

City of Sanibel – Lift Station Rehabilitation Phase 1 Approval of Professional Services Proposal by Tetra Tech, Inc.

This agreement constitutes a work order made through and under the Professional Services Agreement between OWNER and CONSULTANT for Hurricane Ian Architectural and Engineering professional services dated October 3, 2023, the terms and conditions of which are still in full force and effect, except as modified herein.

Services not set forth, or not listed or described herein, are expressly excluded from the Scope of the Professional Services of the CONSULTANT. The CONSULTANT assumes no responsibility to perform any service not specifically identified and/or otherwise described in this Proposal.

SCOPE OF SERVICES

PROFESSIONAL SERVICE OF THE CONSULTANT:

The OWNER maintains 135 wastewater lift stations throughout its collection/transmission system. As a result of Hurricane Ian, many of the stations were submerged in saltwater. Panels were also physically damaged as a result of the storm. The OWNER has compiled details on the panels and associated damage and ultimately desires to proceed with replacement in an organized manner. The first step in this process is to evaluate the existing information that has been compiled and develop a recommended plan of action. Once the plan has been developed, the OWNER desires to proceed with panel replacement for the 25 highest prioritized stations and station rehabilitation of up to 10 (of these 25), under Phase 1 (Pilot). Rehabilitation will be based on a review of each station and may include elevating panels to meet flood elevation requirements, pump replacement, panel replacement, wetwell/valve vault improvements, pipe rehabilitation and related work as determined necessary for each station. For the additional 15 panels proposed for replacement, the panels will match the existing pump sizes. This scope of work outlines the tasks to perform this recommended plan of action and the professional services required to implement Phase 1.

<u> Task 1 – Evaluation</u>

- The CONSULTANT will gather data compiled by the OWNER as well as data gathered by the CONSULTANT through efforts performed for the Florida Department of Emergency Management (FDEM) in response to Hurricane Ian. This may include reports, photos, locations, GIS data, part numbers, flow data, run times, locations and related information which may assist in developing a sequenced plan of action for replacement.
- The CONSULTANT will schedule and attend a meeting with the OWNER to discuss the data and develop criteria for evaluation and ranking for prioritization. Some team members may attend virtually.
- Together with the OWNER, the CONSULTANT will review the potential benefits and costs associated with implementing SCADA for monitoring, and which stations would most benefit.
- Utilizing data collected and analyzed under Task 1, the CONSULTANT will prepare a draft report with recommendations (with the OWNER's input) on how to proceed in a prioritized manner. This will include recommended panels to be replaced per phase and a high-level opinion of cost. The actual number of



phases and number of panels per phase will also be developed with the OWNER's input. Potential incorporation of SCADA will also be included within the plan. It is anticipated that that each phase will include up to 25 stations, with the exception of Phase 1 which will be developed as a pilot with 10 stations. Phase 1 will proceed to design and construction including the top 10 most prioritized stations with panel replacement only for an additional 15 stations.

Task 2 – Preliminary Services (Phase 1 Implementation)

- For those stations identified for Phase 1, CONSULTANT will perform a site visit to the existing lift stations and consult with the CITY to clarify and define the requirements for each.
- Gather field data via surveying at each lift station and force main discharge points where applicable as required to develop base drawings. Field data collection shall include defining location of wetwell, valve vault size depth and layout of lift station, piping, control panels, adjacent roadways and medians adjacent collection and force main piping, electrical, and other associated data needed to complete design. The design flood elevation (DFE) will be determined for each station as a part of this surveying effort and may be based on either the 100-year or 500-year (to be determined).
- To assist with structural design, perform up to 10 standard penetration tests (SPTs) to a depth of 20-feet in order to understand the soils conditions at each lift station proposed to proceed with elevated platforms. For those stations in which no structural platforms for electrical improvements are proposed, no SPT will be performed.
- Perform an analysis to confirm pump sizing for the 10 Phase 1 lift stations. To accomplish this, Watergems will be utilized. This will require input of pump data (curves, flow and related information to be provided by others) for the stations. Once received, data will be input into the Watergems software. Some data presently exists within the hydraulic software, however it is not complete. Once the data has been input, validation will be required through review of available record drawings/GIS data and through monitoring of system pressure. For the purpose of budgeting, this scope anticipates that the existing data is accurate and includes a review of approximately 10-percent of the system to verify pipe sizes. CONSULTANT will work with the OWNER for placement of pressure transducers within the system in order to collect data at various locations. Once the pump and pipe information have been input and the system pressures have been collected, the CONSULTANT will then perform the analysis required to confirm the existing pump size for each of the 10 Phase 1 stations is sufficient and if not, what the recommended size should be.
- Evaluate the existing 135 lift stations to determine which stations fall within the category of either receiving flow from one or more lift stations, or having a discharge pipe that is 12-inches or larger. Stations meeting either of these conditions are required to provide uninterrupted pumping capabilities in accordance with Rule 62-604.400(2) of the Florida Administrative Code (F.A.C.). This may be accomplished through either an in-place generator or bypass pump, unless a variance for an alternative method is sought. This subtask includes identification of stations which meet the conditions; identifies those within compliance; and those which are not. Design for station modifications is not included and would be performed under separate authorization.
- Prepare standard panel designs for up to five (5) different types/sizes of lift stations. Prepare standard plan and profile templates for use in design of future rehabilitation projects. The intent will be to develop templates that will assist the OWNER in streamlining the design process. A template will be developed



