Pump
Bid "B" Based on Completion Time of 210 Calendar Days

Bid "B" Based on Completion Time of 210 Calendar Days					
ITEM			EST.		EXTENDED
NO.	DESCRIPTION	U/M	QTY.	UNIT PRICE	PRICE
	REHABILITATIO				
-4	Wetwell Cleaning		1 250	ie.	i c
2	Wetwell Discharge Piping, HDPE DR-11, 8"	SF	1,350	\$	\$ \$
3	Pump Base Ells, BPIU.14	EA	3	\$	\$
4	Pump Base Elbow Mounting Plate	EA	3	\$	\$
5	S.S. Pipe Bracing, 12 ft dia., triplex	EA	4	\$	\$
6	PVC Stilling Well, 6"	LF	28	\$	\$
7	Replace Ex. Wetwell Top Slab	EA	1	\$	\$
8		LF	15	\$	\$
	Vent, PVC Sch 80, 6" (to odor control system)  Aluminum Hatch Cover, (Wetwell)	EA	1	\$	
	2" S.S.Pump Guide Rail System	LF	90	\$	\$ \$
11		SF	675	\$	\$
	Repair Existing Liner, as needed	EA	1	\$	
12	Grout FIII Ex. Drain, Abandon			\$	\$
13 14	PVC Drain Line for Odor Control, 2" PVC	LF EA	5 5	\$	\$
	Gate Valve, Flanged, 8" Swing Check Valve, Flanged, 8"		3	\$	\$
15		EA		S	\$
16 17	Gate Valve, MJ, 12"	EA	1		\$
	Gate Valve, MJ, 2"	LF	10	\$	\$
19	PVC Pipe (C900), 12"				
	Ductile Iron Pipe 8" Di Pipe, FLG			- T	
		LF	25	\$	\$
	12" DI Pipe, FLG	LF	20		\$
	Ductile Iron Fittings	EA	2		
	4"x8" Ecc. Reducer, DI, FLG 8" Tee, DI, FLG	EA EA			\$
	8" Cross, DI, FLG	EA			\$
	8"x12" Red. 90 Bend, DI, FLG	EA			\$
	12" 90 Bend, DI, MJ	EA			\$
	12" 45 Bend, DI, MJ	EA			\$
	Coupling Adapters, D.I., FLG, 12"	EA			\$
					\$ \$
	Quick Coupler Adapter, male, alum., 6"  Quick Coupler Adapter, male, alum., 2"; w/ PVC filled conc.	EA		Ф	D
7.5	support	EA	1	\$	\$
	S.S. Adjustable Valve Supports, flange attachment	EA	7	\$	\$
	Remove Existing Structure, Valve Vault	EA		\$	\$
	Remove Existing Structure, Meter Vault	EA			\$
	Concrete Slab	SY	50		\$
$\overline{}$	Influent Line Plug, 18"	EA			\$
	By-Pass Pumping	LS	1		\$
	Water Line, PE, 3/4"	LF			\$
	Water Line, PE, 2"	LF			5
	PVC Casing, 3"	LF		·	
	Relocated Ex. Meter, Backflow, & Hose Bibb Assembly	LS			\$
	Remove & Replace Electric Meter Can	EA			\$
	Remove & Replace Fused Safety Switch (disconnect)	EA			\$
35					
	Remove & Replace Control Panel	EA	1	\$	

Bidder Name:	
Authorized Signature:	

(Submit in Duplicate)

SLS N1H Rehabilitation & Emergency backup Pump Bid "B" Based on Completion Time of 210 Calendar Days

