

August 18, 2021 VIA EMAIL AND USPS

City of Hallandale Beach **ATTN**: Mr. Aqeel Abdool-Ghany 630 NW 2<sup>nd</sup> Street Hallandale, Florida 33309

### Re: Proposal for Professional Services City of Hallandale Beach: Lift Station 9 - Foster Road - Improvement Project 750 NW 8<sup>th</sup> Avenue, Hallandale Beach, Florida 33009 The BetaJones Group, Inc. Proposal No. 21117

Mr. Abdool-Ghany,

The BetaJones Group, Inc. (herein, known as the Consultant) is pleased to submit this proposal to the City of Hallandale Beach (herein, known as the Client) for professional engineering services to design, coordinate and assist with permitting for the City of Hallandale Beach Lift Station 9 – Foster Road Capacity and Renewal & Replacement Improvements located on the SE corner of OB Johnson Park at 750 NW 8th Avenue, Hallandale Beach, Florida 33009 (Parcel No. 5142-21-34-0060) (herein, known as the Project).

In accordance with Resolution No. 2020-054, RFP #FY 2018-2019-012 Continuing Professional Architectural and Engineering Services and Other Services, the following scope of services is provided by The BetaJones Group, Inc. (CONSULTANT) as requested by the CITY to provide Engineering Services.

#### **PROJECT DESCRIPTION**

The lift station 9 site is located on the SE corner of OB Johnson Park, NE of the intersection of Foster Road and NW 7<sup>th</sup> Terrace. in the City of Hallandale Beach Broward County Florida. It is a triangular shaped site with approximately 200 linear feet adjacent to Foster Road, 90 linear feet adjacent to NW 7<sup>th</sup> Terrace and 167 Linear feet adjacent to OB Johnson Park. Currently, the Lift Station 9 site is generally a grass area with 1 driveway on NW 7<sup>th</sup> Terrace, a perimeter fence with access gate, a generator, with associated control panel, wet well, 2-submersible 25 horsepower pumps, valve vault and incoming gravity manhole.

The City of Hallandale Beach seeks to retain the Consultant to perform design improvements to Lift Station 9 as per our Site Visit on June 17, 2021, and City's 2018 Wastewater Master Plan Improvement recommendations by Hazen & Sawyer.

As per the Wastewater Masterplan recommendation, the Consultant understands that the client engineering plans and specifications of the following scope:

- 1. Replace valves and piping in the valve vault.
- 2. Replace piping within wet well.
- 3. Blast clean, repair and coat interior surface of wet well.
- 4. Replace valve vault cover with hinged access hatch.
- 5. Replace antiquated and corroded equipment including, starter panels, instruments, float switches, disconnect switch, enclosure for automatic transfer switch.
- 6. Provide additional site lighting.

In Addition to the Wastewater Masterplan recommendations above, the Wastewater Masterplan lift station 9 capacity evaluations on Table E-2 Page 2 state that the existing 2-25hp submersible pumps will have a

deficient Pump Station run time for Maximum Day flow by the year 2030 based on the study's scheduled proposed developments at the time of the model; and that the capacity must be immediately upgraded (Table E-3) to 2 submersible pumps at 40 HP each (Table 5-1 Pg 28 of 74) and Rehabilitate the Pump Station, as per the description of the Wastewater Masterplan (Page 34 of 78 – report page 5-3), hence the Consultant will provide additional services, not included in scope #1-6 above that provide engineering plans, calculations, and specifications of the following scope:

- 7. Using information provided by the Client, the Consultant will verify the size of the pumps and pump station system and provide professional design and permitting assistance services to upgrade the pumps and/or pump station.
- 8. Replace fencing around the station. Since WWMP states that fending appears in good condition, this task will be limited to New larger entrance gate and fence accommodations.

Additionally, as per the June 17, 2021, site visit, the Client has requested additional services to provide engineering plans and specifications of the following scope:

- 9. New Driveway onto Pump Station 9 Area
- 10. Application of a Channel Grinder into the pump system
- 11. Provide necessary privacy landscape around the site with the sight triangle in mind.
- 12. Provide a New Larger top slab on the Wet Well.
- 13. Provide an Odor Control System
- 14. Provide Fall Prevention Grates inside the Wet Well.