for a standard plan layout of the lift station panel(s). CONSULTANT will work with the OWNER to develop and refine the standard details as needed. Provide a PDF copy of the DRAFT standard layouts to the OWNER for review and comment. Meet with the OWNER to discuss DRAFT comments. Provide a PDF copy of the final standard layouts (plan and profile views) for the OWNER's future use in development of plans for wastewater lift station rehabilitation or new construction.

- For those stations recommended for elevating panels under Phase 1, prepare renderings to display what the station site would look like with an elevated platform. The intent will be to show public and Council members what can be anticipated for each site proposed. Renderings will be developed using specialized 3-D imaging software for 1 chosen alternative from the standard panel designs developed in this scope.
- Coordinate with Lee County Electric Cooperative (LCEC) in order to verify power supply and potential ability to upgrade from single phase to three phase power for those stations which are fed by single phase.

Task 3 – Final Design & Permitting (Phase 1 Implementation)

• Prepare for incorporation in the Contract Documents, final drawings and specifications, which provide the general scope, extent and character of the work to be furnished, and performed by the Contractor. The Contract drawings shall proceed to the 60-, 90- and 100-percent completion stages and shall include, but not be limited to the following for all improvements recommended by the CONSULTANT and approved by the OWNER during the Preliminary Services.

<u>60-percent submittal</u>: Civil and mechanical drawings will be updated based on comments received from the OWNER and initial structural, electrical/instrumentation, and project technical specifications in Construction Specifications Institute (CSI) format will be prepared for submittal along with an initial opinion of probable construction cost.

<u>90-percent submittal</u>: Updated engineering drawings (90% complete of all disciplines), technical specifications incorporating the comments received from the OWNER on the 60 percent submittal, and updated opinion of probable construction cost.

<u>100-percent submittal</u>: Updated engineering drawings and technical specification incorporating the comments received from the OWNER on the 90% submittal.

- A preliminary list of anticipated drawings is presented below:
- 1) Cover sheet, index and key map (3 sheets).
- 2) Civil/site plan sheets for lift station layouts (1 sheet per station, 10 total).
- 3) Mechanical drawings for all equipment for the lift stations, wet well rehabilitation, and on-site piping (1 sheet per station, 10 total).
- 4) Structural sheets (if required) (1 sheets per station, plus 5 specific detail sheets, 15 total)
- 5) Electrical and instrumentation drawings for primary power and facility control needs (standard details plus 1 site plan sheet per station for full rehabilitation plus an additional 6 sheets to display panel only replacement, 16 total).



6) Detail Sheets (Civil, Structural, Electrical) (10 sheets total).

<u>Specifications</u>: Prepare a comprehensive project manual that contains technical specifications (Divisions 2 through 16) only for competitive bidding. Bidding and contractual specification development is not included and is anticipated to be performed by the OWNER. The project manual and its contents will be formatted in accordance with the Construction Specification Institute (CSI) and prepared using Microsoft WORD for inclusion with the OWNER's bidding and contractual specifications.

<u>Meetings</u>: Attend design review meetings with the OWNER at the 60-, 90- and 100-percent completion stages and formally address all comments.

- Perform quality assurance and quality control (QA/QC) reviews at each submittal stage. QA/QC reviews will be performed in accordance with the CONSULTANT's Quality Practices Manual and related policies.
- The CONSULTANT will prepare and submit a single permit application and supporting documentation (for all 25 lift stations) to the Florida Department of Environmental Protection (FDEP) and the to obtain permits for construction of the proposed improvements, if required. The CONSULTANT will also respond to requests for additional information (RAIs) from the FDEP to clarify the original applications. All permit application fees will be paid by the OWNER.