39 40	DESCRIPTION Junction Box, 304 SS	U/M	EST.	UNIT PRICE	EXTENDED PRICE
38 39 40	Junction Box, 304 SS		QTY.	UNIT PRICE	DDICE
38 39 40					" FRILE
39 40		EA	1	\$	s
40	Remove & Replace Sch 80 PVC Conduit, 2"	LF		\$	\$
	Replace Electrical Service	LF	10	S	\$
	Remove & Replace Electrical Mounting Structure	EA	1	\$	\$
	Washed Shell with Weed Barrier	SY	340	\$	\$
	Driveway, 6" thick reinf. concrete	SY	210	\$	\$
	Concrete Repair, 2" thick	SF	338	\$	\$
	Removable 4" Dia. Steel Bollards w/ Yellow PVC Covers	EA	4	\$	\$
	Storm Pipe, PVC, 10"	LF	38	\$	\$
	Concrete Storm Mitered End Section	EA		\$	\$
	Emergency Shower & Eyewash, Speakman S.S. SE-1255	EA		\$	\$
	Flow Meter, 8" Ulta Mag (UM06)	EA		\$	\$
	Generator Receptacle (JRSB2044FR) & Support	EA		\$	\$
	Level Transducer, GSX3-PP100-A49-B49-XX-C01-D49	EA		\$	\$
H I-		CY			S
	New concrete wetwell fillet (3,000 psi, Type II, no reinf.)  New concrete wetwell bottom (4,000 psi, Type II, with reinf.)	CY		\$ \$	\$
47,04			PART OF	THE STATE OF THE STATE OF	2
	EMERGENCY BACK U				
	Reinforced Concrete Slab (poured in place)	SY		\$	\$
	Emergency Backup Pump & Fuel Tank	LS		\$	\$
	PVC Pipe (C900, DR-18), 6" (Pump Discharge Line)	LF		\$	\$
	HDPE DR-11, 8" (Pump Suction Line)	LF		\$	\$
	Ductile Iron Fittings				og a dan <b>da</b> n dan dan dan dan dan dan dan dan dan da
	4"x6" Red., DI, FLG	EA		\$	\$
	4"x8" Red., DI, FLG	EA		\$	\$
	6" 45 deg., DI, FLG	EA		\$	\$
	6" 90 deg., DI, FLG	EA		\$	\$
	8" 45 deg., DI, FLG	EA		\$	\$
	8" 90 deg., DI, FLG	EA		\$	\$
	8" 90 deg., DI, MJ	EA		\$	\$
	Sch 80 PVC Conduit, 2"	LF			\$
	Level Transducer, GSX3-PP100-A49-B49-XX-C01-D49	EA		\$	\$
	PVC Stilling Well, 6"	LF	28	\$	\$
	Permits	LS			\$
*)-(**)					\$
	Mobilization	LS			\$
	Miscellaneous Work & Clean Up	LS			\$
65 F	Record Drawings	LS	1	\$	\$
	TOTAL BASE BID "B" - Based on Completion Time of 210		jint F		\$
Emande States	Calendar Days				
	CONTRACT CONTINGENCY WORK (USED ONLY WITH COUNTY APPROVAL)		10% OI	F TOTAL BASE BID	\$
	TOTAL OFFER FOR BID "B" with Contract Contigency - Based on Completion Time of 210 Calendar Days				\$

Bidder Name:	
Authorized Signature:	 

# **CONTRACT DOCUMENTS**

# FOR

# SATELLITE LIFT STATION N1H (RTU 513) REHABILITATION & EMERGENCY BACKUP PUMP

PROJECT # 402-5138380

April 2017 Rev. 6/29/17 Rev. 8/11//17

# PROJECT OWNER:

County of Manatee, Florida c/o Manatee County Purchasing Division 1112 Manatee Avenue West Bradenton, Florida 34205 (941) 748-4501

## PREPARED BY:

Engineering Division Manatee County Public Works Department 1022 26<sup>th</sup> Avenue East Bradenton, Florida 34208 (941) 708-7450 work shall be considered to be included in the scope of the appropriate listed work items.

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 County until as-built (record) drawings have been submitted and approved by the County.

- 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.
- Dewatering and disposal of surplus water.
- 5. Structural fill, backfill, and grading.
- 6. Replacement of unpaved roadways, and shrubbery plots.
- 7. Foundation and borrow materials, except as hereinafter specified.
- 8. Testing and placing system in operation.
- 9. Any material and equipment required to be installed and utilized for the tests.
- 10. Pipe, structures, pavement replacement, asphalt and shell driveways and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
- 11. Maintaining the existing quality of service during construction.
- 12. Maintaining or detouring of traffic.
- 13. Appurtenant work as required for a complete and operable system.
- 14. Seeding and hydromulching.

#### **BID ITEM NO. 1: WETWELL CLEANING**

Measurement and payment shall be per square foot of wet well wall and floor.