**NOTE:** This proposal assumes that during the verification of pump station capacity upgrades with the new updated Wastewater Master Plan (to be provided by the Client) the entire pump system including wet well, vault, and electrical panel does not have to be redesigned, and only the motors require upgrading, and therefore associated design and permitting of the entire system is not included in this proposal, and, if required, the consultant will provide these additional services, under separate cover.

#### SCOPE OF SERVICES

The following tasks outline the services that the Consultant proposes to provide under this proposal.

### DESIGN PHASE

### Task 1 – Surveying Services – Boundary, Topographic Survey, and Asbuilt Survey

**Boundary Survey:** The Surveyor shall perform a boundary survey (as defined in chapter 61G17-6.0031 of the Florida Administrative code) which shall include finding and / or setting all property corners according to Florida Statutes. Also, as part of this task, the Surveyor shall locate the following items, at a minimum:

- Rights-of-Way
- Federal Flood-zone Information, when applicable
- Above-ground Items (buildings, tanks, fences, walls, curbs, pavement, concrete, overhead utilities, poles, signs, valves, hydrants, manholes, inlets, landscaping, etc.)
- Underground utilities, where accessible (water, sewer, gas, storm drainage, etc.)

**Topographical Survey:** Also included in this task, the Surveyor shall perform a topographic survey by collecting onsite spot elevations in a grid pattern on a 25' x 25' grid and in key grade change areas; and the Surveyor shall set two (2) elevation benchmarks to be used during construction of the project. The Surveyor shall illustrate the information listed within this task on a survey signed and sealed per the requirements of the State of Florida.

*As built Survey:* The Surveyor shall provide an As-built Survey once construction has been completed as required by Jurisdictional Agencies and for the Client's Record Keeping.

### Survey Limits:

• 25' outside of the perimeter Fence boundaries or up to the centerline of the adjacent street, whichever is furthest.

*Deliverables*: 5 Signed and Sealed 24x36, including a working editable AutoCAD File.

Printing and travel costs shall be billed per the attached BetaJones Rate Schedule.

### Task 2 – Geotechnical Engineering (Soils Study)

The Geotechnical Engineer shall perform four (2) Standard Penetration Tests(SPT) borings, in accordance with ASTM D-1586 specifications, to depths of approximately ten (10) feet. Also as part of this task, the Geotechnical Engineer shall transfer soil samples to the testing laboratory and perform tests to determine the engineering properties of the onsite soils, including:

- natural water content
- organic content
- sieve analysis

Upon completion of the work described in this task, the Geotechnical Engineer shall provide an engineering report including a description of findings, general asphalt and concrete surface and base design recommendations for support of the improved driveway section and new gate and fence footings. The engineering report shall include graphic logs of the test borings and a bearing capacity analysis. **NOTE**: The fee for this task assumes that the site shall be accessible to truck-mounted drilling equipment as part of this task.

Also, the Consultant shall coordinate with the state's underground utility section and call-in for an underground utility locate prior to drilling. This utility locate is limited to the state's records.

**Deliverables**: 3 Signed and Sealed Geotechnical Reports.

Printing and travel costs shall be billed per the attached BetaJones Rate Schedule.

#### Task 3 – Research and Schematics – Review of Existing System Specifications and Components

The Consultant shall identify all available regulatory criteria, engineering principles, and jurisdictional agencies applicable to the project site for the design and specifications of the required Lift Station Capacity as well as Renewal & Replacement Improvements including the following items:

- Site Related: Fence criteria, driveway criteria, pavement section requirements.
- Landscape Requirements
- Site Lighting Requirements
- Lift Station criteria, connections, and underground utility layout.
- Utilities Potential Utility conflicts (Based on Survey information and asbuilts)
- Utilities Based on the client provided data and found asbuilts of the existing lift Station: pump size, type of tank, tank size, Pipe: fixtures, material, size, Vault Size, fixtures, Manholes and Cleanouts.

**NOTE:** This task is limited to the design verification of the Pump Station system layout where the future demand loads at the incoming point and outgoing Maximum and Minimum Design head at the Point of Connection just outside the pump discharge point are provided by the Client and previous studies done outside of this proposal. If an updated study of the City's Sanitary Sewer system is required to obtain these factors, it is not included in this proposal, and the consultant will provide these additional services, under separate cover.

