



**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

**Financial Project ID No's.: 430444-1-56-01**  
**Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road**  
**From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street**  
**Miami-Dade County, Florida**

**1 SCOPE OF WORK – AMENDMENT NO. 2**

This amendment to the project scope of services is to provide consulting engineering services to the City of Miami Beach due to project delays and FDOT changes to the roadway and drainage designs. Modifications include raising the roadway profile, adding double drainage trunk lines, one for each travel direction, and coordination with FPL for new underground electric utilities. Stantec previously submitted 30% design submittal package in October of 2017 with the 30% FDOT roadway submittal. Based on the noted design changes, FDOT will be resubmitting 30% for review in May of 2020. The WM relocation plans will be resubmitted to FDOT and the City of Miami Beach at the 30% submittals and updated based on the FDOT design modifications.

This amendment also includes a Basis of Design Report (BODR), final design, permitting, preparation of technical special provisions, electronic delivery and post design activities in relation to the installation of four (4) wastewater Pump Stations, 3,600 LF of 8/10/12" PVC force main, 11,500 LF of 8"/10"/12" PVC gravity sewer, and 30 manholes along SR 907/Alton Road South of Ed Sullivan Drive/ 43rd Street to W 63rd Street. See detailed scope in Exhibit A for additional information.

**2 SCHEDULE**

Design Schedule and submittal is based on the Roadway design schedule.  
BODR and final recommendations– TBD  
90% Plans Submittals- TBD  
90% Plans Submittals- September 20<sup>th</sup>, 2022  
100% Plans Submittals- February 24<sup>th</sup>, 2023  
Plans Specifications and Estimate (PS&E) – April 21<sup>st</sup>, 2025  
Letting Date – July 30<sup>th</sup>, 2025

**3 ESTIMATE OF WORK EFFORT**

See attached Estimate of Work Effort and Fee Spreadsheet – Exhibit B

**4 REQUEST TO UTILIZE / ADD SUB-CONSULTANT**

Survey and SUE Sub-consultant to be utilized.

**5 DELIVERABLES**

Plans, Permits, Engineer’s Opinion of Probable Cost, soft digs of existing utilities and Technical Special Provisions for the installation of the proposed wastewater pump stations and force main sewer.

**6 EXCLUSIONS**

Permit fees will be paid by City of Miami Beach.



**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

**Financial Project ID No's.: 430444-1-56-01**  
**Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road**  
**From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street**  
**Miami-Dade County, Florida**

---

Environmental services for contamination clean-up if encountered.

**7 METHOD OF COMPENSATION**

The proposed services will be compensated in the form of a Lump Sum of **\$1, 353,304.88** Compensation will be based on progress submittals of construction documents. Additional services beyond the project scope will require prior approval and separate letter of authorization with justification for the request.

**8 PRELIMINARY ESTIMATE OF PROBABLE COSTS**

See Preliminary Engineer's Opinion of Probable Cost in Exhibit C.



Financial Project ID No's.: 430444-1-56-01  
 Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road  
 From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street  
 Miami-Dade County, Florida

**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
 Coral Gables FL 33134  
 Tel: (305) 445-2900  
 Fax: (305) 445-3366

**9 CONSULTANT ACCEPTANCE**

Prepared For Stantec by:

Dave Clarke, P.E.

Name

Project Manager

Name

\_\_\_\_\_  
 Signature

6-09-2022

Date

Reviewed and accepted for Stantec by:

Ramon Castella, P.E.

Name

Vice-President

Name

\_\_\_\_\_  
 Signature

6-09-2022

Date

**10 SCOPE OF WORK**

Approved for by City of Miami Beach by:

\_\_\_\_\_  
 Name

\_\_\_\_\_  
 Name

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Date

**Financial Project ID No's.: 430444-1-56-01**  
**Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road**  
**From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street**  
**Miami-Dade County, Florida**



**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

---

## **Exhibit A – Scope of Services**

Financial Project ID No's.: 430444-1-56-01  
Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road  
From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street  
Miami-Dade County, Florida

**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

## Scope of Work

The scope of the work for this Task Work Order (TWO) includes:

- City of Miami Beach retained Hazen and Sawyer to develop a city-wide Sewer System Master Plan which was completed in October of 2019. Using the results of the Master Plan, the City evaluated the Alton Road corridor from South of 43<sup>rd</sup> Street to W 63<sup>rd</sup> Street, and identified wastewater improvements within Basins 28 A, and 15 A and B which may include four (4) new wastewater Pump Stations, 3,600 LF of 8"/10"/12" PVC force main, 11,500 LF of 8"/10"/12" PVC gravity sewer, and 30 manholes. The number of pump stations, pipe sizes and length are approximate and will be verified in the BDOR. For this Task Work Order, Stantec will review the recommendations from the Sewer Master Plan and develop a Basis of Design Report to confirm the proposed improvements, conduct an analysis to determine the size of (4) four pump stations and determine the size of the relocated gravity sewer main along Alton Road. In addition to the BODR, Stantec will also develop construction documents for the new Pump Station, and manholes which will include final design, permitting, specifications (per FDOT standards) and limited support during construction. **Final design for Pump Stations A, B and C and proposed FM (between Pump Station A and C) within Basins 15A and 15B (See Exhibit D) will be designed by an outside Consultant selected by City of Miami Beach as part of the North Bay Road and Lakeview improvements in the La Gorce Neighborhood. City of Miami Beach recently received a grant from Florida Department of Environmental Protection (FDEP) to fund these improvements. The design fees for these improvements are included in this proposal as a contingency to be used only if authorized in writing by the City of Miami Beach.**
- Scope of work for the BODR will include:
  - Review of Sewer System Master Plan developed by Hazen and Sawyer for City of Miami Beach.
  - Review hydraulic model (infoworks ICM SE by Innovyze) referenced in the Sewer System Master Plan Report by Hazen, develop list of questions, and participate in a model review meeting with the City and Consultant who prepared the model. Updates to the model are limited to the addition of existing gravity sewer system within the basin being evaluated. It is anticipated that the model is updated to accurately represent existing infrastructure and has been calibrated to reflect existing wastewater flow conditions.
  - Collect and review existing as built and GIS utility information
  - Perform site visit at proposed Pump Station location.
  - Using the City's calibrated hydraulic model, add the existing gravity sewer system within the service area, determine the proposed 4 sewer pump station capacities (total number and size to be determined by BODR), size of proposed force main,

**Financial Project ID No's.: 430444-1-56-01**  
**Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road**  
**From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street**  
**Miami-Dade County, Florida**

**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

---

and size of new gravity sewer system along Alton Road into the R/W from South of Ed Sullivan Drive/ 43rd Street to W 63rd Street for existing and future conditions. A conceptual layout of proposed facilities is included in City Exhibit D.

- Perform hydraulic model to size the proposed gravity, PS and FM and coordinate with City for impacts citywide due to the proposed work.
- Preliminary mechanical and structural calculations to size pumps, wet well, and discharge force main.
- Preliminary electrical coordination to identify necessary power upgrades
- Summarize findings in a draft and final BODR

➤ The scope of the work for the Pump Station (PS), Force main and Gravity Sewer includes:

- Installation of four new Pump Stations design based on the BODR recommendations.
- Installation of the proposed force main as recommended in the BODR along SR 907/Alton Road.
- Installation of proposed gravity sewer and manholes gravity sewer as recommended in the BODR along SR 907/Alton Road from Ed Sullivan Drive/ 43rd Street to Pine Tree Drive.

➤ The scope of the work for the watermain update includes:

- Revise waterline utility drawings to account for FDOT design changes that include addition of a two-way protected bicycle lanes, additional pavement widening, relocation of drainage inlets, adjustments of the curb and gutter, sidewalk and lighting, and adjustments of the roadway profile.
- Update existing utility information
- Prepare updated 60% and 90% EOPCC
- Update Technical Special Provisions
- Prepare and resubmit 60% Preliminary Engineering drawings and specifications.
- Prepare and resubmit 90% Detailed Engineer documents.