The unit bid price shall include, but is not limited to, pressure washing, manual cleaning, sludge removal and disposal. Contractor shall furnish all labor, materials, equipment and incidentals required to complete this bid item, ready for approval and acceptance by the County.

#### BID ITEM NO. 2: WETWELL DISCHARGE PIPING

Measurement shall be the length in linear feet of pipe measured along the centerline of pipe through the fittings from the pump base ell or flanged eccentric reducer to the check valves, in place, completed and accepted.

Payment will be according to the size and type, as listed on the Bid Form.

The unit bid price shall include (unless specifically listed separately on the bid form), but is not limited to, furnishing and installing all pipe; core bores, gaskets; hardware; fittings, molded 90 degree elbows; fusible HDPE flange adapters w/ 316 S.S. backup rings to connect the piping at each end; nuts; bolts; excavation, including rock; dewatering; bedding and backfill; disposal of spoil; removal and proper disposal of existing piping; testing and other related and necessary materials, work and equipment required to complete these bid items, ready for approval and acceptance by the County.

Manatee County personnel will remove and reinstall the wet well pumps. Pump base ells, eccentric reducers, S.S. pipe bracing and pipe thru wall seals paid under separate bid items.

#### BID ITEM NO. 3: PUMP BASE ELLS

Measurement shall be per each pump base ell furnished and installed.

Payment will be according to the size as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal of existing pump base ells; new pump base ells; anchoring system; 316 stainless steel anchor rods, flat washers, lock washers and nuts. The unit bid price shall include, but is not limited to, all other items, materials, work and equipment necessary to complete these bid items, ready for approval and acceptance by the County. New concrete bottom and fillet paid under separate bid items.

#### BID ITEM NO. 4: PUMP BASE ELL MOUNTING PLATES

Measurement shall be per each pump base ell mounting furnished and installed.

Payment will be according to the size as listed on the Bid Form.

The unit bid price shall include, but is not limited to, pump base ell mounting plate; anchoring system; stainless steel anchor rods, flat washers, lock washers; nuts; and removal and replacement of grout to mount plate flat and level. The unit bid price shall include, but is not limited to, all other items, materials, work and equipment necessary to complete these bid items, ready for approval and acceptance by the County. New concrete bottom and fillet paid under separate bid items.

#### BID ITEM NO. 5: S.S. PIPE BRACING

Measurement shall be per each S.S. pipe bracing furnished and installed.

Payment will be according to the inside diameter and type of wet well as listed on the Bid Form.

The unit bid price shall include, but is not limited to, stainless steel angles, straps, braces, anchors, clamps and all necessary hardware. Also included are 3/16" minimum thickness rubber gaskets between pipes and pipe straps, removal and proper disposal of existing pipe bracing, all materials, work and equipment necessary to complete these bid items ready, for approval and acceptance by the County.

#### BID ITEM NO. 6 & 61: 6" PVC STILLING WELL

Measurement shall be the length in linear feet of stilling well pipe measured in place,

The unit bid price shall include, but is not limited to, furnishing and installing 6" schedule 80 PVC pipe, stainless steel supports, anchors, straps, bolts, and all other items, materials, and incidentals necessary to complete this bid item, ready for approval and acceptance by the County.

#### BID ITEM NO. 7: REPLACE EXISTING WETWELL TOP SLAB

Measurement shall be per each reinforced concrete top slab furnished and installed.

Payment will be according to the inside diameter of the wet well as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal; concrete; reinforcement; cast-in protective liner; seam repairs; all labor and materials; excavation, including rock; dewatering; backfill; compaction; dowel rods; anchors; epoxy; sealant; mortar; and all incidentals necessary to complete these bid items, ready for approval and acceptance by the County. Aluminum hatch covers, PVC vent, and liner paid under separate bid items.

### BID ITEM NO. 8: VENT, PVC

Measurement shall be the length in linear feet of Sch 80 PVC pipe measured in place.

Payment will be according to the PVC vent size as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal of existing vent, new Sch 80 PVC pipe, Sch 80 PVC fittings, sealing, core bores, repair of wall penetration with non-shrink grout/hydraulic cement; all labor, materials and all incidentals necessary to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 9: ALUMINUM HATCH COVER

Measurement shall be per each aluminum hatch cover furnished and installed.

