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October 31, 2019

Mr. Clece Aurelus, P.E. Engineering Support Services Manager City of Hollywood – Department of Public Utilities 1621 N. 14th Avenue P. O. Box 229045 Hollywood, FL 33020-9045

Re: Proposal for Consulting Services
Lift Station E-14 Rehabilitation
City of Hollywood Project No. 19-8067
AECOM Work Order (AEC 19-01)

Dear Mr. Aurelus:

As requested, AECOM is pleased to submit the attached revised proposal based on comments received from the City on August 19, 2019 and October 24, 2019. The proposal fee reflects the adjusted scope addressing the City's comments.

We look forward to working with the City on this important assignment. Please contact Brian Stitt at 954.629.4444 should you have any questions or comments on the proposal.

Sincerely,

AECOM Technical Services, Inc.

C. Scott Lee

C. Scott Lee, PE Vice President

Florida Water Business Line Unit Leader

Enclosure

cc: Jeff Jiang, PE - COH ECSD

Brian Stitt, PE – AECOM



PROJECT NUMBER 19-8067 WORK ORDER (AEC 19-01)

October 31, 2019 (Rev. 2)

FEE PROPOSAL AND SCOPE OF SERVICES CITY OF HOLLYWOOD

Lift Station E-14 Rehabilitation

A. Background

The City of Hollywood (City) owns and operates a sanitary sewer system. The system includes lift stations for wastewater conveyance. AECOM has provided professional services for other lift stations consisting of design through construction services.

The City has expressed a need to rehabilitate an existing submersible lift station, E-14, located on Three Islands Boulevard at the entrance to the Harbor Islands private-gated residential community.

Therefore, the City has requested that AECOM prepare this scope and fee proposal to provide the following services for LS E-14:

- Survey
- Limited preliminary design to confirm basis of design
- Final Design in the form of drawings and technical specifications
- Engineer's Opinion of Probable Cost
- Coordination with FPL for any electrical supply update/modification before final design.
- Permitting assistance through the Broward County Environmental Protection Department and the City of Hollywood Building Department
- Bid Phase assistance
- Engineering Services during construction
- Engineering completion certifications

A=COM

B. Scope of Services

1.0 Engineering Design Services

1.1 Management

Project Management activities comprise contract administration, coordination of project staff, monitoring of progress and project costs during this project phase.

1.2 <u>Project Meetings</u>

AECOM will attend meetings with representatives of the City as part of this project, as follows:

- a. Project kick-off meeting
- b. Progress/ review meeting at the preliminary design (10%) and 90% completion milestones
- c. Meeting with Florida Power & Light
- d. Meeting with the Broward County Environmental Protection Department to discuss permit after its submission
- e. Meeting with the city of Hollywood Planning and Zoning for permit dry run to discuss after drawing submission

1.3 Field Services

AECOM will conduct a site visit at the lift station to review current conditions in order to provide for design of the lift station.

1.3.1 Survey

AECOM will be providing for site survey. The survey proposal and anticipated scope of work is provided as **Attachment A**.

1.4 <u>Preliminary Design (10%)</u>

AECOM will provide for a limited preliminary design of the lift station rehabilitation. Preliminary design will consist of the following:

- Site visit
- Pumps and electrical requirements determination
- General site layout and landscaping concepts
- Design criteria for civil, structural, mechanical, electrical and instrumentation. Design is intended to follow the recently completed AECOM designed lift stations.

A Preliminary Design memorandum will be prepared and submitted.

A=COM

1.5 Final Design

AECOM will prepare final drawings and technical specifications. Final design will commence once approval of the preliminary design has been provided by the City. Contract Documents will be in sufficient detail to enable the contractor to make an informed bid and carry out the construction work as contemplated.

AECOM will prepare technical bid specifications commensurate with the lift station facility design. These specifications will be based on standard terms commonly used in construction contracts. City of Hollywood standard details and technical specifications will be used when applicable. Otherwise standard Construction Specification Institute (CSI) 16 Division format technical specifications necessary for the project and proven AECOM standard details will be used to supplement what is needed.

Civil. Site layout including new fence, paving, sod and landscaping.