**Financial Project ID No's.: 430444-1-56-01**  
**Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road**  
**From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street**  
**Miami-Dade County, Florida**

**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

---

### **Services to be provided**

The Scope of Work for this TWO includes the following:

1. Coordination with:
  - a. Florida Dept. of Transportation (FDOT)
  - b. City of Miami Beach
  - c. Miami-Dade Department of Regulatory Economic Resource (RER) formerly DERM
  - d. Florida Department of Environmental Protection

### **Updated Water Main Plans**

2. Update WM plans due to FDOT changes which include addition of a two-way protected bicycle lanes, additional pavement widening, relocation of drainage inlets, adjustments of the curb and gutter, sidewalk and lighting, and adjustments of the roadway profiled

### **New Pump Stations**

3. Supplemental topographic survey and soft digs of the properties for the new Pump stations. The survey will show the property's relationship to boundary, easement lines and location of above ground visible improvements. Additional Geotechnical borings will also be required and provided by the City of Miami Beach.
4. Provide landscape services for screening of PS sites with new clusia shrubs. Design will include spacing of shrubs, selection of species per CLIENT's preference (does not include shrubs that require irrigation), and general landscaping notes. (does not include beautification, photo boards or rendering showing finished look, or architectural screening)
5. Coordinate location, sketch and description of property and easement location for FPL equipment if necessary.
6. Designate utilities horizontally within the subject property to the edge of the pavement or adjacent roadway at each pump station site. Electromagnetic detection/ground penetrating radar techniques will be used to locate utilities and help identify (4) four soft-dig locations at each pump station site. These field located utilities will be plotted on the survey for each pump station.
7. Prepare BODR and preliminary drawings which illustrate the basic components of the improvements including, the size, scale, location, dimensions, layout, and character of each major design feature.

**Financial Project ID No's.: 430444-1-56-01**  
**Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road**  
**From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street**  
**Miami-Dade County, Florida**

**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

8. BODR will include final design criteria and be submitted to permit agencies for review.
9. Stantec will design the pump stations with watertight hatches to avoid an elevated structure and meet the 100-year flood elevation. This will include the minimum wet well rim elevation required by agency having jurisdiction, and the minimum elevation for the bottom of the electrical equipment. Design will include necessary structural and civil efforts to raise sites and harmonize grading with adjacent areas.
10. Coordinate power upgrade requirements with FPL. Stantec will identify the proposed upgrades required for the four new pump stations, will coordinate with FPL for preliminary power upgrade design, coordinate minimum easement requirements, coordinate preliminary costs of upgrades, and work with FPL to identify lead times on upgrades.
11. Detailed design for four new Pump Stations based on the BODR recommendations along Alton Road at the recommended locations in the Sewer System Master Plan developed by Hazen and Sawyer. This will include design plans and project specifications.
12. Each pump station will be designed with a new wet well, new underground valve vault, backup generator, electrical equipment and privacy fence.
13. The pump stations will be designed based on city of Miami Beach Public Works standards for Sanitary Force mains and pump stations and RER DERM.

**14. Preparation of Construction Plans (Pump Station, 57 Sheets):**

*Cover Sheet with Sheet Index (Included with gravity sewer and FM Set)*

*Legend and Key Plan (Included with gravity sewer and FM Set)*

*General Notes, Abbreviations and Pipping Schedule (Included with gravity sewer and FM Set)*

**CIVIL**

*Standard Details (Included with gravity sewer and FM Set)*

- Proposed Site Plan (4 sheets)
- Stormwater Pollution Prevention Plan (2 sheets)



Financial Project ID No's.: 430444-1-56-01  
Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road  
From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street  
Miami-Dade County, Florida



**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

---

### **MECHANICAL**

- PS Plans, Sections and Details (4 sheets)

### **STRUCTURAL**

- Notes and Symbols (3 sheets)
- Valve Vault and Wet Well (4 sheets)
  
- Foundation Support (4 sheets)
- Structural Details (3 sheets)

### **ELECTRICAL & INSTRUMENTATION**

- Notes and Symbols (3 sheets)
- Electrical Site Plan and Equipment Elevations (4 sheets)
- Grounding Plans (4 sheets)
- Single Line Diagram and Riser Diagram (4 sheets)
- Electrical Details (3 sheets)
- Pump Control panel schematic (4 sheets)
- Control Panel Details (3 sheets)
- RTU Installation and Wiring Diagrams (4 sheets)
- Schedules (4 sheets)

**Financial Project ID No's.: 430444-1-56-01**  
**Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road**  
**From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street**  
**Miami-Dade County, Florida**

**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

---

## **Gravity Sewer and Force Main**

15. Development of a preliminary gravity sewer alignment along Alton Road and proposed tie-in locations for new and existing laterals. Discuss the alignment option in meeting with City of Miami Beach and FDOT prior to development of 60% design documents.
16. Development of a preliminary force main alignment along Alton Road, proposed tie-in locations at proposed pump stations. Discuss the alignment option in meeting with City of Miami Beach and FDOT prior to development of 60% design documents.
17. Where existing laterals are being relocated from behind homes into the Alton Road R/W, the City will be responsible for the switching over in a separate project. No improvements will extend beyond the R/W into private properties.
18. Detailed design (plan and profile) of 8/10/12/18" gravity sewer main and associated connections and appurtenances along SR 907/Alton Road, from South of 43rd Street to W 63rd Street.
19. Detailed design (plan and profile) of 8/10/12" force main and associated connections and appurtenances along SR 907/Alton Road, South of Ed Sullivan Drive/ 43rd Street to W 63rd Street.

## **20. Preparation of Construction Plans (Gravity Sewer 96 sheets, Force Main, 6 sheets):**

- Cover Sheet with Sheet Index (3 sheets)
- General Notes (3 sheets)
- Legend and Key Plan (6 sheets)
- Tabulation of Quantities – Sanitary force main, manholes and fittings (12 sheets)
- Summary Table – Including Pipe segment, diameter, material, slope and manholes (3 sheets)
- Plan and Profile for mainline Force main (6 sheets)
- Plan and Profile for mainline Gravity Sewer main (66 sheets)
- Standard Details (3 sheets)

Financial Project ID No's.: 430444-1-56-01  
Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road  
From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street  
Miami-Dade County, Florida



**Stantec Consulting Services Inc.**  
901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

---

## Permitting and Support and Applications

21. Preparation and submittal of permit applications to the following:
  - a. Miami-Dade Department of Regulatory Economic Resource (RER) formerly DERM
  - b. Florida Department of Environmental Protection
  - c. City of Miami Beach Building Department – Dry Run
  - d. City of Miami Beach Public Works
  - e. DERM Sewer Extension
22. Addressing permit comments. Up to three rounds of RFIs for each agency and revising plans as to resolve these RFIs.

## LIMITED SUPPORT DURING BIDDING AND CONSTRUCTION

23. Provide bidding support to FDOT during procurement addressing questions from prospective bidders.
24. Post design services for the new pump station, force main and gravity sewer which include:
  - a. Preconstruction Conference
  - b. Shop Drawing review (Manholes, Modification of existing manholes, gravity sewer pipes, bypass plan for gravity sewer installation, fittings, bypass plan pumps, control panel, valves, wet well, pipes, fittings, etc.)
  - c. Change order evaluation and recommendations
  - d. Start-up Testing
  - e. RFIs and Engineers Supplemental Instructions (ESI's)
  - f. Field visits
25. Prepare Technical Special Provisions (TSPs) required for:
  - a. Wastewater Pump Stations

**Financial Project ID No's.: 430444-1-56-01**  
**Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road**  
**From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street**  
**Miami-Dade County, Florida**

**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

- b. Sanitary Force main construction
- c. Gravity Sewer main construction

26. Prepare Engineers Estimate of Probable Construction Cost in FDOT format

27. Electronic Delivery of the proposed design JPA per FDOT requirements and Final CAD delivery to City of Miami Beach.

Prepare and submit progress drawings and documents for City of Miami Beach review and approval as follows:

a) 30% submittal:

30% drawings, technical specifications (TOC), class 5 (expected accuracy between 30% to 50%) preliminary Opinion of Probable Construction Cost and draft schedule of values. (Deliverables include: Digital copies of 11" x 17" Design Plans at 1"=40" scale for Plan & Profile, digital copies of the technical specifications, digital copies of preliminary Opinion of Probable Construction Cost.

b) 60% submittal:

60% drawings, draft technical specifications, class 4 (expected accuracy between 15% to 30%) preliminary Opinion of Probable Construction Cost and draft schedule of values. (Deliverables include: Digital copies of 11" x 17" Design Plans at 1"=40" scale for Plan & Profile, digital copies of the technical specifications, digital copies of preliminary Opinion of Probable Construction Cost.

c) 90% submittal:

90% drawings, draft technical specifications, class 2 (expected accuracy between 5% to 15%) preliminary Opinion of Probable Construction Cost and draft schedule of values. (Deliverables include: Digital copies of 11" x 17" Design Plans at 1"=40" scale for Plan & Profile, digital copies of the technical specifications, digital copies of preliminary Opinion of Probable Construction Cost.

d) Permit Package:

Permit submittal and resolution of permit review comments for the agencies listed above. (Deliverables include: eight (4) copies of 11" x 17" Design Plans at 1"=40" scale for Plan & Profile, two (2) copies of technical specifications signed and sealed by Stantec's Engineer of Record (EOR), completed permit applications for each agency signed and sealed by Stantec's EOR, tracking sheet with indication of dates of submittal of each application and approval or comments from the corresponding agency).



