

**CITY OF PALM BAY, FL**

**MALABAR ROAD WATER MAIN EXTENSION PHASE 2  
DESIGN, PERMITTING, LAND ACQUISITION SUPPORT, AND BIDDING SERVICES**

**In accordance with City Master Contract #36-0-2020/JG  
MARCH 04, 2024  
TASK ORDER NO. 24-05-IS**

**SECTION I. BACKGROUND**

The City of Palm Bay Utilities Department, hereinafter referred to as "City", has identified the need to design and permit an approximately 10,000 LF extension of the existing 12-inch water main. The proposed 12-inch water main will be located on the south side of Malabar Rd from approximately Malabar Woods Blvd on the east to US 1 on the west within an easement. The proposed 12-inch water main will continue north within the right-of-way on the west side of US-1 from Malabar Rd on the south to just north of Riverview Dr. The proposed 12-inch water main extension will include a crossing of the Florida East Coast Railroad at Malabar Rd.

This improvement is being undertaken to loop the water transmission mains and to improve system redundancy/water quality in the area. This project also prepares for a future expansion of the water system to serve the Town of Malabar (Town).

This project anticipates requiring the acquisition of approximately twenty-six (26) easements from properties along the south side of the Malabar Rd segment of the proposed watermain alignment because of the possible Florida Department of Transportation (FDOT) conceptual Malabar Road improvements right of way requirements.

It is anticipated Malabar staff will interact with affected residents to obtain necessary easements from the property owners. ISS and Utilities staff will support the Town of Malabar through participating in a public meeting.

This Task Order has been prepared based upon the right of way and easement information obtained from the publicly available information contained in the Florida Department of Transportation Malabar Road (ST 514) PD&E Study (FDOT Project No. 430136-1) documentation prepared in April 2018 found at <https://www.cflroads.com/project/430136-1>.

The City requested Infrastructure Solution Services (ISS), hereinafter referred to as "Consultant", to provide design and permitting services for the water system improvement as described in this Task Order.

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 DESIGN SERVICES**

- a) Review project scope and provided data such as surveying and utility drawings, FDOT information, geotechnical report, etc., and provide a data request to the City.
- b) Have a project kick-off meeting with City and Town personnel to discuss the scope, data provided by the City, the City Standards, and any other relevant information provided by the City.
- c) Perform site visits to determine existing conditions.
- d) Perform engineering data collection for the project alignment (including topography, utility locations, locations of above-grade features, tree inventory etc) within the public ROW on the south side of Malabar Rd extending south approximately 25 ft into the private properties to create utility easements and the base files for the design drawings. Similar engineering data will be collected along the water main alignment on the west side of US-1 within the right-of-way.
- e) Perform a specific purpose engineering survey of the proposed project locations to locate the approximate location of certain existing underground utilities using Sunshine 811 call-out services and Ground Penetrating Radar per American Society of Civil Engineering Standard 38-02, Quality Level B. Locations of utilities will be collected via aerial drone and/or GPS coordinates.
- f) Prepare 60% design documents package including design drawings and opinion of probable cost. Submit a 60% design documents package to the City.
- g) Attend a 60% design review meeting with the City and Town if desired.
- h) Coordinate and perform subsurface utility investigations (through a subconsultant) of identified critical utility crossing, where required for the design.
- i) Coordinate and perform geotechnical investigation at key locations (through a subconsultant).
- j) Coordinate and perform a preliminary environmental assessment of the water main routes to identify any environmental concerns including threatened and endangered species or wetlands (through a subconsultant).
- k) Prepare 90% design documents, including technical specifications, incorporating comments from the 60% design review, soft dig information, and geotechnical evaluation into the design. Prepare an updated opinion of probable cost.
- l) Attend a 90% design review meeting with the City.
- m) Submit final design drawings and specifications incorporating comments from the 90% design review and permitting agency comments.
- n) Submit an Engineer's Opinion of Probable Cost with the final design submittal.

#### TASK B: PERMITTING SERVICES

- a) Prepare the Florida Department of Environmental Protection (FDEP) Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs 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.
- b) Prepare Florida Department of Environmental Protection (FDEP) Notice of Intent to use an Environmental Resource General Permit under Section 62-330.453 FAC 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.
- c) Prepare the Florida Department of Transportation (FDOT) Utility Permit with attachments/exhibits, duly signed and sealed by the engineer-of-record. Submit to the City for signatures. Consultant will submit permitting documentation to FDOT.
- d) Prepare the Florida East Coast Railroad Utility License Permit 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 FEC.

- e) Prepare Brevard County Right-of-Way Permit with attachments/ exhibits, duly signed and sealed by the engineer-of-record. Submit to the City for signatures. Consultant will submit permitting documentation to County.
- f) Perform the required tracking and coordination of the submitted permit applications through approval, including but not limited to correspondence with the permitting agency representatives, responses to comments or requests for additional information, and other requirements as requested by the permitting agencies. Response to one Request for Additional Information is anticipated.
- g) Prepare and submit any documentation on behalf of the City required by the permitting agency to close the permit.