Payment will be according to the hatch cover size as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal of hatch cover; all labor and materials; forms; anchors; epoxy; sealant; mortar; and all incidentals necessary to complete these bid items, ready for approval and acceptance by the County.

# BID ITEM NO. 10: 2" S.S. PUMP GUIDE RAIL SYSTEM

Measurement and Payment shall be per linear foot of pump guide rail system as listed on the Bid Form, which includes two (2) each continuous lengths of S.S. Schedule 40 pipes per pump, furnished and installed.

The unit bid price shall include, but is not limited to, removal and proper disposal of existing guide rails; new S.S. upper guide rail brackets; S.S. pump cord hooks; S.S. lift chains; new float brackets, all necessary hardware and all other items, materials and incidentals necessary to complete this bid item ready, for approval and acceptance by the County.

# BID ITEM NO. 11: REPAIR EXISTING LINER

Measurement and Payment shall be per square foot of existing liner repaired per the recommendation of the manufacturer as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal of existing liner; elimination of groundwater infiltration; concrete surface repair, surface preparation, and installation of matching liner all as recommended by the product's manufacturer; spoil removal and disposal; all labor, materials, equipment and incidentals necessary to complete these bid items, ready for approval and acceptance by the County.

Damage to the existing liner caused by carelessness or poor workmanship shall be repaired by the Contractor at his/her expense. No additional cost shall be borne by the County.

## BID ITEM NO. 12: GROUT FILL EX. DRAIN, ABANDON (FLOWABLE FILL)

Measurement shall be for each existing drain abandoned by the means indicated on the plans.

Payment will be per each existing drain abandoned.

The unit bid price shall include, but is not limited to, cleaning, labor, materials, sludge removal and disposal, the complete removal of the drain, patching of the hole with non-shrink hydraulic grout, or equipment for mixing and placing the grout (as indicated in the plans) and all incidentals necessary to complete this bid item, ready for approval and acceptance by the County.

#### BID ITEM NO. 13: PVC DRAIN LINE FOR ODOR CONTROL

Measurement and Payment shall be per linear foot of PVC drain line furnished and installed.

Payment will be according to the size of the drain line as listed on the Bid Form.

The unit bid price shall include, but is not limited to, all material and labor necessary to install new drain line with a p-trap inside the lift station wet well; S.S. pipe strap and hardware; coreboring or jack hammering drain openings; repair of structures and liner around pipe penetrations; non-shrink grout/hydraulic cement; all labor, materials and incidentals necessary to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 14 THRU 17: VALVES

Measurement shall be per each valve, furnished and installed.

Payment will be according to the size and type of valve, as listed on the Bid Form.

The unit bid price shall include, but is not limited to, valves, valve boxes and covers, concrete pad, identification disc, extension stems, cutting, adapters, gaskets, jointing materials, connectors, pipe sleeves, detector wire, excavation, including rock, backfill, dewatering, sheeting, shoring, and any other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 18, 19, 32, 46, 56, & 57: PIPE

Measurement for the quantity of pipe to be paid for under these Bid Items shall be the length in linear feet of pipe measured along the centerline of pipe through valves, fittings and manholes, in place, completed and accepted. Installation shall be by open-cut or directional drill.

Payment will be according to the type of pipe installed (PVC, ductile iron or HDPE), diameter of pipe and the depth of pipe as listed on the Bid Form. The depth of pipe shall be measured from the top of the trench to the top of the installed pipe at the center of pipe.

The unit bid price shall include, but is not limited to, furnishing and installing all pipe; temporary blow-offs for disinfecting pipe; and materials above or below ground along pipeline alignment; joints and jointing materials; field layout; bracing, shoring and sheeting; excavation, including rock; dewatering, clearing, grubbing, stripping, and trenching, including exploratory excavation; detectable tape; detector wire; bedding, backfill and compaction; chlorinating; constructing the specified protection and adjusting of existing aboveground and underground

utilities and service connections; polyethylene encasement; butt fusion welds; drilling fluid disposal; thrust blocking; disposal of spoil; hydrostatic testing; labor, equipment and materials required and all other related and necessary items required to complete these bid items, ready for approval and acceptance by the County. No additional compensation shall be made for excavation below the bottom of the pipe, for rock removal or bedding and backfill material, or for repair of any trench settlement. Site restoration, traffic control, erosion control, services, fittings, joint restraints and pipe adapters paid under separate bid items.