Printing and travel costs shall be billed per the attached BetaJones Rate Schedule.

### Task 4 – Site / Civil Engineering Design Documents

Upon completion of the research and identification phase, the Consultant shall apply all Sanitary Sewer criteria applicable to the proposed improvements based on the pump station (as-built data, to be provided by the client) and boundary and topographical survey in electronic (AutoCAD) format prior to commencement of Task 4.

The Consultant shall design site infrastructure to serve this project based upon the Boundary / Topographic Survey and approved schematic engineering layout. This infrastructure shall include a sanitary sewer pump station, sewer meter connections and laterals, as described in Task 2. The design of such systems shall also be based upon accepted Civil Engineering principles and jurisdictional agency regulations as applicable.

As part of this task, the Consultant shall produce construction plans signed and sealed per the requirements of the State of Florida, including:

- Engineering Cover Sheet
- Engineering Notes
- Site Improvement Plan
- Paving and Grading Plan
- Utility Plan
- Sanitary Sewer Pump Station Details and Notes
- General Site Details and Notes
- Erosion and Sedimentation Control Plan

The Consultant shall forward a copy of the engineering plans to the Client for review and approval prior to the commencement of Task 4. If there are any revisions to the Client-approved Site Plan, after commencement of task 4, which cause major revisions to the Engineering Plans (as determined by the Consultant), an Additional Service will be provided, under separate cover, to address these changes.

Printing and travel costs shall be billed per the attached BetaJones Rate Schedule.

**NOTE**: This Proposal does not include costs to design a drainage system, since it is expected for this City Property to be allowed to drainage towards the City's drainage system on the street or adjacent City park's drainage system. If the City and/or County require the design of a drainage system to convey, treat and store the project's site associated runoff, the consultant will provide a service fee, under separate cover.

### Task 5 – Structural Engineering Design Documents

The Consultant shall provide gravity load calculations, windload calculations, design dimensions and material of the following structures:

- Entrance Swing Gate
- Entrance Swing Gate Foundation Pad
- Light Posts

The design of such systems shall be based upon accepted Structural Engineering principles, Florida Building

Code, and jurisdictional agency regulations, as applicable; and the Consultant shall illustrate the proposed structural improvements on construction drawings signed and sealed per the requirements of the State of Florida.

Included in this task, the Consultant shall provide the following plans signed and sealed per the requirements of the State of Florida:

- Entrance Swing Gate Structural Details and Notes
- Light Posts Structural Details and Notes

The Consultant shall forward a copy of the engineering plans to the Client for review and approval prior to the commencement of Task 5. If there are any revisions to the Client-approved Site Plan, after commencement of task 5, which cause major revisions to the Engineering Plans (as determined by the Consultant), an Additional Service will be provided, under separate cover, to address these changes.

Printing and travel costs shall be billed per the attached BetaJones Rate Schedule.

## Task 6 – Electrical Engineering and Site Photometrics (Site Lighting)

The Electrical Engineer shall provide the following items signed and sealed per the requirements of the State of Florida:

- photometric calculations
- pole details, specifications, and legend
- lighting fixture schedule
- Pump Station Panel Electrical Improvement Plan

Areas requiring site lighting shall be illuminated according to applicable codes, regulations, and jurisdictional agencies.

The design of such systems shall be based upon accepted Electrical Engineering principles, Florida Building Code, and jurisdictional agency regulations, as applicable; and the Consultant shall illustrate the proposed electrical improvements on construction drawings signed and sealed per the requirements of the State of Florida.

The Consultant shall forward a copy of the engineering plans to the Client for review and approval prior to the commencement of Task 6. If there are any revisions to the Client-approved Site Plan, after commencement of task 6, which cause major revisions to the Engineering Plans (as determined by the Consultant), an Additional Service will be provided, under separate cover, to address these changes.

**NOTE:** This task assumes that the site's electrical connection point is adjacent to the project area and is adequate; If electrical line extensions or electrical system improvements are needed, the Consultant shall provide these additional designs, under separate cover.

**NOTE 2:** This proposal does not include tracing and testing of the existing electrical system.

### ADDITIONAL ELECTRICAL ASSUMPTIONS:

- 1. There is enough electrical power capacity for new loads at the main onsite equipment, and FPL transformer.
- 2. Existing electric panel(s) feeding project area has enough capacity and spare spaces for any increase in load as a result of this project.
- 3. Existing electrical system is Code compliant.