**Financial Project ID No's.: 430444-1-56-01**  
**Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road**  
**From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street**  
**Miami-Dade County, Florida**

**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

e) 100% Submittal:

Prepare and submit 100% Final drawings, technical specifications, schedule of values and class 1 (expected accuracy between 5% to 10%) Opinion of Probable Construction Cost to City of Miami Beach and FDOT to execute Construction JPA. (Package shall include five (5) copies of approved 100% Construction Plans in 11" x 17" format, Final Technical specifications (One (1) original not bound, and four (4) copies bound, Final Opinion of Probable Cost, flash drive with 100% Construction Plans (CADD files (Microstation) and PDFs), Final Opinion of Probable Cost in excel, draft and final meeting minutes).

**Assumptions/Clarifications:**

Assumptions and exclusions for this Scope of Work include:

1. The City's Infoworks hydraulic model is up to date and reflects the existing system hydraulic conditions accurately as of issuance of NTP and no calibration is required. Any model updates or modeling of additional scenarios will require additional compensation.
2. Stantec will add the existing gravity sewer in the basin being evaluated. Gravity pipeline data, including pipe sizes and invert elevations, is available in electronic (GIS format) or record drawings in pdf and will be provided by the City.
3. Stantec assumes the existing model was calibrated with existing field pressure data. This scope does not include purchasing or installation of pressure loggers at key locations to validate existing model.
4. Design for any Temporary Works (e.g. excavation, shoring, sheeting, or stabilization of pits or excavations) is not included. Minimum requirements will be included in Technical Specifications.
5. Transient analysis is not required for either replacement of water mains or force mains.
6. Design for relocation of other utilities (gas, electric, telecommunications etc.) is not included in this scope of work.
7. Chain-link fencing with privacy slats at the PS site is not included in this scope of work. PS will be screened with new shrubs.
8. Scope of work does not include submittals to City of Miami Beach Design Review Board, City of Miami Beach Historical Preservation Board, or City of Miami Beach Planning Department
9. Lighting plans for the PS sites is excluded from scope of work outside the PS sites perimeter hedges.

Financial Project ID No's.: 430444-1-56-01  
Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road  
From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street  
Miami-Dade County, Florida



Stantec Consulting Services Inc.  
901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

10. Subsurface geotechnical investigations have been completed by FDOT for the roadway design and provide sufficient data and design recommendations to complete the force main design. Available data and geotechnical reports will be provided to the Engineer. Additional Geotechnical investigations will be required for the PS sites.
11. Additional Geotech information will be provided by the City at the PS sites to support design of the new PS.
12. CAD drawings will be in Microstation (FDOT Requirements)
13. With the exception of the design of the wet well and PS Structures, no other structural analysis or design is required for this project.
14. Design and/or specification of cathodic protection systems is not required for this project.
15. Design of sheet piling is not required for this project.
16. Prepare backout Utility Work Schedule for City of Miami Beach to review and sign. City will review schedule and submit to FDOT.
17. Line and lay drawings and fitting schedules are not required for this project.
18. Engineer shall prepare and make a total of four submittals to City of Miami Beach for review (60%, 90%, Permit Set, and 100% Plans). Engineer shall be entitled to additional compensated for additional and/or supplemental submittal requests.
19. Engineer shall prepare and make a total of 8 submittals to FDOT which coincide with the 60%, 90%, 100%, PS&E, Plans Completed, Production Date, Plans to specs and plans to Tally per Project Schedule milestones.
20. Environmental services for contamination clean-up, if encountered, would be additional services and Stantec will be entitled for any effort required.
21. This scope does not include pump drawdown tests for existing sewer pump stations, or installations of pressure loggers to verify existing pumping conditions.
22. Permitting with City of Miami Beach Urban Forestry or Public Works is not included as part of this scope.
23. This scope does not include permitting with DERM's following departments - Pollution Remediation Section, Water Control, or obtaining Class I – Class VI permits.
24. Permit fees will not be paid by City of Miami Beach.
25. Coordination of Temporary Construction Easements with private property owners are not included as part of this scope.



**Financial Project ID No's.: 430444-1-56-01**  
**Proposed BODR & Final Design for new Pump Stations and FM along SR 907/Alton Road**  
**From South of Ed Sullivan Drive/ 43rd Street to W 63rd Street**  
**Miami-Dade County, Florida**

**Stantec Consulting Services Inc.**

901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

26. This scope only includes a design for up to four pump stations. Design of any additional pump station will require additional compensation.
27. This proposal assumes the pump station locations include the minimum required footprint to accommodate a new pump station, access driveway, harmonize flood elevation elements, and minimum clearances. If a new location is required based on limited PS site area, Stantec will request for additional compensation to evaluate optimal locations.
28. Public Outreach is not included in this scope of work

**Current FDOT Projects Information**

The City of Miami Beach water utility improvements detailed in this Scope of Work will be incorporated under FDOT project FPID No. 430444-1-52-01 along SR 907/Alton Road, from south of Ed Sullivan Drive/ 43rd Street to W 63rd Street. This project is split into two projects. FPID 430444-1-56-01 is from station 164+ 00 (South of Ed/Sullivan Drive/43rd St) to station 206+00 and FPID 430444-1-56-02 from station 206 +00 to end.

**Financial Project ID 430444-1-52-01**

Project Manager: Humberto Gomez, P.E., C.P.M.

Contact Number: (305) 470-7390

Email: Humberto.Gomez@dot.state.fl.us

FDOT Scope of Work: Roadway reconstruction, drainage improvements (including Storm water Pump Stations), intersection improvements, milling and resurfacing, adjustment of valves and manholes, sidewalk and curb ramps, signing and pavement markings signalization.

**Production Schedule:**

430444-1-56-01

90% Plans Submittals- September 20<sup>th</sup>, 2022

100% Plans Submittals- February 24<sup>th</sup>, 2023

Plans Specifications and Estimate (PS&E) – April 21<sup>st</sup>, 2025

Letting Date – July 30<sup>th</sup>, 2025

**Financial Project ID No's.: 429193-1-56-01**  
**Proposed 8"/12" Water Main JPA Installation along SR 907/Alton Road**  
**From south of Ed Sullivan Drive/ 43rd Street to W 63<sup>rd</sup> Street**  
**Miami-Dade County, Florida**

---



**Stantec Consulting Services Inc.**  
901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

## **Exhibit B - Work Effort Spreadsheet**







CONSULTANT: STANTEC CONSULTING SERVICES INC.

WPI NO.: N/A

DESCRIPTION: Proposed BODR, New Pump Stations and Force Main JPA Installation on SR 907/Alton Road.