Mechanical. AECOM will provide for site layout, temporary by-pass pumping, final pump and appurtenances replacement. City will provide design flow and discharge pressure to AECOM for pump selection. It is assumed wetwell is adequately sized for the design flow and no work is anticipated to increase wetwell capacity. Ventilation will also be provided as a passive system; odor control systems are not required. Decommissioning of the existing station consisting of general demolition and other related equipment end use determination will be conducted. Contract drawings and specifications for this design work shall be prepared. Odor misting system to be demolished but not replaced. Piping between wetwell and valve vault assumed to be in good shape and no work anticipated.

Electrical/ Instrumentation. Electrical design consists of determination of power requirements and total connected load for the lift station, design of power and control centers, preparation of circuit wiring diagrams, design of electric power circuits for motors and associated controls for the new pumps, and coordination with COH ICE Division and FP&L. Transformer on site appears new and assumed to be adequate for upgraded facility. If replacement is necessary, AECOM will coordinate with FPL for all details required as part of final design. AECOM will also design new primary instruments (i.e. level, pressure, pump protection, etc.) for monitoring equipment and tying into the existing SCADA system. A flow meter shall be included in the design and will likely require a structure outside the existing site. A new remote telemetry unit (RTU) with PLC and radio will be designed and provided. A new antenna for radiocommunications system



will be provided on the existing tower located on site. Contract drawings and specifications for the electrical work shall be prepared.

Structural. AECOM will provide structural design parameters of the wetwell wall rehabilitation. Rehabilitation of the wet well is limited to minor concrete and rebar repairs and coating replacement. Typical details and specifications will be provided for the types of repair anticipated. A detailed visual assessment of the wetwell structure will occur during construction and not during the design phase. For the design and bid phase areas/ lengths for each type of structural repair will be assumed and confirmed during construction.

1.5.1 Engineer's Estimate of Probable Cost

Class 5 and Class 2 estimates of construction cost will be prepared at the 10% and 90% completion milestones, respectively. The cost estimates will be subdivided into functional areas as much as practical.

1.5.2 Quality Control

As part of our ISO 9001:2008 certification, AECOM will be conducting internal QA/QC reviews at major completion milestones for the project to enhance value to the City. Results will be incorporated into the deliverables.

1.6 Permitting Assistance

Broward County EPD

The FDEP and SFWMD have delegated permitting authority to the BCEPD. Permitting will consist of preparing the appropriate permit application(s) for submittal to the BCEPD. A reasonable level of effort in accordance with our estimate is assumed to complete this task.

City of Hollywood Planning & Zoning:

AECOM will submit drawings to the City's Development Services Department with the intent to have approved plans picked up by the selected Contractor once the building permit has been approved.

A reasonable level of effort in accordance with our estimate is assumed to complete this overall task and is based on our past experience permitting similar infrastructure for the City.



The Contractor will be responsible for obtaining ROW, MOT, and dewatering permits as necessary. Preparation or assistance with these applications for other permits for the above agencies or for other regulatory agencies beyond that specified above will be considered an Additional Services item. Such additional permits not included in this scope of work may include, but not be limited to, wetlands, wetland dredge and fill permits, right-of-way construction permits, MOT, Asbestos Handling/Disposal notification permits, Archeological/Historical preservation permits, endangered species permits, and tree removal permits. If any de-watering permits are necessary to conduct the work, their acquisition will be the responsibility of the Contractor.

1.7 Conformed Documents

After Bid Phase Services, AECOM will prepare Conformed Documents that reflect the actual documents bid by the contractor.

1.8 <u>Deliverables</u>

AECOM will provide the following deliverables:

- Electronic copy and six (6) hard copies of the Preliminary Design Memorandum (10%)
- Engineer's estimate (Class 5) at Preliminary Design
- Electronic copy and six (6) hard copies of the drawings (11 x 17) and technical specifications at the 90% milestone for City review.
- Engineer's estimate (Class 2) and Bid Form for bidding
- BCEPD (FDEP) permit applications and attachments to the County
- A total of three copies of the 100% design drawings for Hollywood Planning & Zoning dry run permitting (signed and sealed)
- Electronic copies of the Conformed Documents for contractor use

2.0 Bidding Services

In this task, AECOM will provide assistance to the City during the bidding and award of the project to a single general contractor for the lift station. The following tasks are anticipated:

By the City of Hollywood:

- 1. Bid advertisement and solicitation
- 2. Provide for reproduction and distribution of contract documents to prospective bidders and will maintain a planholders list

By AECOM:

1. Provide the city with electronic copies of the final contract documents



- Respond to prospective bidders' written inquiries on subject matters effecting our work
- 3. Develop and prepare Addenda
- 4. Assist City in evaluation of bids, and
- 5. Provide written recommendation

3.0 Engineering Services During Construction

AECOM will provide construction services outlined below for the duration of the project through Final Completion, which is assumed to be up to six months. Services are described as follows:

3.1 Management

Project Management activities comprise AECOM contract administration, coordination of our project staff, monitoring of progress and AECOM project costs during this project phase.

3.2 <u>Project Meetings</u>

AECOM will attend meetings with representatives of the City as part of this project, as follows:

- a. Pre-construction meeting
- b. Progress meetings once per month through to substantial completion. Key members of the AECOM team will attend. At each progress meeting AECOM will inspect Contractor prepared red-line record drawings to ensure they are being properly maintained and up-to date with current work progress. It is assumed the CM will prepare the meeting minutes.
- c. Final walkthrough to confirm substantial completion and establish punch list.
- d. Final walkthrough at Final Completion to confirm punch list items addressed.

3.3 Engineering Inspections

AECOM engineers will provide necessary construction observation inspections at key points during project construction to certify implementation is in accordance with our design documents. It is anticipated that each discipline will perform the following number of inspections:

- Civil/Mechanical five (5) inspections
- Electrical/Instrumentation five (5) inspections
- Structural three (3) inspections



It is assumed that the city will provide supplemental information to the engineer as needed as part of the City's resident inspection services.

3.4 Contractor Submittals and Other Engineering Services

AECOM's review of Contractor submittals will consist of the following activities:

- Review submittals (construction schedule, schedule of values, piping, asphalt, mechanical equipment, electrical panels, instruments, concrete repair) submitted by the Contractor to determine general conformance to the design concept and the project manual. AECOM will provide a review and submit comments regarding acceptance status for each set submitted.
- 2. Review of up to 3 Alternate/Substitution submittals by the contractor.
- AECOM will respond to requests for information (RFI) by the Contractor. AECOM will prepare supplementary drawings to resolve actual field conditions encountered as necessary.
- 4. When requested by the city, AECOM will prepare and/or review up to three (3) change/field orders submitted by the Contractor. Review will address conformance to original design concepts and costeffectiveness. AECOM will evaluate requested price changes and time extensions for proposed change orders and make recommendations in writing.
- 5. Specialty Meetings for addressing contractor/ construction issues as they may arise. We have assumed up to five (5) such meetings will occur through the construction duration.
- 6. Cursory review of pay applications by the contractor upon City request.
- 7. Written review of contractor supplied O&M Manuals

3.5 Startup Services

AECOM will provide two (2) person-days on-site support and troubleshooting support during initial startup. It is assumed that operation and maintenance manuals will be provided by separate equipment suppliers and organized by the contractor (for review and approval by AECOM). It is further assumed the contractor will be conducting wet well drawdown tests and all pressure testing then providing test results to AECOM.

3.6 Substantial Completion/Final Acceptance

When the Contractor has submitted for substantial completion, key members of AECOM's team will conduct a final inspection for the work with project representatives and the Contractor and provide written recommendations in the form of a punch list for acceptance of the work.



AECOM will conduct another inspection at Final Completion to confirm all punch list items have been suitably addressed.

3.7 <u>Certification Submittals and Record Drawings</u>

AECOM will submit contractor supplied *record drawings* showing changes made during construction to the BCEPD. It is assumed that the contractor will provide to AECOM marked-up (red-lines), as required in the contract specifications, depicting any significant deviations and changes in the Contract Drawings. It is also assumed the Contractor will have these drawing available and updated monthly for AECOM to review.

AECOM will provide the appropriate documentation for completion certification to the BCEPD. It is assumed that all required testing will be by the contractor and results will be provided to AECOM. A reasonable level of effort in accordance with our estimate is assumed to complete this task.