- 4. Existing emergency generator and emergency panel(s) have enough capacity and spares for new emergency circuits.
- 5. Existing electrical drawings will be provided including transformer capacity and load connections.
- 6. Any testing services required during the design phase are not included.

Printing and travel costs shall be billed per the attached BetaJones Rate Schedule.

### Task 7 – Landscape Architecture and Irrigation

The Landscape Architect shall provide Landscape and Irrigation Plans for the proposed project site. The plans shall be a construction document and shall include a minimum code landscape plan along with an irrigation plan for onsite landscaped areas.

### 1. Existing Conditions Landscape Plan

Existing Bushes and nearby trees, construction notes, site visit,

**NOTE 1**: Site Surveyor shall locate existing trees on survey with DBH tree cal and species and if possible, height and width of tree canopy.

### 2. Proposed Landscape Plan - Ground Level

Proposed landscape plan, entrance, perimeter, Vehicle use area, species, specifications, and planting construction details, construction notes, landscape calculations for city submission.

### 3. Proposed Irrigation Plan - Municipal Water Source

Irrigation head layouts, lateral pipe design/layout, lateral pipe sizing, zoning, mainline sizing, location of water source, irrigation zone valve locations, meter sizing and location, irrigation controller specifications and location

Printing and travel costs shall be billed per the attached BetaJones Rate Schedule.

#### Task 8 – Engineering Calculations, Reports, and Permitting Assistance

Upon completion of the final engineering plans (to a minimum of 90%), the Consultant shall prepare the following necessary documents:

- Structural Calculations Report
- Electrical Calculations Report
- Pump Station Calculation Report

Upon completion of the necessary reports and final engineering plans, the Consultant shall assist in the submittal or submit the required documents and permit applications to the following agencies:

- City of Hallandale Beach Building Permit
- Broward County Utilities and/or City of Hollywood Utilities Complete and Submit Water & Sewer Permit Package
- Florida Dept of Environmental Protection Complete and Submit Pump Station Permit Package

The Consultant shall work, diligently, as the Client's representative while assisting in the acquisition of the required permit(s); However, **PLEASE NOTE**: Agency action is indeterminate; and the Consultant cannot guarantee the issuance of any permit.

**NOTE**: This task is limited to the design of the Pump Station system layout from the production discharge point at the exit point of the building up to the County connection point; If additional utility connections are required by the regulatory agencies or are requested by the Client, the Consultant shall provide these additional designs, under separate cover.

Printing and travel costs shall be billed per the attached BetaJones Rate Schedule.

## Task 9 – Engineering Cost Estimate and Probable Costs

*Engineering Construction Cost Estimate*: The Consultant shall provide an Engineer's Construction Cost Estimate to identify a detailed cost and quantity take-off for all CSI divisions of each type of improvement for:

- Proposed Civil Engineering Components
- Proposed Electrical Engineering Components
- Proposed Landscape and Irrigation Components
- Proposed Structural Engineering Components

The engineer's construction cost estimate shall be based on the design team's 60% and 90% engineering design plans, cost estimate publications, local market availability, and regional price adjustments.

The Consultant shall forward a copy of the Cost Estimate to the Client for review and approval prior to the commencement of Task 9. If there are any revisions to the Client-approved Design, after commencement of task 9, which cause major revisions to the Engineering Plans (as determined by the Consultant), an Additional Service will be provided, under separate cover, to address these changes.

### Task 10 – Meetings and Coordination

The Consultant shall meet and coordinate with the Client, the Owner, other project Team members, and jurisdictional agencies, as required, in order to complete Tasks 1 through 8. These meetings may be conducted at the Owner's offices, the Client's offices, or in the vicinity of the project site; and the fee for this task includes the cost of travel to such meetings as well as the cost of transmittals and communications (emails, phone conferences, faxes) between the Consultant and the parties mentioned above in order to complete this task.

An estimated hourly allowance is provided for this task based upon BetaJones' past experience with projects of this size. Services provided under this task shall be invoiced to the Client on an hourly basis per the attached BetaJones Rate Schedule. If the allowance for this task reaches the amount indicated herein, the Consultant shall provide the Client with an updated estimate for authorization. If the fees for this task do not reach the estimated allowance indicated herein, the Client shall only be responsible for the portion of this allowance for which the Client is invoiced by the Consultant.