#### BID ITEM NO. 20 & 58: DUCTILE IRON FITTINGS

Measurement shall be per each ductile iron fitting.

Payment will be according to the type of each fitting as listed on the Bid Form.

The unit bid price shall include, but is not limited to, furnishing and installing tees, crosses, bends, sleeves, plugs, caps, reducers, increasers, couplings; all fittings and materials above or below ground along the pipeline alignment; restraints, and jointing materials; bolts, nuts, washers, gaskets, coating, lining, excavation, including rock; thrust blocking; bracing, shoring, and sheeting; dewatering, clearing, grubbing, and stripping; trenching, bedding and backfill; constructing the specified protection and adjusting of existing aboveground and underground utilities and service connections; disposal of spoil; hydrostatic testing; and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 21 THRU 23: ADAPTERS

Measurement and Payment shall be per each flange adapter and male quick coupler adapter furnished and installed as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal of existing adapters; new adapters, gaskets, S.S. hardware; hydrostatic testing; 4" diameter concrete filled support post, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 24: S.S. ADJUSTABLE VALVE SUPPORT

Measurement shall be per each adjustable S.S. valve support.

Payment will be for the quantity of adjustable S.S. valve supports furnished and installed.

The unit bid price shall include, but is not limited to, removal and proper disposal of existing pipe/valve supports; new S.S. adjustable valve supports, concrete blocks or pads; and all other related and necessary materials, labor and equipment required to complete this bid item, ready for approval and acceptance by the Engineer/Owner. Supplied stainless steel valve/flange supports shall be adjustable after installation.

### BID ITEM NO. 25 & 26: REMOVE EXISTING STRUCTURE

Measurement and Payment shall be per each structure completely removed.

The unit bid price shall include, but is not limited to, labor, material, the removal and disposal of the structure material, clean fill dirt, compaction, sodding area as needed, testing and any and all other items necessary to complete these bid items, ready for approval and acceptance

by the County.

#### BID ITEM NO. 27 & 54: REINFORCED CONCRETE SLAB

Measurement and payment shall be for each square yard poured-in-place concrete slab installed.

Payment for all work included in this Bid Item will be made at the applicable Contract price bid for furnishing design calculations signed and sealed by a Professional Engineer licensed in the State of Florida, installed poured-in-place reinforced concrete slab, including installation shown on the Contract Drawings. Payment will be made after installation and will represent full compensation for all labor, materials, equipment, and testing required to complete this Bid Item. The unit bid price shall include, but is not limited to, all labor, materials and equipment, ground preparation, concrete, reinforcing, expansion joint, compacting, finishing, testing and incidentals necessary to complete this bid item, ready for approval and acceptance by the County.

#### **BID ITEM NO. 28: INFLUENT LINE PLUG**

Measurement shall be per each influent line plug furnished and installed.

Payment will be according to the diameter of line to be plugged as listed on the Bid Form.

The unit bid price shall include, but is not limited to, bladders, adapters, seals, gaskets and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 29: BY-PASS PUMPING SYSTEM

Measurement shall be lump sum for the by-pass pumping system required.

Payment will be according to the maximum flow and maximum head required as listed on the Bid Form.

The lump sum price shall include, but is not limited to, pumps, piping, temporary lines, vacuum trucks, anchors, barricades, noise abatement procedures, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NOS. 30 & 31: WATER LINES

Measurement shall be per linear feet of water line installed. Length shall be measured along with centerline of installed pipe through fittings in place.

Payment will be according to the size, type and linear feet of water line installed as listed on the Bid Form. Payment shall represent full compensation for all labor, material and equipment required to complete the work.

The unit bid price shall include, but is not limited to, dewatering, excavation, including rock excavation, service lines, casing pipe, tapping saddles, corporation stops, curb stops, detector wire, all necessary fittings, all service connections, backfill, compaction, testing, disinfection and equipment required to complete these bid items, ready for approval and acceptance by

the County.

#### BID ITEM NO. 33: RELOCATE EX. METER, BACKFLOW PREVENTER & HOSE BIBB

Measurement shall be lump sum for each water service assembly consisting of a meter, backflow preventer, and hose bibb relocated and installed per the current Manatee County Public Work Utility Standards.