CONST. YR. 2024-2025

COUNTY: MIAMI-DADE

From: south of Ed Sullivan Drive/ 43rd Street

To: W 63rd Street

TASKS	W O R K %	MANHOURS				HOURLY RATE (W/OUT OM)	FIXED FEE (OM)	TOTAL HOURLY RATE	ESTIMATED COST
		BODR AND PM TOTAL HOURS							
BODR		368						\$52,668.16	
PM & COORDINATION		241						\$34,491.92	
<b>SUB TOTAL</b>		<b>609</b>						<b>\$87,160.08</b>	
<b>STANTEC SUB TOTAL</b>									

TASKS	W O R K %	MANHOURS				HOURLY RATE (W/OUT OM)	FIXED FEE (OM)	TOTAL HOURLY RATE	ESTIMATED COST
		WATER MAIN TOTAL HOURS	TOTAL SHEETS						
UPDATE 90% PLANS		212	82					\$30,340.91	
<b>SUB TOTAL</b>		<b>212</b>	<b>82</b>					<b>\$30,340.91</b>	
<b>STANTEC SUB TOTAL</b>									

TASKS	W O R K %	MANHOURS				HOURLY RATE (W/OUT OM)	FIXED FEE (OM)	TOTAL HOURLY RATE	ESTIMATED COST
		GRAVITY SEWER TOTAL HOURS	TOTAL SHEETS						
30% PLANS		1,082	60					\$154,845.10	
60% PLANS		1,499	96					\$214,536.88	
90% PLANS		1,048	96					\$149,989.76	
100% PLANS		668	96					\$95,604.16	
<b>SUB TOTAL</b>		<b>4,297</b>	<b>96</b>					<b>\$614,975.90</b>	
<b>STANTEC SUB TOTAL</b>									

TASKS	W O R K %	MANHOURS				HOURLY RATE (W/OUT OM)	FIXED FEE (OM)	TOTAL HOURLY RATE	ESTIMATED COST
		PS A BASIN 28A TOTAL HOURS	TOTAL SHEETS						
DESIGN ANALYSIS		118						\$16,888.16	
30% PLANS		59	2					\$8,444.08	
60% PLANS		256	20					\$36,638.72	
90% PLANS		134	20					\$19,178.08	
100% PLANS		65	20					\$9,302.80	
<b>SUB TOTAL</b>		<b>632</b>	<b>20</b>					<b>\$90,451.84</b>	
<b>STANTEC SUB TOTAL</b>									

TASKS	W O R K %	MANHOURS				HOURLY RATE (W/OUT OM)	FIXED FEE (OM)	TOTAL HOURLY RATE	ESTIMATED COST
		PERMITTING & POST DESIGN							
PERMIT		268						\$38,356.16	
POST DESIGN		604						\$86,444.48	
<b>SUB TOTAL</b>		<b>872</b>						<b>\$124,800.64</b>	
<b>STANTEC SUB TOTAL</b>									

TASKS	W O R K %	MANHOURS				HOURLY RATE (W/OUT OM)	FIXED FEE (OM)	TOTAL HOURLY RATE	ESTIMATED COST
		PS A,B,C BASIN 15A & 15B & FM TOTAL HOURS	TOTAL SHEETS						
DESIGN ANALYSIS		245						\$35,064.40	
30% PLANS		193	8					\$27,622.16	
60% PLANS		584	43					\$83,582.08	
90% PLANS		326	43					\$46,657.12	
100% PLANS		174	43					\$24,902.88	
PERMIT		324						\$46,370.88	
POST DESIGN		300						\$42,925.35	
<b>SUB TOTAL</b>		<b>2,146</b>	<b>43</b>					<b>\$307,124.87</b>	
<b>STANTEC SUB TOTAL</b>									

STANTEC WITHOUT CONTINGENCY TOTAL HRS	6622	\$947,729.37
STANTEC TOTAL SHEET COUNT	198	
SURVEY AND SUE SERVICES		\$98,450.64
CONTINGENCY PS A,B,C & FM HRS	2146	\$307,124.87
<b>GRAND TOTAL CONTRACT AMOUNT</b>		<b>\$1,353,304.88</b>

Proposed BODR, New Pump Stations and Force Main JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
BODR, New Pump Stations and Force Mains

ACTIVITY: A. (BODR and Preliminary Sketches)

SUBACTIVITY: 1 (Design Analysis)

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1	Review of Sewer System Master Plan and hydraulic model developed by Hazen and Sawyer for City of Miami Beach.	LS	1	40	40		
2	Hydraulic and Modeling Evaluation and calculations to validate number of pump stations proposed, size of new force mains & size of relocated gravity sewer mains	LS	1	90	90		
3	Performing easement research and coordinating proposed skteches	EA	0	0	0		For 4 PS sites
4	Draft BODR	LS	1	120	120		Includes lakeview gravity sewer BODR
5	Final BODR Including Workshop	LS	1	100	100		
6	Preliminary drawings illustrating the PS site layout and new force main.	EA	4	18	72		Civil Demo/Existing, Civil Site Plan, & Mechanical Section
7	Hydraulic Calculations for Pump Selection	EA	4	20	80		Assume 20 hrs for each station
8	Structural Calculations for PS buoyancy, wet well structure	EA	4	20	80		Assume 20 hrs for each station
9	Coordinate with FPL for preliminary power upgrade, easement requirements,	EA	4	20	80		
10	Coordinate collection of field data for survey, geotech and SUE	LS	1	10	10		
11	Obtain utility design ticket and existing utility information	EA	12	2	24		Obtain Sunshine Onecall design ticket and existing utility information from UA/Os
12	Field Reviews	EA	3	8	24		Estimate is for 4 field visits @ 4 hours each (2 persons) and includes preparation, travel, and documentation time.
13	Contract File (Set-up and maintenance)	LS	1	50	50		Setup project, maintenance of files, schedule updates, sub-consultant management, progress reports etc. Assume approx 4 hrs per month for 12 months
14	FDOT Computation Book & Quantities	LS	1	40	40		Quantities based on PS and new pipeline alignment
15	Bidding Support	LS	1	100	100		
16	Meeting Via Teams	EA	2	4	8		Meetings with City of Miami Beach and FDOT; Kick off meeting with City to discuss report and hydraulic model Meeting with FDOT to discuss location and alignment prior to development of 60% design deliverable. Two attendees at 2 hrs each.
17	Meetings In-Person	EA	2	4	8		Meetings with City of Miami Beach and FDOT; Kick off meeting with City to discuss report and hydraulic model Meeting with FDOT to discuss location and alignment prior to development of 60% design deliverable. Two attendees at 4 hrs each.
<b>SUBACTIVITY SUBTOTAL</b>					<b>926</b>		
18	Quality Assurance/Quality Control	%	5%		46		
<b>SUBACTIVITY TOTAL</b>					<b>972</b>		

Proposed BODR, New Pump Stations and Force Main JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
 BODR, New Pump Stations and Force Mains

ACTIVITY: A. (PS and FM PLANS)

SUBACTIVITY: 2 (Construction Plans 30%)

