



SCOPE OF WORK

FOR

LYONS PARK NEIGHBORHOOD IMPROVEMENT PROJECT CONSTRUCTION MANAGEMENT SERVICES (CMS)

PURPOSE

The Lyons Park Neighborhood is located west of South Cypress Road, north of McNab Road, east of South Flagler Avenue and south of Southwest 8th Street. This study area is a residential neighborhood with mostly single-family homes, which is served by an existing stormwater collection system. The project area suffers from flooding problems as documented in the City Stormwater Master Plan (SWMP). This project intends to improve the drainage systems within the project area.

The sanitary sewer lines within the Lyons Park Neighborhood are located in the rear yard easements of the properties/homes. One of the City's Comprehensive Plan policies is to identify the feasibility of implementing capital projects to relocate the sewer lines or to rehabilitate them in place. This project intends to relocate the sewers to the street's right-of-way. No improvements are needed to the existing lift stations.

The project will not include a water line improvements or reuse water irrigation system.

The project was divided into three phases. Phase 1 included the preparation of a Basis of Design Report (BODR) and preliminary design of the improvements. Phase 2 included the design of the improvements, and bidding assistance. Phase 3 is to provide construction phase services.

1. **Construction engineering/management services.** The purpose of the construction administration phase is to manage the construction of the **Project**. Construction Phase will commence with the award of the Construction Contract(s). A construction duration of **18** months has been used to estimate the fee.

Meetings during Construction: **CONSULTANT** shall perform the following services during construction of all improvements for the project areas.

- a. Meetings with **City:** **CONSULTANT** shall coordinate all preconstruction preparation, including preconstruction photos, meetings and coordination. A pre-construction meeting will be held. **CONSULTANT** shall supply all invitations to said meeting and will record and distribute meeting minutes. **CONSULTANT** will attend meetings required during construction for the **Project** when specifically requested by the **City**. These meetings include, but are not limited to, construction progress meetings, neighborhood association meetings and individual resident meetings.

- b. Meetings with Agencies: **CONSULTANT** shall meet with regulatory or other agencies to discuss **Project** matters.

Construction Services: **CONSULTANT** shall perform the following services during construction of all improvements for the project areas.

- a. Construction Observation: **CONSULTANT** shall provide on-site construction observation services. These will include the following:
- i. Construction Phase will commence with the award of the Construction Contract(s) and will not terminate until a Certificate of completion of the completed Project is issued by the City, or when final payment is due the Contractor, or in their absence, sixty (60) days from the date of substantial completion. **CONSULTANT** will administer said Construction Phase according to the terms of this Agreement and in accordance with the duties and responsibilities set forth in the Contract Documents for the duration of the Construction Phase.
 - ii. **CONSULTANT** shall consult with and advise **City** and act as its representative as provided in the Contract Documents.
 - iii. **CONSULTANT** shall provide full time on-site representatives to monitor the progress and quality of the work and to determine if the work is proceeding in accordance with the Contract Documents. On the basis of its on-site observation, **CONSULTANT** shall exercise the utmost care and diligence with sufficient detail to guard **City** against defects and deficiencies in the work by the Contractor and to determine if the work is proceeding in accordance with all of the requirements of the Contract Documents. **CONSULTANT** shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work; however, **CONSULTANT** shall have the duty to give prompt notification in writing to **City** of any failure of the Contractor, of which **CONSULTANT** may be aware as a result of its observations, to follow and conform to the Contract Documents and specifications, but shall not be responsible for the failure of the Contractor to perform the construction work in accordance with the Contract Documents.
 - iv. Review and approve Shop Drawings and samples within the time specifications set forth in the Contract Documents, the results of tests and inspections and other data which any Contractor is required to submit, but only for conformance with the design concept of the Contract Documents; determine the acceptability of substitute materials and equipment proposed by Contractor(s); receive and review (for general content as required by the specifications) maintenance and operating instructions, schedules, guarantees,

bonds and certificates of inspection which are to be assembled by Contractor(s) in accordance with the Contract Documents; and respond to Contractor's requests for information or clarification, all of which shall be performed in a prompt and timely manner so as not to delay the performance of the Contractor.