As part of this task, AECOM will prepare CADD Record Drawings based on Contractor provided red-line markups.

Deliverables

AECOM will provide the following deliverables:

- Submittal reviews and RFI responses as required (electronically transmitted where practical)
- Preparation of up to 3 change/field orders
- Punch list at substantial completion
- BCEPD permit applications to the County for final certification
- Electronic copy of the Record Drawings

Project Team

The project team will be led by AECOM's project manager Mr. Brian Stitt with Sheldon Barnes as the Project Engineer. AECOM proposes to use the following subcontractors:

Gibbs Land Surveyors (a City of Hollywood firm) for surveying

C. Basic Assumptions

Design and Bid Services:

1. The lift station design flow and pressure will be provided by the City. City plans to keep the same existing pump design rating flow, and is considering



- increasing the pump design rating head. If pump design rating head is increased, the City will provide backup calculations to include in BCEPD permit application package.
- AECOM will rehabilitate existing lift station within easements or rights-of-way.
 Property acquisition assistance services are not included in AECOM's scope of work and may be provided on a Time and Materials Basis if requested.
- 3. Pump Station rehabilitation will include similar design features to those lift stations designed by AECOM such as LS A-5 (duplex, constant speed).
- 4. Piping outside the wet well, valve vault, including pipes connecting the wet well and valve vault, and pipes outside the lift station site will not be evaluated or addressed during design. Possible repair of buried piping connecting wet well and valve vault to be addressed by the City during construction at the City's discretion.
- 5. Geotechnical borings and soft dig utility locates will not be necessary.
- 6. Sheet pile design, if necessary, will be by the selected contractor during construction.
- A plug-in generator connection compatible with existing City equipment will be used; existing electrical and instrumentation equipment will be used as directed by COH ICE Division and reflected in the contract documents.
- 8. Sound attenuation, excessive fats, oils and greases (FOG), grit and trash accumulation, and odor control is not anticipated to be a concern for design.
- 9. Site landscape features will be coordinated with City Building Department.
- 10. Monumentation of the right of way is not included.
- 11. Hydraulic modeling of the force main and transmission network along with a surge analysis will not be conducted.
- 12. Traffic Control Plans (MOT) will be by the city's general contractor.
- 13. Permitting is limited to providing the required information through permit applications to those agencies specified herein.
- 14. City will pay for all permit fees.
- 15. Public hearings will not be required.
- 16. The City will provide front end (bidding) documents in word format.
- 17. A single bid effort is assumed.
- 18. Compensation for engineering work in this proposal will be based on a lump sum method of payment. This estimate is based on an overall project budget level of effort for the fees proposed.

Engineering Construction Services:

- 1. Witness factory testing for the pumps or other equipment will not be necessary.
- 2. The city will pay all permit fees.
- 3. Public hearings will not be required.
- 4. The City will provide Resident Inspection Services and Construction Management of the project and will enter an agreement with the selected general contractor.
- 5. Pay request review is by the City.
- 6. AECOM shall prepare meeting minutes for all meetings participated.



- 7. Redlines will be the sole responsibility of the contractor. Redlines progress drawings will be continuously updated and available for AECOM review monthly. Final redlines will be provided to AECOM to prepare Record Drawings which rely on such redlines.
- 8. Compensation for engineering work in this proposal will be based on a lump sum method of payment. This estimate is based on an overall project budget level of effort for the fees proposed.

D. Contract Reference

This Task Order shall be performed under the terms and conditions described within the Professional Services Agreement for General Engineering Consultant Service contract 17-1325 executed November 2017 between the City of Hollywood and AECOM Technical Services, Inc. as amended.

E. Obligations of the City

- 1. The City shall provide AECOM in a timely manner, all available record data and information related to the project as necessary for the performance of the services specified herein.
- The City shall review all documents presented by AECOM; obtain advice of an attorney, insurance counselor, and other as the City deems appropriate for such review and render decisions pertaining thereto within reasonable time so as not to delay the services of AECOM.

F. Compensation

AECOM proposes to perform the tasks for a total of \$99,958. A fee breakdown is presented as **Attachment A**.

AECOM's current rate structure is in accordance with our Contract executed in November 2017.