Notes:

1. No services beyond design and permitting are included within this scope of services. Bidding and/or construction services will be submitted under a separate Service Proposal.

2. All permitting fess shall be paid by the City.

SCHEDULE

The scope of services will be performed in accordance with the following schedule:

Task 1 – Evaluation - to be completed within 60 days of notice to proceed.

Task 2 – Preliminary Services (Phase 1 Implementation) – to be completed within 150 days of notice to proceed.

Task 3 – Final Design & Permitting (Phase 1 Implementation) – to be completed within 365 days of the notice to proceed.

COMPENSATION

The Price Proposal submitted by CONSULTANT attached hereto as Exhibit A is accepted and summarized as follows:

Definitions:

Lump Sum (LS): Includes all direct and indirect labor costs, personnel related costs, overhead and administrative costs, which may pertain to the services performed, provided and/or furnished by the CONSULTANT as may be required to complete the services in Exhibit A. The total amount of compensation to be paid the CONSULTANT shall not exceed the amount of the total Lump Sum compensation established



and agreed to. The portion of the amount billed for CONSULTANT's services which is on account of the Lump Sum will be based upon CONSULTANT's estimate of the portion of the total services actually completed at the time of billing.

Time and Materials (T&M): For the actual hours expended by the CONSULTANT's professional and technical personnel, multiplied by the applicable hourly rates for each classification or position on the CONSULTANT's standard billing rate schedule in effect at the time the services are rendered. The current standard billing rate schedule is attached as Exhibit B. For the services of CONSULTANT's Sub-Consultants engaged to perform or furnish services in Exhibit A, the amount billed to CONSULTANT therefore times a factor of 1.10. The amount payable for Reimbursable Expenses will be the charge actually incurred by or imputed cost allocated by CONSULTANT, therefore times a factor of 1.10.

Estimated Fees: CONSULTANT's estimate of the amount that will become payable for Services (including CONSULTANT's Sub-Consultants and reimbursable expenses) is only an estimate for planning purposes, is not binding on the parties and is not the maximum amount payable to CONSULTANT for the services under this Agreement. Notwithstanding the fact that the estimated amount for the services is exceeded, CONSULTANT shall receive compensation for all Services furnished or performed under this Agreement.

If it becomes apparent to CONSULTANT at any time before the Services to be performed or furnished under this Agreement are about eighty percent complete that the total amount of compensation to be paid to CONSULTANT on account of these Services will exceed CONSULTANT's estimate, CONSULTANT shall endeavor to give CITY written notice thereof. Promptly thereafter CITY and CONSULTANT shall review the matter of compensation for such Services, and either CITY shall accede to such compensation exceeding said estimated amounts or CITY and CONSULTANT shall agree to a reduction in the remaining services to be rendered by CONSULTANT under this Agreement so that total compensation for such Services will not exceed said estimated amount when such services are complete. The CONSULTANT shall be paid for all services rendered if CONSULTANT exceeds the estimated amount before CITY and CONSULTANT have agreed to an increase in the compensation due to CONSULTANT or a reduction in the remaining services.

For the services provided and performed by CONSULTANT for providing and performing the Task(s) set forth and enumerated in Exhibit A entitled "Price Proposal", the CITY shall compensate the CONSULTANT as follows:

ITEM	AMOUNT (Estimated if T&M)	FEE TYPE (LS; T&M NTE)
Task 1 – Evaluation	\$41,280	T&M
Task 2 – Preliminary Services (Phase 1 Implementation)	\$169,710	T&M
Task 3 – Final Design & Permitting (Phase 1 Implementation)	\$243,850	T&M
TOTAL COMPENSATION FOR CONSULTANT'S SERVICES	\$454,840	Т&М

For services of CONSULTANT's Sub-Consultants engaged to perform or furnish services, the CITY shall compensate the CONSULTANT as follows:



SUB-CONSULTANT	AMOUNT (Estimated if T&M)	FEE TYPE (LS; T&M NTE)
Not Applicable	\$44,000	T&M
TOTAL COMPENSATION FOR SUB-CONSULTANT'S SERVICES	\$44,000	Т&М

For reimbursable expenses of CONSULTANT, the CITY shall compensate the CONSULTANT as follows:

REIMBURSABLE EXPENSES	AMOUNT (Estimated if T&M)	FEE TYPE (LS; T&M NTE)
Airline Fares, hotels, rental car, fuel, courier and express delivery charges, reproduction of plans and reports, photography, field supplies and costs of other materials and/or equipment specifically used for and solely applicable to this project	\$1,000	T&M
TOTAL COMPENSATION FOR REIMBURSABLE EXPENSES	\$1,000	T&M

TOTAL COMPENSATION INCLUDING CONSULTANT'S SERVICES, SUB-CONSULTANT'S SERVICES & REIMBURSABLE EXPENSES	\$499,840	Т&М
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EXHIBITS

This Agreement is subject to the provisions of the following Exhibits which are attached to and made a part of the Agreement:

Exhibit A "Price Proposal" Exhibit B "Standard Billing Rate Schedule"

IN WITNESS WHEREOF, the parties hereto have executed the Agreement to be effective as of the date above.