Payment will be as per the item used as listed on the Bid Form.

The unit bid price shall include, but is not limited to the relocation of all, valve, camlock fitting, meter, backflow preventer assembly, hose bib, hose bib mounting post, water line extension, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 34: ELECTRIC METER CAN

Measurement shall be each electric meter can furnished and installed.

Payment will be according to the quantity of electric meter cans installed.

The unit bid price shall include, but is not limited to, removal and proper disposal, all connection, and all other related and necessary materials, labor and equipment required to complete this bid item, ready for approval and acceptance by the County.

#### BID ITEM NO. 35: FUSED SAFETY SWITCH

Measurement shall be each fused safety switch furnished and installed.

Payment will be according to the type of fused safety switch as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal, all connections, lighting arrestor mounted on exterior of safety switch, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 36: CONTROL PANEL, 304 SS

Measurement shall be per each powder coated white control panel furnished and installed.

Payment will be according to the type of control panel as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal, conduit and wire connections to the safety switch, all conduit and wire connections to the wet well, reconnecting all ground wiring, connecting wiring from antenna tower, all conduit and wire connections to the flow meter vault, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 37: TCU & FIBERGLASS ENCLOSURE (DFS)

Measurement and Payment shall be per each TCU & white fiberglass enclosure furnished and installed.

The unit bid price shall include, but is not limited to, removal and proper disposal, conduit and wire connections to the control panel, reconnecting all ground wiring, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 38 JUNCTION BOX, 304 SS

Measurement and Payment shall be per each white junction box enclosure furnished and installed.

The unit bid price shall include, but is not limited to, removal and proper disposal, conduit and wire connections to the wet well, reconnecting all ground wiring, connecting wiring from antenna tower, all conduit and wire connections to the flow meter vault, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 39 & 59: CONDUIT, SCH 80 PVC

Measurement shall be per linear foot of conduit furnished and installed.

Payment will be according to the size of the conduit as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal, all connections, drilling, wet well core bores, sealing, grout, liner repair, hand digging the trench, backfill, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 40: ELECTRICAL SERVICE

Measurement shall be per linear foot of electrical service from the power source to the electric meter.

Payment will be according to the size and type as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal, wire, conduit, handhole, permits, all wire connections, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 41: ELECTRICAL MOUNTING STRUCTURE

Measurement shall be per each electrical mount structure furnished and installed.

Payment will be according to the quantity of electrical mounting structures installed.

The unit bid price shall include, but is not limited to, removal and proper disposal, S.S. pipes, S.S. channels, S.S. hardware, concrete, and all other related and necessary materials, labor and equipment required to complete this bid item, ready for approval and acceptance by the County.

# BID ITEM NO. 42: WASHED SHELL W/ WEED BARRIER

Measurement shall be per square yards of washed shell w/ weed barrier installed.

The washed shell and weed barrier shall be installed/replaced in accordance with the latest Manatee County Public Works Utility Standards.

Payment will be for the actual square yards of washed shell and weed barrier installed and accepted.

The unit bid price shall include, but is not limited to, all labor, materials and equipment, cutting, spreading, finishing, and incidentals necessary to complete this bid item, ready for approval and acceptance by the County.

#### **BID ITEM NO. 43: DRIVEWAY**

Measurement shall be per square yards of installed driveway.

Payment will be for the actual square yards of driveway installed and accepted.

Payment for all work included in these Bid Items will be made at the applicable contract unit bid price per square yard of shell, asphaltic concrete, or concrete driveway restoration as listed on the Bid Form. Disturbed driveways shall be replaced or restored in accordance with the latest Manatee County Transportation Department Highway Standards.

The unit bid price shall include, but is not limited to, all labor, materials and equipment for cutting the edges of existing driveways/pavement/curbing, compacting subgrade, furnishing and installing the shell, asphaltic concrete or concrete and all incidentals necessary to complete these bid items ready for approval and acceptance by the County.

#### BID ITEM NO. 44: CONCRETE REPAIR

Payment for all work under this Bid Item shall be made at the unit price bid per square foot for repair and patching of the concrete walls in excess of the surface preparation required for the installation of the surface protection liner.