G. Project Schedule

Schedule Time Elapsed to Task Task Completion

Notice to Proceed 0 weeks

Task 1 – Engineering Design

Project Management Continuous **FPL Coordination** Continuous Survey 3 weeks Preliminary Design Memo (10%) 5 weeks 90% Design 14 weeks 90% Review Meeting 16 weeks **BCEPD** Permitting 20 weeks Bid Ready Documents 20 weeks

Task 2 – Bid Phase 6 weeks after city

advertisement

Task 3 – Construction Services

Shop Drawing reviews 8 weeks (after Contractor

NTP)

Substantial Completion 14 weeks after shop

drawing approval

Final Completion 18 weeks after shop

drawing approval

The design schedule assumes all easements or ROW will be in place prior to beginning survey.



ATTACHMENT A

- 1. AECOM Fee Analysis
 - 2. Survey Proposal

CITY OF HOLLYWOOD Lift Station E-14 Rehabilitation

ATTACHMENT 1

		TASK Designations																	
LABOR CATEGORY	HOURLY		1.1		1.2		1.3		1.4		1.5		1.6		1.7		1.8	TOTAL	TOTAL
	RATE	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	HOURS	FEES
Consulting/Engineering:																			
Proj. Dir., Principal	\$235	1	\$235		\$0		\$0		\$0		\$0		\$0		\$0		\$0	1	\$235
Senior Technical Director (QA/QC	\$235		\$0		\$0		\$0	2	\$470	4	\$940		\$0		\$0		\$0	6	\$1,410
Senior Project Manager	\$210	4	\$840	4	\$840	2	\$420	2	\$420	2	\$420	1	\$210	1	\$210	1	\$210	17	\$3,570
Senior Technical Specialist II	\$210		\$0		\$0		\$0	4	\$840	18	\$3,780		\$0	1	\$210	1	\$210	24	\$5,040
Senior Technical Specialist I	\$177		\$0	30	\$5,310	6	\$1,062	6	\$1,062	30	\$5,310	2	\$354	1	\$177	1	\$177	76	\$13,452
Senior Project Engineer	\$152		\$0	18	\$2,736	7	\$1,064	13	\$1,976	43	\$6,536	16	\$2,432	4	\$608	3	\$456	104	\$15,808
Technical Specialist II	\$152		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Technical Specialist I	\$136		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Project Engineer II	\$136		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Project Engineer	\$119		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Senior Engineer	\$113		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Engineer II	\$104		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Engineer I	\$96		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Technical Services:																			
Senior Designer II	\$123		\$0		\$0	2	\$246	9	\$1,107	46	\$5,658	4	\$492	4	\$492	4	\$492	69	\$8,487
Designer	\$96		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Project Support Services:																			
Administrative	\$78	12	\$936		\$0	4	\$312		\$0		\$0	2	\$156		\$0	2	\$156	20	\$1,560
TOTAL PERSONNEL		17	\$2,011	52	\$8,886	21	\$3,104	36	\$5,875	143	\$22,644	25	\$3,644	11	\$1,697	12	\$1,701	317	\$49,562
Direct Costs:																			
Subcontractor (Gibbs)	cost		\$0		\$0		\$3,500		\$0		\$0		\$0		\$0		\$0		\$3,500
ODCs	cost		\$50		\$500		\$150		\$0		\$50		\$50		\$100		\$150		\$1,050
10% markup on subcontractors	10%		\$0		\$0		\$350		\$0		\$0		\$0		\$0		\$0		\$350
TOTAL DIRECT COSTS			\$50		\$500		\$4,000		\$0		\$50		\$50		\$100		\$150		\$4,900
SUB TOTAL			\$2,061		\$9,386		\$7,104		\$5,875		\$22,694		\$3,694		\$1,797		\$1,851		\$54,462

