

**CITY OF PALM BAY, FL**

**LIFT STATION NO. 14 & 73 REHABILITATION AND UPGRADES  
FINAL DESIGN AND PERMITTING**

**In accordance with City Master Contract #36-0-2020/JG**

**March 28, 2024**

**TASK ORDER NO. 24-06-IS**

**SECTION I. BACKGROUND**

The City of Palm Bay Utilities Department, hereinafter referred to as "City", desires to rehabilitate and upgrade Lift Station Nos. 14 & 73 in accordance with the City's staff direction.

Lift Station No. 14 located at 1020 Americana Blvd NE currently has two dry pit type pumps rated at 250 gpm at 43 ft TDH, 10 HP motors. The existing 8 ft by 8 ft square wet well will be converted into a submersible lift station configuration in accordance with the City's staff direction. The dry pit will be abandoned in place. In addition, all electrical and pump controls will be replaced. The lift station site will be enclosed with fencing.

Lift Station No. 73 located at 265 Melis Ave NE currently has two conventional submersible pumps rated at 200 gpm at 108 ft TDH, 20 HP motors. The station has a 6 ft circular wet well and below-grade valve vault. The City desires to convert the valve to an above-grade configuration, replace the wet well liner, replace the existing submersible pumps, replace the electrical / pump controls, and replace all corroded piping/appurtenances as needed.

The City requested Infrastructure Solution Services (ISS), hereinafter referred to as "Consultant", to provide final engineering design services consisting of the preparation of Contract Documents to rehabilitate and upgrade Lift Station Nos. 14 & 73.

The following are the details of the scope:

**SECTION II. SCOPE OF WORK**

Infrastructure Solution Services agrees to perform the following tasks:

**TASK A: FINAL ENGINEERING SERVICES**

- a) Perform engineering data collection of the existing lift station site areas and points of connection. Field verify Record Drawings of the existing station.
- b) Review Lift Station No. 14 & 73 wastewater model representation, performance, and operation. Use wastewater model to verify pump design duty points.
- c) Prepare 60% design documents package including site plan, demolition plans, bypass pumping plan, preliminary submersible pump selections with calculations, electrical one-line diagram, opinion of probable cost, and a technical design memorandum. Submit a 60% design documents package to the City.
- d) Attend a 60% design review meeting with the City.
- e) Prepare 90% design documents, including technical specifications, incorporating comments from the 60% design review.

- f) Attend a 90% design review meeting with the City.
- g) Submit final design drawings and specifications incorporating comments from the 90% design review.
- h) Submit an engineer's opinion of probable cost with the final design submittal.

#### **TASK B: PERMITTING SERVICES**

- a) Prepare FDEP Notification/ Application for Constructing a Domestic Wastewater Collection/ Transmission System with attachments/ exhibits, duly signed and sealed by the engineer-of-record. Submit to the City for signatures. The Consultant will submit permitting documentation to FDEP. Two FDEP submittals are anticipated.
- b) Address comments received as Request for Additional Information (RAI) from the permitting agencies. Response to one RAI is anticipated from each permitting jurisdiction and is included in this task order.

#### **SECTION III: PROJECT REPRESENTATIVES**

City of Palm Bay Utilities:	Dan Perez, PE 321-952-3410 <a href="mailto:Daniel.Perez@palmbayflorida.org">Daniel.Perez@palmbayflorida.org</a>
Infrastructure Solution Services	Clayton E. McCormack, PE 321-622-4646 <a href="mailto:cmccormack@infrastructureuss.com">cmccormack@infrastructureuss.com</a>

#### **SECTION IV: PERMITTING**

The following permitting is included in this Task Order:

- 1) Wastewater Collection / Transmission System permit through FDEP for each Lift Station.

#### **SECTION V: CITY'S RESPONSIBILITY**

The following items are required from the CITY to complete the Task Order as mentioned above:

- a) Reasonable access to the site.
- b) Reasonable access to operations, maintenance, and engineering staff.
- c) Copies of available Record Drawings.
- d) Payment of permit fees.
- e) Available SCADA system information relative to pump run times if available.
- f) Lift Station No. 14 & 73 measured force main discharge pressures.
- g) Most recent pump drawdown test for each pump for Lift Station No. 14 & 73.
- h) Coordination with other City offices and federal and state regulatory agencies.
- i) Review of engineering design documents.
- j) Coordination with FPL if a new power feed is required.

#### **SECTION VI: CONSULTANT SERVICES SPECIFICALLY NOT INCLUDED**

- a) Environmental services related to unknown threatened and endangered species, wetlands, or regulated solid wastes encountered on the site.

- b) Services related to the acquisition of real property, easements, or rights-of-way.
- c) Revisions to the City's wastewater collection system model.
- d) Bidding and Engineering during Construction Services.

## **SECTION VII: DELIVERABLES**

The following results shall be delivered by the Consultant:

All deliverables shall be provided only in electronic PDF format unless otherwise noted.

Generally –

- a) Monthly activity reports.
- b) Meeting minutes from meetings and conferences with City staff and regulatory agencies.
- c) Timely invoices concurrent with the work.