**TASK C: LAND ACQUISITION SUPPORT**

- a) Prepare Sketch of Descriptions for Easements to be acquired. Sketches are to be delivered at letter size (8-1/2"x11") sheets as required by Brevard County for recording purposes. Three signed/sealed copies will be provided. A total of 26 easement descriptions are anticipated. This effort will begin after the 60% deliverable design review meeting.
- b) Prepare for and participate in one public meeting with impacted property owners to introduce the project scope of work, project benefits, and discuss land acquisition needs. All necessary coordination needed to schedule the meeting, obtain a meeting location, prepare meeting announcements, and distribute meeting announcements will be done by others.

**TASK D: BIDDING SERVICES**

- a) Review City prepared Invitation to Bidding documents.
- b) Attend the pre-bid meeting.
- c) Prepare answers to bidder questions for the City to use in preparation and distribution of bid addenda.

**TASK E: ENGINEERING SERVICES DURING CONSTRUCTION**

Engineering Services during Construction will be provided under a separate 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@infrastructuress.com">cmccormack@infrastructuress.com</a>

**SECTION IV: PERMITTING**

The following permitting is included in this Task Order:

- 1) FDEP Water Main Extensions for PWSs General Permit and Certification
- 2) FDEP Environmental Resource Permit General Permit for Utilities
- 3) FDOT Utility Permit

- 4) Florida East Coast Railroad Utility License
- 5) Brevard County Right-of-Way

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

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

- a) Reasonable access to the piping routes and support with residents.
- b) Reasonable access to operations, maintenance, and engineering staff.
- c) Copies of available record drawings.
- d) Payment of permit fees.
- e) Coordination with other City offices and federal and state regulatory agencies.
- f) Support with easement acquisition and property access for fieldwork.
- g) Public Meeting coordination and support with residents.
- h) Review of 60 percent and 90 percent design document submittals.
- i) Preparation of Invitation to Bid documents

#### **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 routes unless otherwise described herein.
- b) Services related to the acquisition of real property, easements, or rights-of-way except for the easements specifically listed herein.
- c) Hydraulic modeling or other revisions to the City's water distribution system model.
- d) Engineering Services during Construction.

#### **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.

Design documents will be prepared assuming all project locations will be bid for construction as a single procurement.

Watermain design drawings will be prepared depicting plan views only unless plan and section views are required due to the proposed method of construction or regulatory requirements.

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 Design 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%, 90% and final design.

**Task B – Permitting Services**

- a) General Permit for Construction of Water Main Extensions for PWSs application with supporting information. Provide .pdf and hard copies as required.
- b) Environmental Resource General Permit application with supporting information. Provide .pdf and hard copies as required.
- c) FDOT Utility Permit with supporting information. Provide .pdf and hard copies as required.
- d) FEC Utility License Permit with supporting information. Provide .pdf and hard copies as required.
- e) Brevard County Right-of-Way Permit with supporting information. Provide .pdf and hard copies as required.

**Task C – Land Acquisition Support**

- a) Draft and final easement descriptions
- b) Public Meeting documentation

**Task D - Bidding Services**

- a) Responses to Contractor questions during bid phase.

**SECTION VIII: SCHEDULE**

<b>Milestone</b>	<b>Calendar Days to Complete</b>	<b>Sum of Days from NTP</b>
Mobilization	5	5
Field Data Collection (Surveying)	75	80
60% Design Package	60	140
City review of 60% Design Package	14	154
90% Design Package (Including permit applications)	45	199
City review of 90% Design Package	14	213
Permitting	45	258
Address Permitting Review Comments and Resubmit	14	272
Final Design Package (100% plans and technical specifications)	30	302

**SECTION IX: BASIS OF COMPENSATION**

The lump sum fee for the scope of work described in Section II shall not exceed a total of **\$ 345,160** as shown in the table below. The subconsultants 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 Design Services	\$189,760
B	Permitting Services	\$ 33,680

C	Land Acquisition Support Services	\$ 63,760
D	Bidding Services	\$ 9,360
	Subconsultant Allowance	\$ 48,600
	<b>Total</b>	<b>\$345,160</b>

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

**SECTION X: ESTIMATED COST OF CONSTRUCTION**

Based upon the design and construction services experience of Infrastructure Solution Services in the Brevard County area during the past several years, the estimated construction cost for the Malabar Road Water Main Extension project being undertaken under this Task Order is approximately \$3.5 million plus land acquisition costs.