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
<b>Pump Stations Drawings-General/Civil</b>							
1	Cover Sheet and Index	Sheet	0	0	0		Included with Gravity Sewer
2	Legend and Key Plan	Sheet	0	0	0		Included with Gravity Sewer
3	General Notes, Abbreviations and Piping Schedule	Sheet	0	0	0		Included with Gravity Sewer
4	Standard Details	Sheet	0	0	0		Included with Gravity Sewer
5	Prop Site/Grading Plan	Sheet	4	0	0		Not part of 30% submittal
6	SWPPP	Sheet	2	0	0		Not part of 30% submittal
<b>Pump Stations Drawings-Mechanical</b>							
7	PS Plans and Sections & Details	Sheet	4	48	192		
<b>Pump Stations Drawings-Structural</b>							
8	Notes and Symbols	Sheet	3	0	0		Not part of 30% submittal
9	Valve Vault and Wet well	Sheet	4	0	0		Not part of 30% submittal
10	Foundation Support	Sheet	4	0	0		Not part of 30% submittal
11	Structural Details	Sheet	3	0	0		Not part of 30% submittal
<b>Pump Stations Drawings-Electrical &amp; Instrumentation</b>							
12	Notes and Symbols	Sheet	3	0	0		Not part of 30% submittal
13	Elec Site Plan & Equipment Elevations	Sheet	4	0	0		Not part of 30% submittal
14	Grounding Plan	Sheet	4	0	0		Not part of 30% submittal
15	Single Line & Riser Diagram	Sheet	4	0	0		Not part of 30% submittal
16	Electrical Details	Sheet	3	0	0		Not part of 30% submittal
17	Pump Control Panel Schematic	Sheet	4	0	0		Not part of 30% submittal
18	Control Panel Details	Sheet	3	0	0		Not part of 30% submittal
19	RTU Installation and Wiring Diagrams	Sheet	4	0	0		Not part of 30% submittal
20	Schedules	Sheet	4	0	0		Not part of 30% submittal
<b>Force Main Drawings-</b>							
21	Key Sheet/Key Plan	Sheet	0	0	0		Included with Gravity Sewer
22	General Notes	Sheet	0	0	0		Included with Gravity Sewer
23	Legend and Key Plan	Sheet	0	0	0		Included with Gravity Sewer
24	Tabulation of Quantities and Lateral Tables	Sheet	0	0	0		Included with Gravity Sewer
25	8"/10"/12" Force main Plan	Sheet	6	8	48		
26	Structural Details	Sheet	0	0	0		
27	Standard Details including Gravity Sewer Details	Sheet	0	0	0		
28	Special Details	Sheet	0	0	0		
29	Pavement and Base Restoration/General Notes and Details	Sheet	0	0	0		
30	Core Boring Reports	Sheet	0	0	0		
31	Traffic Control Notes	Sheet	0	0	0		
32	Traffic Control Typical Sections	Sheet	0	0	0		
33	Traffic Control Plan	Sheet	0	0	0		
34	Electronic Delivery	LS	0	0	0		
35	Phase Review Meetings	EA	0	0	0		
<b>SUBACTIVITY SUBTOTAL</b>					<b>240</b>		
36	Quality Assurance/Quality Control	%	5%			12	
<b>SUBACTIVITY TOTAL</b>					<b>252</b>		

Proposed BODR, New Pump Stations and Force Main JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
 BODR, New Pump Stations and Force Mains

ACTIVITY: A. (PS and FM PLANS)

SUBACTIVITY: 2 (Construction Plans 60%)

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
<b>Pump Stations Drawings-General/Civil</b>							
1	Cover Sheet and Index	Sheet	0	0	0		Included with Gravity Sewer
2	Legend and Key Plan	Sheet	0	0	0		Included with Gravity Sewer
3	General Notes, Abbreviations and Piping Schedule	Sheet	0	0	0		Included with Gravity Sewer
4	Standard Details	Sheet	0	0	0		Included with Gravity Sewer
5	Prop Site/Grading Plan	Sheet	4	16	64		
6	SWPPP	Sheet	2	16	32		
<b>Pump Stations Drawings-Mechanical</b>							
7	PS Plans and Sections & Details	Sheet	4	24	96		
<b>Pump Stations Drawings-Structural</b>							
8	Notes and Symbols	Sheet	3	4	12		
9	Valve Vault and Wet well	Sheet	4	32	128		
10	Foundation Support	Sheet	4	20	80		
11	Structural Details	Sheet	3	16	48		
<b>Pump Stations Drawings-Electrical &amp; Instrumentation</b>							
12	Notes and Symbols	Sheet	3	4	12		
13	Elec Site Plan & Equipment Elevations	Sheet	4	12	48		
14	Grounding Plan	Sheet	4	8	32		
15	Single Line & Riser Diagram	Sheet	4	8	32		
16	Electrical Details	Sheet	3	4	12		
17	Pump Control Panel Schematic	Sheet	4	8	32		
18	Control Panel Details	Sheet	3	4	12		
19	RTU Installation and Wiring Diagrams	Sheet	4	8	32		
20	Schedules	Sheet	4	8	32		
<b>Force Main Drawings</b>							
21	Key Sheet/Key Plan	Sheet	0	0	0		Included with Gravity Sewer
22	General Notes	Sheet	0	0	0		Included with Gravity Sewer
23	Legend and Key Plan	Sheet	0	0	0		Included with Gravity Sewer
24	Tabulation of Quantities and Lateral Tables	Sheet	0	0	0		Included with Gravity Sewer
25	8"/10"/12" Force main Plan/Profile Sheets	Sheet	6	16	96		
26	Structural Details	Sheet	0	0	0		
27	Standard Details including Gravity Sewer Details	Sheet	0	0	0		
28	Special Details	Sheet	0	0	0		
29	Pavement and Base Restoration/General Notes and Details	Sheet	0	0	0		
30	Core Boring Reports	Sheet	0	0	0		
31	Traffic Control Notes	Sheet	0	0	0		
32	Traffic Control Typical Sections	Sheet	0	0	0		
33	Traffic Control Plan	Sheet	0	0	0		
39	Electronic Delivery	LS	0	0	0		
40	Phase Review Meetings	EA	0	0	0		
<b>SUBACTIVITY SUBTOTAL</b>					<b>800</b>		
41	Quality Assurance/Quality Control	%	5%			40	
<b>SUBACTIVITY TOTAL</b>					<b>840</b>		



Proposed BODR, New Pump Stations and Force Main JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
 BODR, New Pump Stations and Force Mains

ACTIVITY: A. (PS and FM PLANS)

SUBACTIVITY: 2 (Construction Plans 90%)

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
<b>Pump Stations Drawings-General/Civil</b>							
1	Cover Sheet and Index	Sheet	0	0	0		Included with Gravity Sewer
2	Legend and Key Plan	Sheet	0	0	0		Included with Gravity Sewer
3	General Notes, Abbreviations and Piping Schedule	Sheet	0	0	0		Included with Gravity Sewer
4	Standard Details	Sheet	0	0	0		Included with Gravity Sewer
5	Prop Site/Grading Plan	Sheet	4	10	40		
6	SWPPP	Sheet	2	10	20		
<b>Pump Stations Drawings-Mechanical</b>							
7	PS Plans and Sections	Sheet	4	12	48		
<b>Pump Stations Drawings-Structural</b>							
8	Notes and Symbols	Sheet	3	2	6		
9	Valve Vault and Wet well	Sheet	4	18	72		
10	Foundation Support	Sheet	4	10	40		
11	Structural Details	Sheet	3	4	12		
<b>Pump Stations Drawings-Electrical &amp; Instrumentation</b>							
12	Notes and Symbols	Sheet	3	2	6		
13	Elec Site Plan & Equipment Elevations	Sheet	4	6	24		
14	Grounding Plan	Sheet	4	4	16		
15	Single Line & Riser Diagram	Sheet	4	4	16		
16	Electrical Details	Sheet	3	2	6		
17	Pump Control Panel Schematic	Sheet	4	4	16		
18	Control Panel Details	Sheet	3	4	12		
19	RTU Installation and Wiring Diagrams	Sheet	4	4	16		
20	Schedules	Sheet	4	4	16		
<b>Force Main Drawings-</b>							
21	Key Sheet/Key Plan	Sheet	0	0	0		Included with Gravity Sewer
22	General Notes	Sheet	0	0	0		Included with Gravity Sewer
23	Legend and Key Plan	Sheet	0	0	0		Included with Gravity Sewer
24	Tabulation of Quantities and Lateral Tables	Sheet	0	0	0		Included with Gravity Sewer
25	8"/10"/12" Force main Plan/Profile Sheets	Sheet	6	12	72		
26	Structural Details	Sheet	0	0	0		
27	Standard Details including Gravity Sewer Details	Sheet	0	0	0		
28	Special Details	Sheet	0	0	0		
29	Pavement and Base Restoration/General Notes and Details	Sheet	0	0	0		
30	Core Boring Reports	Sheet	0	0	0		
31	Traffic Control Notes	Sheet	0	0	0		
32	Traffic Control Typical Sections	Sheet	0	0	0		
33	Traffic Control Plan	Sheet	0	0	0		
39	Electronic Delivery	LS	0	0	0		
40	Phase Review Meetings	EA	0	0	0		
<b>SUBACTIVITY SUBTOTAL</b>					<b>438</b>		
41	Quality Assurance/Quality Control	%	5%			22	
<b>SUBACTIVITY TOTAL</b>					<b>460</b>		

Proposed BODR, New Pump Stations and Force Main JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
 BODR, New Pump Stations and Force Mains

ACTIVITY: A. (PS and FM PLANS)

SUBACTIVITY: 2 (Construction Plans 100%)