### **Task A – Final Engineering Services**

- a) Design drawings and technical specifications.
- b) Final design drawings in PDF and AutoCAD format with X-refs and plot styles.
- c) One hard copy and one half sized signed and sealed Final Design Drawings.
- d) Technical Specifications (as required) in PDF format.
- e) Engineer's Opinion of Probable Cost at 60% and final design.

### **Task B – Permitting Services**

- a) FDEP Wastewater Collection / Transmission System General Permit application with supporting information.

## **SECTION VIII: SCHEDULE**

<b>Milestone</b>	<b>Calendar Days to Complete</b>	<b>Sum of Days from NTP</b>
Mobilization	7	7
60% Design Package	60	67
City review of 60% Design Package	21	88
90% Design Package (Including permit applications)	30	118
City review of 90% Design Package	21	139
Permitting	14	153
Final Design Package (100% plans and technical specifications)	14	167

## **SECTION IX: BASIS OF COMPENSATION**

The fee for the scope of work described in Section II shall not exceed a total of **\$117,900.00** and shall not exceed the amounts shown in the table below for each specific task. The subconsultant fee is estimated and shall be billed on a cost not to exceed basis. The City shall periodically compensate the Consultant a portion of the task fee based on mutually agreed-upon percentages of completion of each task.

<b>TASK</b>	<b>DESCRIPTION</b>	<b>FEE</b>
A	Final Engineering Services	\$109,600.00
B	Permitting Services	\$4,800.00
	Subconsultant Allowance	\$3,500.00
	<b>TOTAL</b>	<b>\$117,900.00</b>

At the direction of the City, ISS may be requested to provide additional services. These additional services will be billed at ISS standard rates.

## **SECTION X: ESTIMATED COST OF CONSTRUCTION**

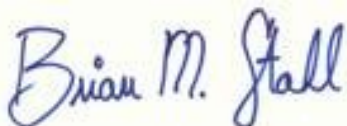
Based upon the design and construction services experience of Infrastructure Solution Services in Brevard County during the past several years, the estimated construction cost of the Lift Station Nos. 14 & 74 Conversion project being undertaken under this Task Order is approximately \$1,000,000.

## **SECTION XI: ACCEPTANCE**

If the above scope and feed meet your approval, please indicate by your signature in the space provided below and return one signed copy, which will constitute an "Agreement and Notice to Proceed" for the accomplishment of this work.

INFRASTRUCTURE SOLUTION SERVICES, LLC.

CITY OF PALM BAY, FLORIDA



\_\_\_\_\_  
Brian M. Stahl, PE  
Managing Member

\_\_\_\_\_  
George Barber, CPPO, CPPB  
Chief Procurement Officer

\_\_\_\_\_  
3/28/24  
Date

\_\_\_\_\_  
Date

Professional Engineering Services for the City of Palm Bay, Florida  
LIFT STATION NO. 14 & 73 REHABILITATION AND UPGRADES  
FINAL DESIGN AND PERMITTING  
Task Order No. 24-06-IS



Project Hourly Labor Breakdown Estimate for Engineering Services										
Task Name		Principal/Associate	Professional Engineer 4	Professional Engineer 4	Engineer 3	Technician 5	1 Person Survey Crew	Administrative / Clerical 3	Total Hours	Total Dollars
		\$190	\$170	\$170	\$110	\$110	\$110	\$60		
Task A: Final Design Services										
a	Prepare Topo Survey of Lift Station Site		16			40	60		116	\$13,720
b	Review Wastewater Model		20						20	\$3,400
c	Prepare 60% Deliverable	8	40	24	100	160			332	\$41,000
d	Attend 60% Design Review		4		8				12	\$1,560
e	Prepare 90% Deliverable	4	20	12	60	80			176	\$21,600
f	Attend 90% Design Review		4		8				12	\$1,560
g	Prepare Final Design Deliverable	4	16	8	24	40			92	\$11,880
h	Prepare Cost Est		8		24				32	\$4,000
	Project Management & Administration		64						64	\$10,880
Task A: Total		16	192	44	224	320	60	0	856	\$109,600
Task B: Permitting										
a	Prepare and Submit FDEP Notification/ Application for Constructing a Domestic Wastewater Collection/ Transmission System		8		24	7.3			39	\$4,800
									0	\$0
Task B: Total		0	8	0	24	7	0	0	39	\$4,800
	Total Labor Hours	16	200	44	248	327	60	0	895	
	% OF Total Labor Hours	1.8	22.3	4.9	27.7	36.6	6.7	0.0	100.0	
	Total Labor Fee	\$3,040	\$34,000	\$7,480	\$27,280	\$36,000	\$6,600	\$0	\$114,400	\$114,400

Subconsultants				Total
Underground Utility Locates - GPRS				\$ 3,500
Total Subconsultant Fees				\$ 3,500

Summary of Task Estimate	Total
ISS Labor Estimate Total	\$114,400
Subconsultant Fees	\$3,500
ISS Expenses Estimate Total	\$0
Total Estimated Cost	\$117,900