- v. Issue all instructions of the City to Contractor(s); prepare change orders as required; make decisions on the interpretation of the Contract Documents on all claims of the Contractor(s) relating to the execution and progress of the work and all other matters and questions relating thereto.
 - vi. Based on **CONSULTANT**'s on-site observations and on its review of Contractor(s)' applications for payment and the accompanying data and schedules, including appropriate progress record drawings, determine the amounts owned to Contractor(s) and notify the **City** for approval of payments to Contractor(s) in such amounts.
 - vii. **CONSULTANT** shall prepare Change Orders in compliance with **City** procedures.
 - viii. **CONSULTANT** shall conduct inspections to determine if the Project is substantially complete and the date of substantial completion and a final inspection to determine if the Project has been completed in general accordance with the Contract Documents and the date of final completion, shall receive and review written guarantees and related documents assembled by the Contractor, and shall issue a final Certificate of Payment. **CONSULTANT** will prepare punch list items and during substantial completion review and approval of completed items before final completion or project certification.
 - ix. **CONSULTANT** shall receive as-built drawings prepared by the Contractor, reflecting conditions based upon actual construction, including final sign and sealed copies at project completion. These drawings shall be reviewed by **CONSULTANT** for general completeness of information and shall be submitted to and be the property of **City**.
- b. Field Meetings (Engineer of Record): **CONSULTANT** shall attend construction field meetings as needed.
 - c. Periodic On-Site Visits (Engineer of Record): **CONSULTANT** designers shall meet on-site as needed to discuss **Project** matters.

- d. **CONSULTANT** shall modify drawings, documents and/or specifications due to request for changes by the **City**.
 - e. Public Information: **CONSULTANT** shall attend one community meeting during at the start of construction to support the public awareness program outlined in the previously approved Community Awareness Plan. **CONSULTANT** shall be prepared to answer questions and give information on technical matters. The consultant will prepare and mail letters to invite residents to the community meeting. **CONSULTANT** shall prepare technical presentations for community meetings and provide minutes of the meeting.
 - c. The consultant will assign a person during the construction phase to be the Community Liaison to answer and relate/resolve the community concerns with the construction team and contractor.
 - d. Project documentation (test results, daily report, photos, ect.) will be collected and uploaded to the City's e-Builder system by the Consultant.
 - e. Project Certification: **CONSULTANT** shall certify the project upon final completion for regulatory and **City** purposes.
2. **Record Drawings:** **CONSULTANT** shall provide record drawings prepared by incorporating the as-built information provided by the contractor at project completion. All survey fieldwork required to locate the required appurtenances will be the responsibility of the contractor.
3. **Materials testing during construction:** (See attachment 2 – Federal Engineering and Testing fee Proposal).

Notes:

1. Duration was based on 18 months.
2. Attendance to Public Meeting is included in original Work Order.

R J Behar & Company, Inc.

<u>Personnel Category</u>	<u>Documents</u>	<u>Cadd</u>	<u>Const.</u>	<u>Engineer</u>	<u>Senior</u>	<u>Project</u>	<u>Principal</u>	<u>FEE</u>	<u>Comments</u>
<u>Hourly Rate</u>	<u>Public O.</u>	<u>Technician</u>	<u>Inspector</u>	<u>Engineer</u>	<u>Engineer/</u>	<u>Manager</u>	<u>Principal</u>	<u>FEE</u>	<u>Comments</u>
	\$ 62.70	\$ 79.32	\$ 75.66	\$ 94.50	\$ 171.60	\$ 171.60	\$ 224.73		
TASK									
1) Construction Services (18 months)									
Preconstruction meeting				4		4			18 meetings @ 3 hours
Meetings during construction					54				Assume 4 meetings @ 4 hours
Meetings with agencies				16	16				Inspections and document control in 18-
Construction observation	45		3120						month (52 weeks/year * 1.5 * 40 hrs per
Site Visits and Special Inspector							12		week). 3 hrs / month site visits. Inspector Services
Shop drawing reviews				50	8				& Certifications for the 2 proposed outfalls
Field meetings (EOR)					72				12 hrs of Structural EOR
RFI's, and other clarifications				36	36				25 submittals
Periodic meetings (EOR)					72				1 per month @ 4 hrs
Plan revisions (EOR)		16		16	4				2 per month @ 2 hrs
Public Information									1 per month @ 4 hrs
Community Liaison	72			8		4			4 revisions
Project Certification									1 meeting included in original WO
Subtotal Hours	117	16	3120	130	316	8	12		2 inquiries per month @ 2 hours (2*18*2)
	\$7,335.90	\$1,269.12	\$236,059.20	\$12,285.00	\$54,225.60	\$1,372.80	\$2,696.76	\$315,244	And closeout
2) Record Drawings		20		16		8			
subtotal hours	0	20	0	16	0	8	0		
subtotal fees	\$0.00	\$1,586.40	\$0.00	\$1,512.00	\$0.00	\$1,372.80	\$0.00	\$4,471	

TASK FEE SUMMARY

Task 1)	Construction Services	T&M NTE	\$315,244.38
Task 2)	Record Drawings	T&M NTE	\$4,471.20
	Sub-Total for (TASK 1 to TASK 2)		\$319,715.58
	Expenses @ 2.5%		\$7,992.89
Task 3)	Material Testing during const. (Federal Engineering)	T&M NTE	\$71,414.00
	Total (TASK 1 to TASK 3)	T&M NTE	\$399,122.47