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
<b>Pump Stations Drawings-General/Civil</b>							
1	Cover Sheet and Index	Sheet	0	0	0		Included with Gravity Sewer
2	Legend and Key Plan	Sheet	0	0	0		Included with Gravity Sewer
3	General Notes, Abbreviations and Piping Schedule	Sheet	0	0	0		Included with Gravity Sewer
4	Standard Details	Sheet	0	0	0		Included with Gravity Sewer
5	Prop Site/Grading Plan	Sheet	4	6	24		
6	SWPPP	Sheet	2	6	12		
<b>Pump Stations Drawings-Mechanical</b>							
7	PS Plans and Sections	Sheet	4	8	32		
<b>Pump Stations Drawings-Structural</b>							
8	Notes and Symbols	Sheet	3	0	0		
9	Valve Vault and Wet well	Sheet	4	8	32		
10	Foundation Support	Sheet	4	6	24		
11	Structural Details	Sheet	3	0	0		
<b>Pump Stations Drawings-Electrical &amp; Instrumentation</b>							
12	Notes and Symbols	Sheet	3	0	0		
13	Elec Site Plan & Equipment Elevations	Sheet	4	4	16		
14	Grounding Plan	Sheet	4	2	8		
15	Single Line & Riser Diagram	Sheet	4	2	8		
16	Electrical Details	Sheet	3	0	0		
17	Pump Control Panel Schematic	Sheet	4	2	8		
18	Control Panel Details	Sheet	3	0	0		
19	RTU Installation and Wiring Diagrams	Sheet	4	2	8		
20	Schedules	Sheet	4	2	8		
<b>Force Main Drawings-</b>							
21	Key Sheet/Key Plan	Sheet	0	0	0		Included with Gravity Sewer
22	General Notes	Sheet	0	0	0		Included with Gravity Sewer
23	Legend and Key Plan	Sheet	0	0	0		Included with Gravity Sewer
24	Tabulation of Quantities and Lateral Tables	Sheet	0	0	0		Included with Gravity Sewer
25	8"/10"/12" Force main Plan/Profile Sheets	Sheet	6	8	48		
26	Structural Details	Sheet	0	0	0		
27	Standard Details including Gravity Sewer Details	Sheet	0	0	0		
28	Special Details	Sheet	0	0	0		
29	Pavement and Base Restoration/General Notes and Details	Sheet	0	0	0		
30	Core Boring Reports	Sheet	0	0	0		
31	Traffic Control Notes	Sheet	0	0	0		
32	Traffic Control Typical Sections	Sheet	0	0	0		
33	Traffic Control Plan	Sheet	0	0	0		
39	Electronic Delivery	LS	0	0	0		
40	Phase Review Meetings	EA	0	0	0		
<b>SUBACTIVITY SUBTOTAL</b>					<b>228</b>		
41	Quality Assurance/Quality Control	%	5%			11	
<b>SUBACTIVITY TOTAL</b>					<b>239</b>		

Proposed BODR, New Pump Stations and Force Main JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
BODR, New Pump Stations and Force Mains

ACTIVITY: A. (BODR and Preliminary Sketches)

SUBACTIVITY: 3 (Permits)

TASK		BASIS OF ESTIMATE	NO. OF UNITS	HOURS/UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1	Prepare Permit Applications FDEP	EA	6	20		120		4 permit applications for each of the four Stations and 1 for the forcemain and Gravity Sewer
2	Prepare Permit Applications DERM Sewer	EA	6	20		120		4 permit applications for each of the four Stations and 1 for the forcemain and Gravity Sewer
3	Prepare Permit Applications Building	EA	4	20		80		4 permit applications for each of the four Stations
4	Prepare Permit Applications Public Works	EA	4	16		64		4 permit applications for each of the four Stations
5	Coordination and RFI with Permitting Agencies	EA	24	8		192		Assume two for each station (2x4), two for FM, and two for GS (3 packages)
6	Permit Meetings	EA	4	4		16		Assume two meetings for each Pump Station and FM
7	Permit Fees	LS						To be paid by City of Miami Beach. Stantec will request check from City once permit package is ready to be submitted.
<b>SUBACTIVITY TOTAL</b>						<b>592</b>		



Proposed BODR, New Pump Stations and Force Main JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
BODR, New Pump Stations and Force Mains

ACTIVITY: B. (POST DESIGN)

SUBACTIVITY: 4 (Post Design Services)

TASK		BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1	Post Design Services-Pre-Construction Meeting	EA	2	4		8		Two persons including travel and meeting time
2	Shop Drawing Review	EA	36	6		216		Assume 6 for each PS and FM including resubmittals and assume 12 submittals to San Sewer
3	Engineering Assistance & RFI's	EA	40	6		240		(3) PS, FM and San Sewer
4	Change Order Evalution and Recommendation	EA	16	6		96		(3) PS, FM and San Sewer
5	Construction Site Visits	EA	8	4		32		
6	Start Up testing	EA	4	12		48		
7	Plans Update & Revisions	EA	20	6		120		(3) PS, FM and San Sewer
8	Review Preliminary As-built Drawings Review	EA	72	2		144		6 Pages for FM Design and 66 Pages for San Sewer
<b>SUBACTIVITY TOTAL</b>						<b>904</b>		

Proposed 8" /10" Gravity Sewer JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
Gravity Sewer Plans

ACTIVITY: A. (GRAVITY PLANS)

SUBACTIVITY: 2 (Construction Plans 30%)

TASK		BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1	Pipe Line Alignment & Design	LS	1	100		100		Establish alignment an conncections for new force main and gravity sewer
2	Cover Sheet and Index	Sheet	3	8		24		North project is split into three projects and will have three separate key sheets, includes PS and FM plans
3	General Notes, Abbreviations and Piping Schedule	Sheet	3	8		24		North project is split into three projects, includes PS and FM sets
4	Legend and Key Plan	Sheet	6	8		48		North project is split into three projects, includes PS and FM sets (2 pages per project FPID)
5	Tabulation of Quantities and Lateral Tables	Sheet	12	8		96		North project is split into three projects, includes PS and FM sets (each page fits 10 - 66SS pages plus 6FM = 8 pages plus laterals)
6	Summary of Including Pipe segment, diameter, material, slope and manholes	Sheet	3	8		24		North project is split into three projects, includes PS and FM sets
7	8"/10"/12"/18" Gravity Sewer Plan/Profile Sheets	Sheet	66	10		660		
8	Laterals Connections to Existing Manholes	Sheet	0	0		0		
9	Plan/Profile sheets (36-inch Water Main)	Sheet	0	0		0		
10	Fire Hydrant Connection Plan/Profile Sheets	Sheet	0	0		0		
11	Structural Details	Sheet	0	0		0		
12	Standard Details	Sheet	3	6		18		North project is split into three projects
13	Typical Details	Sheet	0	0		0		
14	Pavement and Base Restoration/General Notes and Details	Sheet	0	0		0		
15	Traffic Control Analysis	LS	0	0		0		Assumed under FDOT project
16	Traffic Control Notes	Sheet	0	0		0		Assumed under FDOT project
17	Traffic Control Typical Sections	Sheet	0	0		0		Assumed under FDOT project
18	Traffic Control Plan	Sheet	0	0		0		Assumed under FDOT project
19	Phase Review Meetings	EA	0	0		0		
20	Prepare Construction Cost Estimate	EA	3	12		36		Engineers estimate of probable cost in FDOT format
21	Special Provisions/ Specifications / TOC	LS	3	0		0		30% includes only TOC
<b>SUBACTIVITY SUBTOTAL</b>						<b>1030</b>		
22	Quality Assurance/Quality Control	%	5%			52		
<b>SUBACTIVITY TOTAL</b>						<b>1,082</b>		

Proposed 8" /10" Gravity Sewer JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
Gravity Sewer Plans

ACTIVITY: A. (GRAVITY PLANS)

SUBACTIVITY: 2 (Construction Plans 60%)