The concrete wall surfaces shall to be returned to original lines and dimensions and adequately sound and smooth enough to meet the new surface protection liner application standards. The depth limitation of this bid item is from the bottom of the "skim coat" to exposed rebar, 2" max.

Included are exposed rebar coating, hydraulic cement patching, grouting around support structure or any other structure or support or guides that need to be in place prior to the spray surface protection liner application. The actual number of square feet of area to be repaired shall be agreed upon with the County Inspector prior to commencement of any work.

#### BID ITEM NO. 45: REMOVABLE STEEL BOLLARD

Measurement shall be for each bollard installed.

Payment will represent full compensation for all labor, shipping, products, and materials. Also included shall be the installation of all bollards; paint; concrete; and all other appurtenances

and incidentals required or specified to complete the installation, ready for inspection and acceptance by the County.

#### BID ITEM NO. 47: CONCRETE MITERED END SECTION

Measurement and Payment for the removal of each existing storm mitered end section and replacement with new matching mitered end section.

The unit bid price shall include, but is not limited to, all labor, materials, equipment supplied as required, to remove/replace any existing storm structures, remove/replace existing storm pipe, remove/replace existing mitered end sections, dewatering, excavation, backfill, compaction and all other ancillary items required to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 48: EMERGENCY SHOWER & EYEWASH

Measurement and payment shall be lump sum for each furnished and installed emergency shower and eyewash.

The unit bid price shall include, but is not limited to, emergency shower and eyewash, concrete pad, fittings, connectors, and all other related and necessary materials, labor and equipment required to complete this bid item ready for approval and acceptance by the County.

#### BID ITEM NO. 49: FLOW METER

Measurement shall be per each flow meter furnished and installed.

Payment will be according to each type and quantity of flow meters installed.

The unit bid price shall include, but is not limited to, ultra mag electromagnetic flow meter, aboveground transmitter, aluminum pedestal, wiring, power, conduit, monitor for connection to telemetry, and all other related and necessary materials, labor and equipment required to complete this bid item ready for approval and acceptance by the County.

# BID ITEM NO. 50: GENERATOR RECEPTACLE AND SUPPORT

Measurement and payment shall be for each furnished and installed generator receptacle and concrete support.

The unit bid price shall include, but is not limited to, generator receptacle (JRSB2044FR), reinforced concrete support, S.S. anchors, S.S. straps, fittings, connectors, and all other related and necessary materials, labor and equipment required to complete this bid item ready for approval and acceptance by the County.

#### BID ITEM NO. 51 & 60: LEVEL TRANSDUCER

Measurement shall be per each transducer furnished and installed.

Payment will be according to the quantity of transducers installed.

The unit bid price shall include, but is not limited to, transducer, wiring, and all other related and necessary materials, labor and equipment required to complete this bid item, ready for approval and acceptance by the County.

#### BID ITEM NO. 52 & 53: CONCRETE REMOVAL & INSTALATION

Measurement shall be per cubic yard of concrete installed or removed.

Payment will be according to the Bid Item as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removing, furnishing and installing concrete wet well fillets, concrete wet well bottoms; reinforcement; proper disposal of spoil; and any other items, materials and incidentals necessary to complete these bid items, ready for approval and acceptance by the County.

#### BID ITEM NO. 55: EMERGENCY BACKUP PUMP & FUEL TANK

Payment for all work included under this Bid Item shall be lump sum made at the Contract bid price for an emergency backup pump set, fuel tank, and all the pump appurtenances furnished and installed as part of the pump unit as shown on the Contract Drawings and as approved and listed in the Bid Documents. The bid price shall include, but is not limited to, emergency pump, fuel tank, wiring, level transducer, control floats, and all appurtenances indicated in the drawings; and shall include all other items, equipment, materials, testing and incidentals necessary to complete this bid item and a have a fully functional and efficiently operating backup pump, in accordance with these Specifications, ready for approval and acceptance by the County.

#### **BID ITEM NO. 62: PERMITS**

Payment for all work included under this Bid Item shall be made at the applicable contract unit price bid per complete acquisition of all applicable permits. Contractor is responsible for obtaining all necessary permits to complete the project. Estimated fees indicated below.

