

November 17, 2025

Giselle Hipolito
CITY OF HOLLYWOOD
Department of Public Utilities
Engineering and Construction Services Division
Post Office Box 229045
Hollywood, Florida 33022

LS E-03
Interim Capacity Upgrade Evaluation

Dear Ms. Hipolito:

Hazen and Sawyer, D.P.C. (Hazen) is pleased to offer architectural and engineering consulting services to evaluate the potential for an interim capacity increase to Lift Station E-03.

BACKGROUND

LS E-03 is a triplex master lift station which is responsible for transmitting wastewater from the southern portion of the beaches to the mainland for treatment and disposal. This lift station was built in 1957, was last upgraded in 1982, and is currently unable to transmit peak flows during storm events without use of the standby pumping unit (i.e. all 3 pumps). It is scheduled for complete rehabilitation in the next 5-10 years. In addition, proposed development within the service area would increase the volume of influent flow within the next couple of years. To accommodate the proposed beach development in the interim period prior to the rehabilitation, the City would like to provide an increase in the pumping capacity up to that permissible by the existing electric service (23kVA/208V) currently, estimated to be 60hp per pump.

SCOPE OF SERVICES

Task 1.1 – Capacity Evaluation

A preliminary site visit of LS E-03 identified the existing electric service as 23kVA/208V. It is the intent of this interim capacity increase to limit the lift station capacity to no more than that which can be accommodated by the existing electric service. This is currently estimated to be a maximum of 60 hp per pump. It is further intended to limit all associated mechanical, structural, electrical, and instrumentation work to only that necessary for the determined capacity increase and associated permitting requirements. Existing isolation valves, level sensors and controls are assumed to be operational. Hazen shall perform a hydraulic analysis based on existing flows to the LS E-03 basin plus flows to be encumbered through development as provided by the City, to confirm the interim pumping capacity needed at the lift station. City shall provide available operation records for the lift station, including current pump curves, run time data, historical discharge pressures and flows, wet well level information, and operating pressure range of the receiving force main. Hydraulic modeling shall include a desktop analysis based on existing operational data. Based on the results of the hydraulic modeling efforts, Hazen shall make recommendations for proposed pump sizing.

Hazen shall prepare a Technical Memorandum (TM) summarizing the results of this task. Should the capacity needed exceed the capabilities of the existing electrical service, Hazen will inform the City prior to proceeding with Task 1.2 – Preliminary Design. Otherwise, this TM shall form the basis of design for the project.

Task 1.2 – Preliminary Design

Should the TM identified in Task 1.1 confirm the hydraulic capabilities of the existing electric feed to be adequate, this task will pursue preliminary design with respect to pump selection, constructability, and permitting for requirements such as finished floor elevation, floor-to-ceiling clearance, monorail rating, standby generator power, and necessary modifications due to classified area designations, ventilation, lighting, and storm hardening. The preliminary design efforts will result in a report with 30% drawings, schedule, and an opinion of probable construction cost (OPCC). Hazen shall provide City with electronic PDF copies of the Preliminary Design Report (PDR). Hazen shall meet with City staff to receive and discuss City's review comments. Meeting minutes shall be prepared by Hazen and distributed electronically to attendees. Meeting minutes shall include a comment and response log and responses shall be incorporated into future design submittals.

Preliminary design activities shall include the following:

- **Topographic and Boundary Survey:** Hazen shall contract the services of a licensed State of Florida Surveyor to prepare a topographic and boundary survey in accordance with the requirements of Florida Administrative Code Chapter 61G17.004. The topographic survey will be limited to those above ground visible improvements lying within the lift station property. A boundary survey of the pump station is included as part of this activity.
- **Underground Utility Designations:** Hazen shall retain the services of an underground utility locator company to locate underground utilities in select areas of the project. These locates will be incorporated into the topographic survey.
- **Geotechnical Investigation:** If needed, Hazen shall retain the services of a licensed State of Florida Geotechnical Engineer to confirm subsurface soil conditions. A total of two Standard Penetration Test (SPT) borings to depths of 15 feet below the existing ground surface have been assumed.
- **Asbestos / Lead Abatement Survey:** Hazen shall retain the services of a licensed State of Florida testing service to confirm the presence or absence of asbestos and lead with respect to work practices to be followed during demolition and renovation of the structure in accordance with EPA NESHAP requirements.

It is anticipated that the City will schedule the review meeting within two (2) weeks from submittal of the PDR. Hazen shall provide minutes and the comment and response log within two (2) weeks from the date of the review meeting. Two (2) additional weeks of time has been estimated for issuance of the ATP by the City.

KEY ASSUMPTIONS

Key assumptions concerning this scope are:

- City will provide access to all necessary facilities for execution of the work.