TASK		BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1	Cover Sheet and Index	Sheet	3	6		18		North project is split into three projects and will have three separate key sheets, includes PS and FM plans
2	General Notes, Abbreviations and Piping Schedule	Sheet	3	6		18		North project is split into three projects, includes PS and FM sets
3	Legend and Key Plan	Sheet	6	6		36		North project is split into three projects, includes PS and FM sets (2 pages per project FPID)
4	Tabulation of Quantities and Lateral Tables	Sheet	12	6		72		North project is split into three projects, includes PS and FM sets (each page fits 10 - 66SS pages plus 6FM = 8 pages plus laterals)
5	Summary of Including Pipe segment, diameter, material, slope and manholes	Sheet	3	8		24		North project is split into three projects, includes PS and FM sets
6	8"/10"/12"/18" Gravity Sewer Plan/Profile Sheets	Sheet	66	16		1056		
7	Laterals Connections to Existing Manholes	Sheet	3	12		36		
8	Plan/Profile sheets (36-inch Water Main)	Sheet	0	0		0		
9	Fire Hydrant Connection Plan/Profile Sheets	Sheet	0	0		0		
10	Structural Details	Sheet	0	0		0		
11	Standard Details	Sheet	3	4		12		
12	Typical Details	Sheet	0	0		0		
13	Pavement and Base Restoration/General Notes and Details	Sheet	0	0		0		
14	Traffic Control Analysis	LS	0	0		0		Assumed under FDOT project
15	Traffic Control Notes	Sheet	0	0		0		Assumed under FDOT project
16	Traffic Control Typical Sections	Sheet	0	0		0		Assumed under FDOT project
17	Traffic Control Plan	Sheet	0	0		0		Assumed under FDOT project
18	Phase Review Meetings	EA	2	4		8		Attend Phase Review Meetings with City and FDOT During 60% Submittal.
19	Prepare Construction Cost Estimate	EA	3	16		48		Engineers estimate of probable cost in FDOT format
20	Special Provisions/ Specifications / TOC	LS	1	100		100		
<b>SUBACTIVITY SUBTOTAL</b>						<b>1428</b>		
21	Quality Assurance/Quality Control	%	5%			71		
<b>SUBACTIVITY TOTAL</b>						<b>1,499</b>		

Proposed 8" /10" Gravity Sewer JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
Gravity Sewer Plans

ACTIVITY: A. (GRAVITY PLANS)

SUBACTIVITY: 2 (Construction Plans 90%)

TASK		BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1	Cover Sheet and Index	Sheet	3	2		6		North project is split into three projects and will have three separate key sheets, includes PS and FM plans
2	General Notes, Abbreviations and Piping Schedule	Sheet	3	2		6		North project is split into three projects, includes PS and FM sets
3	Legend and Key Plan	Sheet	6	2		12		North project is split into three projects, includes PS and FM sets (2 pages per project FPID)
4	Tabulation of Quantities and Lateral Tables	Sheet	12	4		48		North project is split into three projects, includes PS and FM sets (each page fits 10 - 66SS pages plus 6FM = 8 pages plus laterals)
5	Summary of Including Pipe segment, diameter, material, slope and manholes	Sheet	3	6		18		North project is split into three projects, includes PS and FM sets
6	8"/10"/12"/18" Gravity Sewer Plan/Profile Sheets	Sheet	66	12		792		
7	Laterals Connections to Existing Manholes	Sheet	3	6		18		
8	Plan/Profile sheets (36-inch Water Main)	Sheet	0	0		0		
9	Fire Hydrant Connection Plan/Profile Sheets	Sheet	0	0		0		
10	Structural Details	Sheet	0	0		0		
11	Standard Details	Sheet	3	2		6		
12	Typical Details	Sheet	0	0		0		
13	Pavement and Base Restoration/General Notes and Details	Sheet	0	0		0		
14	Traffic Control Analysis	LS	0	0		0		Assumed under FDOT project
15	Traffic Control Notes	Sheet	0	0		0		Assumed under FDOT project
16	Traffic Control Typical Sections	Sheet	0	0		0		Assumed under FDOT project
17	Traffic Control Plan	Sheet	0	0		0		Assumed under FDOT project
18	Phase Review Meetings	EA	2	4		8		Attend Phase Review Meetings with City and FDOT During 90% Submittal.
19	Prepare Construction Cost Estimate	EA	3	8		24		
20	Special Provisions/ Specifications / TOC	LS	1	60		60		
<b>SUBACTIVITY SUBTOTAL</b>						<b>998</b>		
21	Quality Assurance/Quality Control	%	5%			50		
<b>SUBACTIVITY TOTAL</b>						<b>1,048</b>		

Proposed 8" /10" Gravity Sewer JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.: 430444-1-56-01  
Gravity Sewer Plans

ACTIVITY: A. (GRAVITY PLANS)

SUBACTIVITY: 2 (Construction Plans 100%)

TASK		BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1	Cover Sheet and Index	Sheet	3	0		0		North project is split into three projects and will have three separate key sheets, includes PS and FM plans
2	General Notes, Abbreviations and Piping Schedule	Sheet	3	0		0		North project is split into three projects, includes PS and FM sets
3	Legend and Key Plan	Sheet	6	0		0		North project is split into three projects, includes PS and FM sets (2 pages per project FPID)
4	Tabulation of Quantities and Lateral Tables	Sheet	12	2		24		North project is split into three projects, includes PS and FM sets (each page fits 10 - 66SS pages plus 6FM = 8 pages plus laterals)
5	Summary of Including Pipe segment, diameter, material, slope and manholes	Sheet	3	2		6		North project is split into three projects, includes PS and FM sets
6	8"/10"/12"/18" Gravity Sewer Plan/Profile Sheets	Sheet	66	8		528		
7	Laterals Connections to Existing Manholes	Sheet	3	4		12		
8	Plan/Profile sheets (36-inch Water Main)	Sheet	0	0		0		
9	Fire Hydrant Connection Plan/Profile Sheets	Sheet	0	0		0		
10	Structural Details	Sheet	0	0		0		
11	Standard Details	Sheet	3	0		0		
12	Typical Details	Sheet	0	0		0		
13	Pavement and Base Restoration/General Notes and Details	Sheet	0	0		0		
14	Traffic Control Analysis	LS	0	0		0		Assumed under FDOT project
15	Traffic Control Notes	Sheet	0	0		0		Assumed under FDOT project
16	Traffic Control Typical Sections	Sheet	0	0		0		Assumed under FDOT project
17	Traffic Control Plan	Sheet	0	0		0		Assumed under FDOT project
18	Phase Review Meetings	EA	2	4		8		Attend Phase Review Meetings with City and FDOT During 100% Submittal.
19	Prepare Construction Cost Estimate	EA	3	6		18		
20	Special Provisions/ Specifications / TOC	LS	1	40		40		
<b>SUBACTIVITY SUBTOTAL</b>						<b>636</b>		
21	Quality Assurance/Quality Control	%	5%			32		
<b>SUBACTIVITY TOTAL</b>						<b>668</b>		

Proposed 12" /20" Water Main JPA Installation on SR 907/Alton Road.  
 FINANCIAL PROJECT No.:430444-1-56-01  
Water Main Plans

ACTIVITY: A. (WATER PLANS)

SUBACTIVITY: 2 (Construction Plans 30%)

TASK		BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1	Key Sheet/Key Plan	Sheet	1	2		2		Update PM and FDOT Design standards and other FDOT project information
2	General Notes	Sheet	1	2		2		Update FDOT design notes and verify UA/O contact list from 2018
3	Legend and Key Plan	Sheet	3	0		0		No change from original scope
4	Tabulation of Quantities and Pay Item Notes	Sheet	5	0		0		No change from original scope
5	Summary of Valve and Manhole adjustment	Sheet	1	0		0		No change from original scope
6	Summary of water meter service and service lines	Sheet	1	0		0		No change from original scope
7	12" Water main Plan	Sheet	24	4		96		This includes all work to create elements showing the mainline alignment for both horizontal and vertical geometries in plan and profile portion of plan sheets for proposed water main and existing utilities per FDOT standards.
8	20" Water main Plan	Sheet	16	4		64		This includes all work to create elements showing the mainline alignment for both horizontal and vertical geometries in plan and profile portion of plan sheets for proposed water main and existing utilities per FDOT standards.
9	Laterals Connections Plan	Sheet	19	2		38		This includes all work to create elements showing the side street alignment for horizontal geometries in plan and profile portion of plan sheets for proposed water main and existing utilities per FDOT standards
10	Fire Hydrant Connection Plan/Profile Sheets	Sheet	6	0		0		
11	Structural Details	Sheet	0	0		0		
12	General Details	Sheet	1	0		0		
13	Typical Details	Sheet	2	0		0		
14	Pavement and Base Restoration/General Notes and Details	Sheet	1	0		0		No change from original scope
15	Core Boring Reports	Sheet	0	0		0		
16	Traffic Control Notes	Sheet	1	0		0		No change from original scope
17	Traffic Control Typical Sections	Sheet	2	0		0		No change from original scope
18	Traffic Control Plan	Sheet	30	0		0		No change from original scope
19	Electronic Delivery	LS	3	0		0		No change from original scope
20	Phase Review Meetings	EA	1	0		0		No change from original scope
21	FDOT Submittals	EA	4	0		0		No change from original scope
<b>SUBACTIVITY SUBTOTAL</b>						<b>202</b>		
22	Quality Assurance/Quality Control	%	5%			10		
<b>SUBACTIVITY TOTAL</b>						<b>212</b>		