By:

OWNER: CITY OF SANIBEL CONSULTANT: <u>TETRA TECH, INC.</u>

Signature

Signature

By: Dana Souza

Title City Manager

Title Vice President

Daniel Nelson, P.E.

📧 Exhibit A - Price Proposa		Labor Plan P								Price Summary / Totals														
Exhibit A Thee hopost			19 Resources										Task Pric	ing Totals	499,840									
Lift Station Rehabilitation Phase 1	Bill Rate >	300.00	290.00	130.00	280.00	200.00	125.00	145.00	200.00	130.00	155.00	180.00	110.00	125.00	110.00	85.00	200.00	145.00	155.00	170.00				
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Project Phases / Tasks	2,787	<u>ة ق</u> 38	214	<u>ت</u> بھ 390	ت <u>ت</u> 63	310	434		72	132	5 <u>5</u> 50	जम् 40	ت ج 110	5 Z 110	<u>රස</u> ග 40	60	100	200	ය <u>ම</u> 320	ऊँ छै 50	Labor 454.840	Subs 44.000	ODCs 1,000	499,840
		20						54	72	152	30	40	110	110	40		100	200	320	30	. ,	44,000	1,000	
Task 1 - Evaluation	236	4	34	62	6	66	40	4	-	-		-	-	-	-	20	-	-	-	-	41,280	-	-	41,280
Data Collection	20		2	8		6		4													3,400			3,400
Evaluation Meeting with OWNER	12		4	4		4															2,480			2,480
SCADA Incorporation Review	20		4			16															4,360			4,360
Plan Development & Phasing	184	4		50	6	40	40									20					31,040			31,040
Task 2 - Preliminary Services (Phase 1 Implementation)	1,070	2	-	90	-	112	52	50	-	-	50	40	110	110	40	-	100	200	-	50	169,710	44,000	-	213,710
Lift Station Site Visits (10 sites)	30		10	20																	5,500			5,500
Surveying (10 stations)	312		6	6								40	110	110	40						39,970			39,970
Standard Penetration Tests (25 SPTs)	10		4	4			2														1,930	44,000		45,930
Hydraulic Analysis for Pump Verification	374		4	20				50									100	200			60,010			60,010
Lift Station Compliance with FAC 62-604.400(2)	44		4	40																	6,360			6,360
Standard Panel Design	220		20			100	50													50	40,550			40,550
Lift Station Platform Renderings	68	2	16								50										12,990			12,990
LCEC Coordination	12					12															2,400			2,400
Task 3 - Final Design & Permitting (Phase 1 Implementation)	1,481	32		238	57		342	-	72	132	-	-	-	-	-	40	-	-	320	-	243,850		-	243,850
Drawings	1,085	-	72	134	25	80	334	-	40	80	-	-	-	-	-	-	-	-	320	-	171,050	-	-	171,050
General Sheets (3 Sheets)	36		2	4			30														4,850			4,850
Civil Sheets (10 Sheets)	205		25	60			120														30,050			30,050
Mechanical Sheets (10 sheets)	205		25	60			120														30,050			30,050
Structural Sheets (15 sheeets)	288		8						40	80									160		45,520			45,520
Electrical/Instrumentation (16 sheets)	273		8		25	80													160		50,120			50,120
Detail Sheets (10 sheets)	78		4	10			64														10,460			10,460
Technical Specifications	136		16	40		24				24						32					20,480			20,480
Design Meetings with Owner (3)	64		20	20		12				12											12,360			12,360
Opinions of Costs (60-, 90- and 100-percent)	60		4	24		16				16											9,560			9,560
QA/QC Reviews (60-, 90- and 100-percent)	96	32			32				32												24,960			24,960
FDEP Permit and RAI Response)	40		4	20			8									8					5,440			5,440
Reimbursable Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		1,000	1,000
Direct Costs	-																						1,000	1,000
Totals	2,787	38	214	390	63	310	434	54	72	132	50	40	110	110	40	60	100	200	320	50	454,840	44,000	1,000	499,840