- City shall provide access to plans and data (electronic format), both public and private, that City has record of and provide copies of requested information/documents at no charge.
- No owner-furnished / pre-purchasing of equipment is anticipated.
- Value engineering and other outside reviews (other than City staff review) are not anticipated.
- No local minority business enterprise or local small business enterprise participation is envisioned.
- An application or approval from a Development Review Committee is not required.
- Approval and/or review by the Engineering Department is not required.
- All proposed building elements will meet current code requirements; however, updating the existing pump station structure to meet Florida Building Code or ADA requirements is not anticipated.
- No odor control system, landscaping or irrigation system design is included.
- Acquisition of easements are not included.
- The City will competitively bid the project and enter into an agreement with an outside Contractor to complete the work. No prequalification of Contractors or contract negotiations will be performed.
- Detailed design, permitting and bidding services will be included under a separate work order.
- Services during construction will be included under a separate work order.
- Pumping unit sizing will be limited to that which can be accommodated by the existing electric service (23kVA/208V), currently estimated to be 60 hp per pump.
- Existing valves, level sensors and controls are assumed to be operational.
- All work is anticipated to be performed in the dry well of the lift station.
- Replacement of the lift station roof and monorail is not included.
- Replacement of the lift station exterior doors and windows for storm hardening is not included.
- Interior and exterior painting of the lift station and repairs and/or specialty coating of the wet well is not included.
- No stormwater improvements are anticipated.
- SRF funding assistance and/or development of a facility plan is not included.
- Preparation of maintenance of traffic plan drawings are not included in this scope of services. Requirements for traffic control, if needed, will be described in a technical specification to be addressed by the Contractor.
- Due to the project urgency, fees for subconsultant efforts have been estimated. Actual costs may be different.

COMPENSATION

The engineering services for this project will be performed on a Not-to-Exceed basis in the amount of \$291,078. A detailed fee breakdown is attached.

SCHEDULE

Engineering services will be completed within 5 months from Notice-to-Proceed.

Engineering services for the project will be performed as part of the Professional Services Agreement for General Engineering Hazen Services (Agreement) dated October 2023 under Service Area 3 – Infrastructure Projects. Services provided by Hazen and Sawyer, D.P.C. shall be limited to those services specifically identified in this work order.

We look forward to your reply. In the meantime, should you have any questions, please contact us.

Very truly yours,

HAZEN AND SAWYER, D.P.C.



J. Philip Cooke, P.E.
Vice President

c: *File No. 4321-016/1.0*

Attachment

CITY OF HOLLYWOOD
SOUTHERN REGIONAL WASTEWATER TRANSMISSION SYSTEM
LIFT STATION E-03 INTERIM CAPACITY UPGRADE EVALUATION
Fee Breakdown

| <u>Tasks</u> | Labor Hours | | | | | | | | | | | <u>Subtotal</u> | <u>Fee</u> |
|--|---------------------------|---|-----------------------------|------------------|--|-------------------------------|-----------------|--|-------------------------------|---------------------------|----------------------------|-----------------|-------------------|
| | <u>Vice President</u> | <u>Associate Vice President</u> | <u>Senior Associate</u> | <u>Associate</u> | <u>Senior Principal Engineer</u> | <u>Principal Engineer</u> | <u>Engineer</u> | <u>Senior Principal Designer</u> | <u>Principal Designer</u> | <u>Senior Drafter</u> | <u>Admin Assistant</u> | | |
| LABOR | | | | | | | | | | | | | |
| Task 1.1 - Capacity Upgrade Evaluation | 0 | 20 | 56 | 0 | 40 | 56 | 104 | 0 | 8 | 24 | 36 | 344 | \$ 65,354 |
| Task 1.2 - Preliminary Design | 0 | 12 | 30 | 60 | 80 | 120 | 120 | 40 | 120 | 200 | 8 | 790 | \$ 138,474 |
| Subtotal | 0 | 32 | 86 | 60 | 120 | 176 | 224 | 40 | 128 | 224 | 44 | 1,134 | \$ 203,828 |
| SUBCONSULTANTS | | | | | | | | | | | | | |
| Craven Thompson - Survey, UG Locates | | | | | | | | | | | | | \$ 25,000 |
| Wirx - Geotechnical | | | | | | | | | | | | | \$ 25,000 |
| Metco - HVAC | | | | | | | | | | | | | \$ 25,000 |
| Asbestos/Lead Survey | | | | | | | | | | | | | \$ 12,000 |
| Subtotal | | | | | | | | | | | | | \$ 87,000 |
| DIRECT EXPENSES | | | | | | | | | | | | | |
| Out-of-pocket | | | | | | | | | | | | | \$ 250 |
| Subtotal | | | | | | | | | | | | | \$ 250 |
| Total | | | | | | | | | | | | | \$ 291,078 |
| Maximum Hourly Labor Rate | 367.20 | 335.27 | 332.07 | 293.76 | 207.55 | 194.77 | 130.91 | 179.13 | 185.19 | 105.37 | 89.40 | | |