#### Task 11 – Project Coordination, Bidding Assistance, and Construction Administration

Based upon the final permitted plans, the Consultant shall assist in the preparation of a Bid Package for the proposed Project improvements provided by the Consultant. Upon completion of these documents and upon request by the Client, copies of the Construction Documents and Bid Package shall be forwarded to the Client for distribution. Also, as part of this task, the Consultant shall provide bidding assistance by answering Contractors' pre-bid questions, attending a pre-bid meeting, and by reviewing Contractor-submitted bids.

During the construction phase of the project, the Consultant shall assist in reviewing the following construction documents, pertaining to the Consultant's designed improvements:

- Engineering Shop Drawings (Review and Approval)
- Request for Information (RFIs) and Construction Change Orders

- Engineering As-Builts (As-Built Survey To Be Provided by the Client or under separate cover)
- Payment request review and approvals

Also as part of this task, the Consultant shall provide construction assistance by answering Contractors' questions. The consultant shall review and approve construction shop drawings for structures used in this project indicated on the Consultant's engineering detail plans. Included in this task is phone conferences and email coordination with the construction team, and the client. Printing, Meeting and Travel Costs during Construction, shall be billed based on The BetaJones Rate Schedule Attached.

### In addition:

• The Consultant shall provide certifications, if required by the regulatory agencies.

The inspections are limited to visual observations and technical data provided to the consultant. For a more thorough quality control, the consultant will be requesting the following information from the Client and/or GC:

- GC approved construction survey including:
  - Base Course Elevations (Same locations where design elevations are provided)
  - Asphalt Surface Elevations (Same locations where design elevations are provided)
- Density and Monitoring Test Results (To be provided by the Consultant at the Client's request under separate cover)

### As-built Certifications

The Consultant shall provide a final engineering asbuilt review and certification provided that the Client and or GC provides the Consultant with an Asbuilt Survey with all documentation required and requested on the construction plans completed by the Consultant.

### Task 12 – Reimbursables

The Consultant shall meet and coordinate with the Client, the Owner, other project Team members, and jurisdictional agencies, as required, in order to complete Tasks 1 through 8. These meetings may be conducted at the Owner's offices, the Client's offices, or in the vicinity of the project site; and the fee for this task includes the cost of travel to such meetings as well as the cost of transmittals and communications (emails, phone conferences, faxes) between the Consultant and the parties mentioned above in order to complete this task.

# **COST OF SERVICES**

DESIGN PHASE			
Task	Description	Basis of Fee	Cost
1	Surveying Services – Boundary, Topographic Survey, and Asbuilt Survey	Lump Sum	\$ 15,720.00
2	Geotechnical Engineering (Soils Study)	Lump Sum	\$ 7,120.00
3	Research and Schematics – Review of Existing System Specifications and Components	Lump Sum	\$ 31,600.00
4	Site / Civil Engineering Design Documents	Lump Sum	\$ 37,200.00
5	Structural Engineering Design Documents	Lump Sum	\$ 6,520.00
6	Electrical Engineering and Site Photometrics (Site Lighting)	Lump Sum	\$ 11,240.00
7	Landscape Architecture and Irrigation	Lump Sum	\$ 4,870.00
8	Engineering Calculations, Reports, and Permitting Assistance	Lump Sum	\$ 19,800.00
9	Engineering Cost Estimate and Probable Costs	Lump Sum	\$ 18,300.00
10	Meetings and Coordination	Hourly Allowance	\$ 10,600.00

CONSTRUCTION PHASE			
Task	Description	Basis of Fee	Cost
11	Project Coordination, Bidding Assistance, and Construction Administration	Lump Sum	\$ 23,600.00

Task	Description	Basis of Fee	Cost
12	Reimbursables	Lump Sum	\$ 12,500.00
		Project Total:	\$ 199,070.00

### STIPULATIONS AND EXCLUSIONS:

The following services are <u>not</u> part of this proposal, but can be provided, if necessary, under a separate proposal upon written request by the Client:

- Drainage System Design
- Architectural Design
- Television Surveys of the Sanitary Sewer System
- Fire Flow Testing
- Environmental Consulting, Wetland Delineation, or Archeological Investigation(s)
- Hydrogeologic Report(s) and Aquifer Recharge Report(s)
- Transportation, Traffic, Mechanical, or Plumbing Engineering
- Custom Size Wet Well and Vault Design
- Agency Permitting Fee, Application, Review & Impact Fees
- Material Testing, Concrete Testing and Density Tests
- Construction Services and Construction materials
- Offsite utility extensions or upgrades

This proposal does not include any other services or submittals which are not clearly outlined in this proposal; however, a separate proposal can be provided for additional items upon written request by the Client. Any deviation from the scope of work outlined in this proposal (due to extensive revisions) will be immediately brought to the Client's attention and a separate proposal shall be provided to the Client by the Consultant.

Proposal for Professional Services City of Hallandale Beach: Lift Station 9 - Foster Road - Improvement Project 750 NW 8<sup>th</sup> Avenue, Hallandale Beach, Florida 33009 The BetaJones Group, Inc. Proposal No. 21117

# Total Contract Amount for Services outlined within this proposal: \$ 199,070.00

### Authorization

Refer to CCNA RFP #FY 2018-2019-012 Agreement

Attachments: BetaJones Rate Schedule General Conditions Special Provisions

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# **OPINION OF PROBABLE COST**

Task	Description	Cost
1	Replace valves and piping in the valve vault.	\$ 35,000.00
2	Replace piping within wet well	\$ 35,000.00
3	Blast clean, repair and coat interior surface of wet well	\$ 15,000.00
4	Replace valve vault cover with hinged access hatch	\$ 25,000.00
5	Replace antiquated and corroded equipment including, starter panels, instruments, float switches, disconnect switch, enclosure for automatic transfer switch	\$ 25,000.00
6	Additional site lighting	\$ 50,000.00
7	Construction of an upgraded Pump Station for 2030 Capacity	\$ 725,000.00
8	Replace fencing around the station, including new entrance gate	\$ 35,000.00
9	New Driveway onto Pump Station 9 Area	\$ 60,000.00
10	Application of a Channel Grinder into the pump system	\$ 35,000.00
11	Provide necessary privacy landscape around the site with the sight triangle in mind.	\$ 25,000.00
12	Provide a New Larger top slab on the Wet Well	\$ 75,000.00
13	Provide an Odor Control System	\$ 35,000.00
14	Provide Fall Prevention Grates inside the Wet Well.	\$ 20,000.00
	Opinion of Probable Cost Construction Costs Total:	\$ 1,150,000.00

# BetaJones Rate Schedule Per City of Hallandale Hourly Rate CCNA – RFP FY 2018-2019-012

	<u>H</u>	<u>Hourly</u>	
Professional Services		<u>Rate</u>	
Associate Engineer	\$	140	
Director Engineer	\$	140	
Project Manager	\$	140	
Project Engineer	\$	125	
Engineer	\$	100	
Jr. Engineer	\$	90	
Senior CADD Tech Manager	\$	65	
CADD Technician	\$	65	
Permit Administrator	\$	100	

#### **Reimbursable Expenses**

Courier Zone 1 (0 - 30 Miles)	\$ 25.00
Courier Zone 2 (31 - 60 Miles)	\$ 50.00
Courier Zone 3 (61 - 75 Miles)	\$ 60.00
Mileage (per mile)	\$ 0.56
Black / White Prints & Copies (8 ½" x 11") (per page)	\$ 0.25
Black / White Prints & Copies (11" x 17") (per page)	\$ 0.50
Color Prints & Copies (8 ½" x 11") (per page)	\$ 1.00
Color Prints & Copies (11" x 17") (per page)	\$ 2.00
Black / White Plots (24" x 36") (per sheet)	\$ 1.00
Black / White Plots (30" x 42") (per sheet)	\$ 1.50
Color Plots (24" x 36") (per sheet)	\$ 8.00
Color Plots (30" x 42") (per sheet)	\$ 10.00
Mylars (24" X 36") (per sheet)	\$ 12.00
Vellums (24" X 36") (per sheet)	\$ 15.00
Official Record Docs (per page)	\$ 1.00
Postage	*
Fax Transmissions	*

#### **\*Out-of-Pocket Expenses**

Cost

<u>Rate</u>