August 6th, 2020

R.J. Behar & Company, Inc.
 6861 SW 196th Ave. Ste. 302
 Pembroke Pines, FL 33332
 Attn: Estimating Department

RE: Proposal and Agreement for Engineering Services
 Lyons Park Neighborhood Improvements
 McNab Road
 Pompano Beach, FL

Thank you for contacting **Federal Engineering & Testing, Inc.** ("F.E.T."). Please find below our Proposal for the services you have requested, the accompanying Agreement for said services, and also our Terms & Conditions. If these documents meet with your approval, please execute them where indicated and returned to us via fax at **(954) 784-7875** or e-mail to CJ@fed-eng.com. Upon receipt of the signed documents, F.E.T. will commence the services agreed to therein.

Proposal for Construction Materials Testing & Inspection Services

Proposed Construction Materials Testing Services (CMT)

Site Testing

Proctors	15 Tests	at	\$75.00	\$ 1,125.00
Sieve Analysis (No. 200 Wash)	15 Tests	at	\$75.00	\$ 1,125.00
Calcium Carbonate	6 Tests	at	\$65.00	\$ 390.00
L.B.R. Tests	10 Tests	at	\$215.00	\$ 2,150.00
Concrete Tests (5 Cyl. Per Set)	30 Tests	at	\$60.00	\$ 1,800.00
Includes:				
<ul style="list-style-type: none"> • Sidewalks/Curbs/Aprons 				
Densities (Min. 4 Per Trip)	3,314 Tests	at	\$16.00	\$ 53,024.00
Includes:				
<ul style="list-style-type: none"> • Pipe Backfill • Roadway/Parking Subgrade & Basecourse • Sidewalks/Curbs/Aprons 				
Asphalt Inspections	160 Hours	at	\$60.00	\$ 9,600.00
Includes:				
<ul style="list-style-type: none"> • Thickness & Temperature Monitoring • Final Report • Min. 3 Hrs. Per Trip 				
Technician Stand-By Time (If Needed)	40 Hours	at	\$55.00	\$ 2,200.00

GRAND TOTAL **\$ 71,414.00***

Please continue-sign/initial each page as indicated

Client Initial _____

Proposal for Construction Materials Testing & Inspection Services

*All quantities are based on the set of plans and specifications provided by R.J. Behar & Company, Inc. Federal Engineering & Testing, Inc. appreciates the opportunity to serve you. This pricing is based upon the original bid documents, it does not include any addendums or changes to the scope or specifications.

* All prices include two (2) sealed copies of reports.

* FET will only bill for actual work performed.

* All Concrete Cylinder & Masonry Tests include the following:

- Slump Test
- Concrete Temperature
- Sample Pick-Up
- Storage in a Moisture Controlled Room
- Compressive Strength Testing Break Schedule (7, 28, 28, Hold)
- Report for each Set of Cylinders
- Any Additional Cylinders Required Outside of FET's Normal Break Schedule will be Charged at \$10.00 Per Cylinder

* If FET is ordered by the client to pick up a soil sample for lab analysis and no other tests are to be performed on site FET will charge a trip fee equal to 1 hour of technician time to compensate for the travel cost.

Possible Additional CMT Testing Services (If Needed Only)

1.) Windsor Probe Testing (Min. 3 per Trip)	\$75.00/Test
2.) Schmidt Hammer Testing (Min. 3 per Trip)	\$75.00/Test
3.) Masonry Unit Absorption (ASTM C-1403)	\$150.00/Test
4.) Soil Classification	\$100.00/Test
5.) Atterberg Limits	\$100.00/Test
6.) Void Ratio	\$85.00/Test
7.) Specific Gravity (Coarse or Fine Agg.)	\$215.00/Test
8.) Asphalt Cores (Min. 4 Cores Per Trip)	\$100.00/Core

Possible Additional INSP Services (If Needed Only)

1.) Fill-Quality Control Inspection	\$65.00/Hour
2.) Soil Test Pit Inspection	\$65.00/Hour
3.) Seismic Monitoring Inspection (Machine & Tech)	\$65.00/Hour
4.) Certified Building Inspector	\$65.00/Hour

**All Inspections minimum of 3 hours per trip.*

Possible Additional Administration Services (If Needed Only)

1.) Professional Engineer Time	\$125.00/Hour
2.) Administrative Time	\$30.00/Hour

Client Initial _____

Please sign/initial each page as indicated and return to F.E.T. via email to CJ@fed-eng.com or fax to (954) 784-7875