Building Department Permitting F	<del>-ee (estimate):</del>
Permitting fee:	\$216
Fire Department Review:	\$ <u>65</u>
Total per site:	\$281

#### **BID ITEM NO. 63 - MOBILIZATION**

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. Mobilization includes, but it not limited to: preparation and movement of personnel, equipment, supplies and incidentals such as safety and sanitary supplies/facilities.

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

Partial payments for this Bid Item will be made in accordance with the following schedule:

Percent of Original Contract Amount:	Percent Allowable Payment of Mobilization/Demobilization Bid Item Price:
5	25
10	35

25	45
50	50
75	75
100	100

These payments will be subject to the standard retainage provided in the Contract. Payment of the retainage will be made after completion of the work and demobilization.

#### BID ITEM NO. 64 - MISCELLANEOUS WORK AND CLEANUP

Payment for all work included under this Bid Item shall be made at the lump sum price bid listed in the Bid Form for 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 County. Payment shall also include, but not limited to, full compensation for project photographs, project signs, traffic control, rubbish and spoil removal, repair, replacement or relocation of all signs, walls, private irrigation systems, concrete mitered end section, clean & compacted fill; and related items and any and all other items required to complete the project in accordance with Contract Documents.

#### BID ITEM NO. 65: RECORD DRAWINGS

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 generate and provide record drawings approved by the County. Record drawings shall be in strict accordance with Section 1.14 of the current Manatee County Public Works Standards, Part I Utilities Standards Manual approved June 2015.

Record information shall include all site improvements such as, but not limited to, wet well rim elev., pipe invert(s) elev., bottom elev., bottom of control panel elev., pavement elev., concrete pad corners & elevations; conduit type, depth, & location, all installed pipe top elevations, etc., as required in Section 1.14 to demonstrate the proposed improvements have been constructed in substantial conformance to the construction documents.

Refer to Section 11215 Part 1.06.C for specific record drawing requirements for the emergency backup pump.

# BID ITEM NO. 66 - CONTRACT CONTINGENCY

Payment for all work under this Bid Item shall be made only at the County's discretion. This Bid Item shall not exceed 10% of the Bidders Total Base Bid. The Bidder shall calculate and enter a dollar amount for this Bid Item.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**END OF SECTION** 

# DIVISION 11 EQUIPMENT

# SECTION 11215 DIESEL BACKUP PUMP

#### PART 1 GENERAL

#### 1.01 SCOPE

- A. Provide and install complete and operable backup diesel powered pump systems for lift stations which contain all the devices and equipment specified herein and/or required for the service. Equipment shall be new, factory and field tested, installed, and ready for operation.
- B. The engine shall be a diesel, Tier III approved and shall be of sufficient horsepower to drive the pump under full load conditions. It shall be 4-cycle, fueled by a sub-base fuel tank and cooled with a closed looped radiator system. The pump is to be compressor assisted self priming. The pump, controls and associated cooling and exhaust systems specified in these specifications are to be housed in a suitable weather protected enclosure which is to be permanently installed outdoors.
- C. Where conflict between drawings, specifications or code occurs, the Contractor shall assume and provide the more stringent of the alternatives to the County.

#### 1.02 RATINGS

A. Pump is to be installed at:

SLS N1H, RTU 513 11220 U.S. 41 North Palmetto, Florida

This pump is to have a primary capacity of 500 gpm at a TDH of 66 feet, with a maximum capacity of 150% the primary capacity. This site shall be diesel fueled with a sub-base fuel tank. This site is in a flood zone and a flood certification is required.

PLEASE NOTE: Pump is to be built with the following characteristics/conditions:

- 1. The pump should come on automatically when the wet well reaches a high level condition.
- 2. Primary level control using transducer with backup floats.
- 3. Programmable controller that allows both scheduled & manual exercising.
- 4. Pump and controls to have contacts for the telemetry system.
- 5. Pump should have the capability to pass a 3" spherical solid.
- 6. Pump has compressor assisted automatic priming.
- 7. Pump to have a weather protected and sound attenuated enclosure designed for 140 mph wind load.

#### 1.03 MANUFACTURERS

- A. Subject to compliance with requirements stated and defined in these specifications, the following are approved manufacturers:
  - 1. Godwin Pumps
  - 2. Acme Dynamics Pumps