**Financial Project ID No's.: 429193-1-56-01  
Proposed 8"/12" Water Main JPA Installation along SR 907/Alton Road  
From south of Ed Sullivan Drive/ 43rd Street to W 63<sup>rd</sup> Street  
Miami-Dade County, Florida**



**Stantec Consulting Services Inc.**  
901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

---

## **Exhibit C – Preliminary Engineer’s Estimate of Probable Construction Cost**

**Financial Project ID No's.: 429193-1-56-01  
Proposed 8"/12" Water Main JPA Installation along SR 907/Alton Road  
From south of Ed Sullivan Drive/ 43rd Street to W 63<sup>rd</sup> Street  
Miami-Dade County, Florida**



**Stantec Consulting Services Inc.**  
901 Ponce de Leon Boulevard Suite 900  
Coral Gables FL 33134  
Tel: (305) 445-2900  
Fax: (305) 445-3366

---

## **Exhibit D – Alternatives from for PS and FM Improvements (Basins 28 A, B, C & 15 A and B) from Wastewater Master Plan**



# Basin 15 A&B Option 2

**PSB @ Poinciana Park or Alternate Locations City Parcel / La Gorce Park**

with FM to  
 A) EX PS15 or Prop PSD  
 B) Manifold Ex 8" FM (PS18) or EX 30" from Basin29

- 11.6' approx maximum depth at PSB from N Bay Road & W 59th St
- 11.4' approx maximum depth at PSB from W 59th St & Pine Tree Dr

++++ Abandoned In Place

**Sewer Force Main**

- Force Main
- Transmission Force Main
- Abandoned In Place

BUILDINGS

Water

PARCEL

**PSC @ ROW next to water or GC on easement with FM to:**

A) EX PS15 Manifold & w PSA FM

- 12.1' approx maximum depth at PSC from W 59th St & Alton Rd
- 13.3' approx maximum depth at PSC from W 52nd St & Alton Rd

**PSD @ GC on easement with FM to:**

- A) EX PS15
- B) Manifold EX 30" from Basin29
- 10.9' approx maximum depth at PSD from W 59th St & Pine Tree Dr
- 9.5' approx maximum depth at PSD from W 54th St & Pine Tree Dr

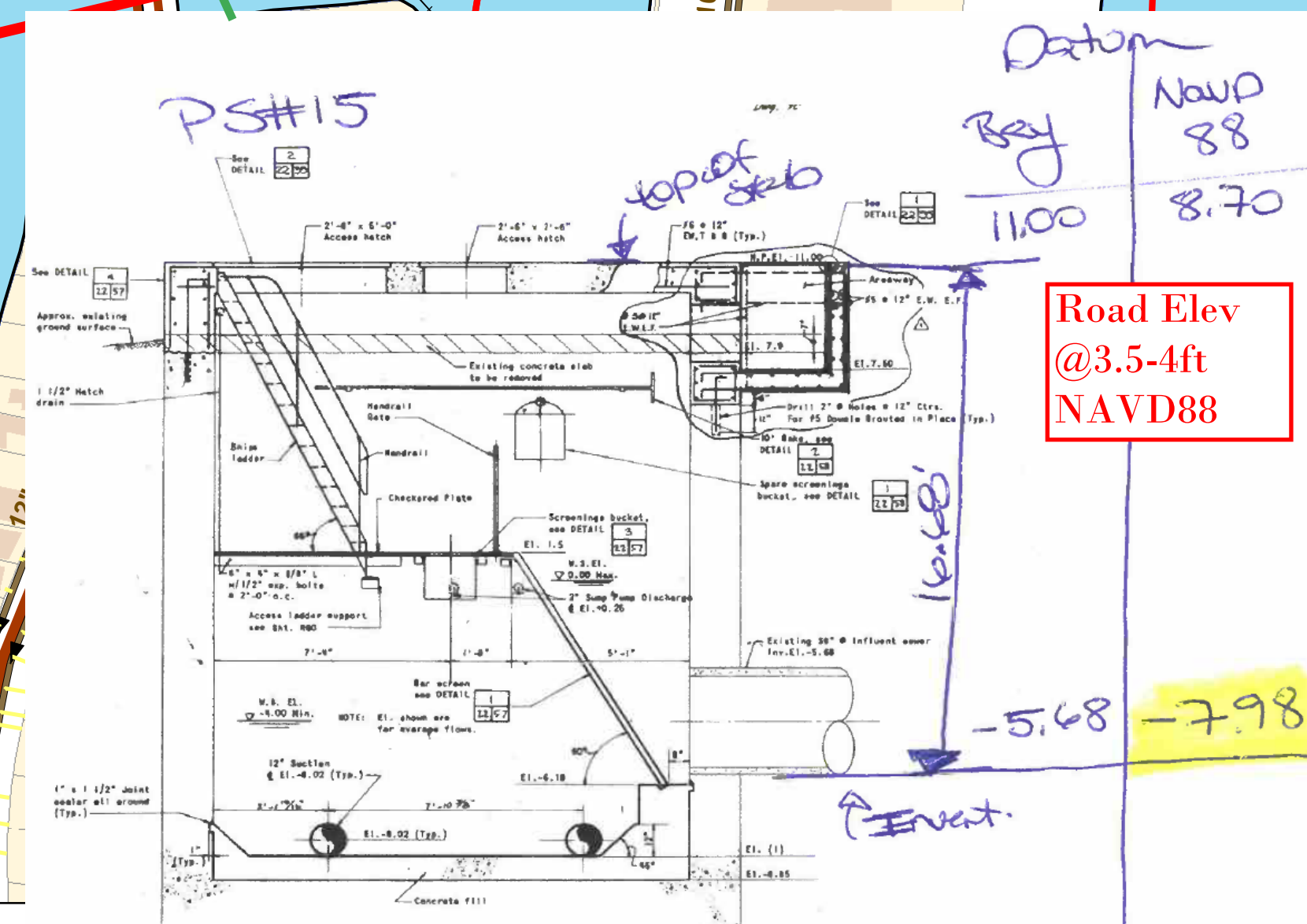
**EX PS15 accepting flows from half of Lakeview & W54st/La Gorce Drive**

- 11.8' approx maximum depth at exPS15 from Lakeview Dr & Cherokee Ave (= -8.75 Inv Elev at EX PS15, > EX invert)
- \*EX PS15 need to be modified
- 10.1' approx maximum depth at exPS15 W54st/La Gorce Drive (= -6.46 Inv Elev at EX PS15, < EX invert)

**PSA @ Fisher Park or grassy triangle W51st accepting flows from half of Lakeview & from W52st & Alton Rd /N Bay Rd.**

with FM to EX PS15

- 10.2' approx maximum depth at PSA from Lakeview Dr & Cherokee Ave
- 9.4' approx maximum depth at PSA from W52st / N Bay Road



SHEET NO.	DATE	DRAWN	WORKERS
1	7/31/2020		
SCALE	REQUESTED	FILENAME	
Not To Scale	Nestor Navarro	MiamiBeachGIS	



Miami Beach  
 Miami-Dade County, FL

## Sewer System: Basin 15A & 15B