Resilient and Sustainable Infrastructure (RSI)

Hourly Billing Rates for: IEW Rates Effective Starting: January 1, 2023

Personnel	Hourly Rate
Management	
Operations Management	
Principal in Charge	\$385.00
Project and Program Management	
Project Manager 1	\$210.00
Project Manager 2	\$230.00
Sr Project Manager	\$290.00
Program Manager	\$300.00
A/E Services	
Engineers	
Engineer 1	\$115.00
Engineer 2	\$130.00
Engineer 3	\$145.00
Project Engineer 1	\$185.00
Project Engineer 2	\$200.00
Sr Engineer 1	\$240.00
Sr Engineer 2	\$260.00
Sr Engineer 3	\$280.00
Principal Engineer	\$365.00
Engineering Designers	
Engineering Technician	\$80.00
Engineering Designer 1	\$100.00
Engineering Designer 2	\$120.00
Engineering Designer 3	\$140.00
Sr Eng Designer 1	\$175.00
Sr Eng Designer 2	\$185.00
Sr Eng Designer 3	\$200.00
Information Technology	
Jr Sys Analyst / Programmer	\$120.00
Sys Analyst / Programmer	\$180.00
Sr Sys Analyst / Programmer 1	\$200.00
Sr Sys Analyst / Programmer 2	\$285.00
Sci Svcs	
Scientists	
Scientist 1	\$85.00
Scientist 2	\$105.00
Scientist 3	\$130.00
Sr Scientist 1	\$145.00
Sr Scientist 2	\$175.00
Sr Scientist 3	\$235.00
Principal Scientist	\$270.00



Resilient and Sustainable Infrastructure (RSI)

Hourly Billing Rates for: IEW Rates Effective Starting: January 1, 2023

Personnel	Hourly Rate
Field Services	
Construction Observation	
Construction Project Rep 1	\$120.00
Construction Project Rep 2	\$130.00
Sr Constr Project Rep 1	\$160.00
Sr Constr Project Rep 2	\$165.00
Construction Administration	
Construction Administrator	\$105.00
Sr Construction Administrator	\$130.00
Construction Management	
Construction Manager 1	\$200.00
Construction Manager 2	\$220.00
Sr Construction Manager	\$250.00
Construction Director	\$290.00
Surveying	
Survey Tech 1	\$75.00
Survey Tech 2	\$110.00
Survey Tech 3	\$115.00
Survey Crew Chief	\$125.00
Surveying Specialist	\$140.00
Land Surveyor	\$150.00
Sr Land Surveyor	\$180.00
Technical Services	
Technicians	
Technician 1	\$80.00
Technician 2	\$95.00
Technician 3	\$110.00
Sr Technician 1	\$150.00
Sr Technician 2	\$155.00
Sr Technician 3	\$160.00
Project Support	
Computer Aided Design (CAD)	¢00.00
CAD Technician 1	\$80.00
CAD Technician 2	\$95.00
CAD Technician 3	\$110.00
CAD Designer	\$125.00
Sr CAD Designer 1	\$155.00
Sr CAD Designer 2	\$170.00
CAD Director	\$200.00
Geographic Information Systems (GIS)	<u> </u>
GIS Analyst 1	\$80.00
GIS Analyst 2	\$110.00
Sr GIS Analyst	\$135.00
GIS Application Developer	\$145.00



Resilient and Sustainable Infrastructure (RSI)

Hourly Billing Rates for: IEW Rates Effective Starting: January 1, 2023

Personnel

Sr GIS Application Developer

Hourly Rate

\$180.00



Resilient and Sustainable Infrastructure (RSI)

Hourly Billing Rates for: IEW Rates Effective Starting: January 1, 2023

Personnel	Hourly Rate
Business Support	
Project Administration	
Project Assistant 1	\$75.00
Project Assistant 2	\$85.00
Project Administrator	\$115.00
Sr Project Administrator	\$130.00
Contracts / Legal	
Contract Administrator	\$95.00
Sr Contract Administrator	\$130.00
Finance / Accounting	
Project Analyst 1	\$100.00
Project Analyst 2	\$130.00
Sr Project Analyst	\$175.00
Project Accounting Director	\$250.00
Graphics	
Graphic Artist	\$150.00
Consulting	
Consultant 1	\$95.00
Consultant 2	\$135.00
Sr Consultant 1	\$175.00
Sr Consultant 2	\$215.00
Sr Consultant 3	\$225.00