**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

03/04/24  
 \_\_\_\_\_  
 Date

\_\_\_\_\_  
 Date

Professional Engineering Services for the City of Palm Bay, Florida  
 Malabar Rd Water Main Extension Phase 2  
 Task Order No. 24-05-IS



Project Hourly Labor Breakdown Estimate for Engineering Services									
Task Name	Principal/Associate	Professional Engineer 4	Engineer 3	Technician 6	2 Person Survey Crew	Professional Surveyor	Total Hours	Total Dollars	
	\$190	\$170	\$110	\$120	\$140	\$150			
<b>Task A: Final Design Services</b>									
a Review project scope and data. Prepare data request to City		2	4				6	\$780	
b Project kickoff meeting	4	4	8				16	\$2,320	
c Perform site visits to determine existing site conditions		16	16				32	\$4,480	
d Perform engineering data collection of the project location	2	16	16	200	300	40	574	\$76,860	
e Coordinate and perform utility locates			20		40		60	\$7,800	
f Prepare 60% design documents package	16	40	80	120			256	\$33,040	
g Attend 60% design review meeting	2	4	8				14	\$1,940	
h Coordinate subsurface utility investigations		4	12		24		40	\$5,360	
i Coordinate geotechnical investigations		4	12				16	\$2,000	
j Coordinate preliminary environmental assessment investigations		4	12				16	\$2,000	
k Prepare 90% design documents	16	24	40	100			180	\$23,520	
l Attend 90% design review meeting	2	4	8				14	\$1,940	
m Prepare final design documents	6	8	24	40		8	86	\$11,140	
n Prepare Engineer's Opinion of Probable Construction Costs		2	24				26	\$2,980	
Project Management & Administration		80					80	\$13,600	
<b>Task A: Total</b>	<b>48</b>	<b>212</b>	<b>284</b>	<b>460</b>	<b>364</b>	<b>48</b>	<b>1,416</b>	<b>\$189,760</b>	
<b>Task B: Permitting</b>									
a Prepare and Submit FDEP WM General Permit application		4	16	8			28	\$3,400	
b Prepare and Submit ERP General Permit application		4	24	16			44	\$5,240	
c Prepare and Submit FDOT Utility Permit application		16	24	20			60	\$7,760	
d Prepare and Submit FEC Utilities License application		24	40	24			88	\$11,360	
e Prepare and Submit Brevard County ROW Permit application		8	24	16			48	\$5,920	
<b>Task B: Total</b>	<b>0</b>	<b>56</b>	<b>128</b>	<b>84</b>	<b>0</b>	<b>0</b>	<b>268</b>	<b>\$33,680</b>	
<b>Task C: Land Acquisition Support Services</b>									
Research & Prepare Easements	8	24		104		260	396	\$57,080	
Public Meeting Support	4	16	16	12			48	\$6,680	
<b>Task C: Total</b>	<b>12</b>	<b>40</b>	<b>16</b>	<b>116</b>	<b>0</b>	<b>260</b>	<b>444</b>	<b>\$63,760</b>	
<b>Task D: Bidding Services</b>									
Attend the pre-bid meeting		4	8				12	\$1,560	
Prepare answers to bidder questions for the City to use in preparation and distribution of bid addenda		20	40				60	\$7,800	
<b>Task D: Total</b>	<b>0</b>	<b>24</b>	<b>48</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>\$9,360</b>	
<b>Total Labor Hours</b>	<b>60</b>	<b>332</b>	<b>476</b>	<b>660</b>	<b>364</b>	<b>308</b>	<b>2,200</b>		
<b>% OF Total Labor Hours</b>	<b>2.7</b>	<b>15.1</b>	<b>21.6</b>	<b>30.0</b>	<b>16.5</b>	<b>14.0</b>	<b>100.0</b>		
<b>Total Labor Fee</b>	<b>\$11,400</b>	<b>\$56,440</b>	<b>\$52,360</b>	<b>\$79,200</b>	<b>\$50,960</b>	<b>\$46,200</b>	<b>\$296,560</b>	<b>\$296,560</b>	

Subconsultants	Total
Utility Locates - GPRS, Inc. (4 AC @ \$3,500/AC)	\$ 14,000
Subsurface Investigation (Soft Digs) - ECHO UES, Inc. (25 Soft Digs @ \$400/each)	\$ 9,600
Geotechnical - Universal Engineering Services, Inc. (6 ft bores, 500 ft spacing @ \$750/each)	\$ 15,000
Preliminary Environmental Assessment - Atlantic Environmental of Florida, LLC.	\$ 10,000
<b>Total Subconsultant Fees</b>	<b>\$ 48,600</b>

Summary of Task Estimate	Total
ISS Labor Estimate Total	\$296,560
Subconsultant Fees	\$48,600
ISS Expenses Estimate Total	\$0
<b>Total Estimated Cost</b>	<b>\$345,160</b>