CITY OF HOLLYWOOD Lift Station E-14 Rehabilitation

ATTACHMENT 1

		TASK Designations																	
LABOR CATEGORY	HOURLY	2.0		3.1		3.2		3.3		3.4		3.5		3.6		3.7		TOTAL	TOTAL
	RATE	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	Hours	Rt x Hrs	HOURS	FEES
Consulting/Engineering:																			
Proj. Dir., Principal	\$235		\$0	1	\$235		\$0		\$0		\$0		\$0		\$0		\$0	1	\$235
Senior Technical Director (QA/QC	\$235		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Senior Project Manager	\$210	4	\$840	4	\$840	4	\$840	1	\$210	8	\$1,680		\$0		\$0	2	\$420	23	\$4,830
Senior Technical Specialist II	\$210	6	\$1,260		\$0	2	\$420	18	\$3,780	20	\$4,200		\$0		\$0	1	\$210	47	\$9,870
Senior Technical Specialist I	\$177	6	\$1,062		\$0	4	\$708	15	\$2,655	32	\$5,664	8	\$1,416	3	\$531	1	\$177	69	\$12,213
Senior Project Engineer	\$152	10	\$1,520	4	\$608	15	\$2,280	15	\$2,280	32	\$4,864	8	\$1,216	3	\$456	2	\$304	89	\$13,528
Technical Specialist II	\$152		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Technical Specialist I	\$136		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Project Engineer II	\$136		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Project Engineer	\$119		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Senior Engineer	\$113		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Engineer II	\$104		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Engineer I	\$96		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Technical Services:																			
Senior Designer II	\$123	8	\$984		\$0		\$0		\$0	4	\$492		\$0		\$0	2	\$246	14	\$1,722
Designer	\$96		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0	\$0
Project Support Services:																			
Administrative	\$78	2	\$156	10	\$780		\$0		\$0	3	\$234		\$0		\$0	1	\$78	16	\$1,248
TOTAL PERSONNEL		36	\$5,822	19	\$2,463	25	\$4,248	49	\$8,925	99	\$17,134	16	\$2,632	6	\$987	9	\$1,435	259	\$43,646
TOTAL PERSONNEL		30	ψ3,022	13	₹,403	20	₽4,∠40	49	Ψ0,92 5	99	φ11,134	10	Ψ 2,032		φ 3 01	9	ψ1, 4 35	209	\$43, 040
Direct Costs:																			
Subcontractor (Gibbs)	cost		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0
ODCs	cost		\$0		\$50		\$50		\$1,500		\$0		\$100		\$50		\$100		\$1,850
10% markup on subcontractors	10%		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0
TOTAL DIRECT COSTS			\$0		\$50		\$50		\$1,500		\$0		\$100		\$50		\$100		\$1,850
																		Ī	
SUB TOTAL			\$5,822		\$2,513		\$4,298		\$10,425		\$17,134		\$2,732		\$1,037		\$1,535		\$45,496

Grand Total \$99,958

GIBBS LAND SURVEYORS

2131 HOLLYWOOD BOULEVARD SUITE 204 HOLLYWOOD, FLORIDA 33020 PHONE: 954-923-7666 FAX: 954-923-7668 SSEELEY@GIBBSLANDSURVEYORS.COM

July 15, 2019

Brian Stitt AECOM

RE: Lift Station LS E-14 Survey Services

Dear Mr. Stitt:

We are pleased to submit the following proposal for Professional Land Surveying services on the above referenced project.

LIMITS OF WORK

All of the parcel surrounding LS E-14, bounded by fence and/or legal description

SCOPE OF WORK

- 1. Boundary survey of Lift Station parcel. Legal description (recorded instrument or City Resolution) to be provided, and any easements of record to be provided to this firm)
- 2. Topographic / As-Built Survey to show existing conditions.
- 3. Surface improvements, including roadway and asphalt driveway, fencing, random elevations surrounding the area in the Lift Station fenced limits, above-ground evidence of underground features as marked by others, valves, manholes, (rim and invert elevations), trees, slabs, structures, as-built of wet well and dry pit, elevations and direction of pipe inverts, bottom of structures, pumps, etc. Elevations will be referenced to NAVD88 Datum.
- 4. Horizontal positioning will be referenced to State Plane Coordinate system NAD83/90, in feet.

The above SCOPE OF WORK will be performed for a fee of \$3,500.00

Any additional surveying as requested will be performed at the following hourly rates:

Principal \$125.00/hour
Survey Crew Supervisor 85.00/hour
Field Crew \$125.00/hour
Cad Drafter - Survey Technician 85.00/hour
Secretary 35.00/hour

Sincerely

Stephen M. Seeley, PSM