

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

1 SCOPE OF WORK – SUPPLEMENTAL AGREEMENT

This amendment to the project scope of services is to provide consulting engineering services to the City of Miami Beach due to additional design services associated with Pump Station No. 25 and including a new 12-inch Force Main along Alton Road. Services associated with PS No. 25 include analysis of Variable Frequency Drive (VFD), flow meter, BABA coordination, and renderings of site. The new 12-inch FM along Alton Road will extend between W 27th Street and W 29th Street. The changes to the PS will be incorporated in the PS design drawings and included in the 100% submittal to FDOT. The new 12-inch FM will be included in the gravity sewer relocation plans and submitted in the upcoming 100% submittal to FDOT.

This amendment will also include adjustment to the water main relocation design to allow phase construction along Alton Road, final design, updating permit application to include new FM, update Engineers Opinion of Probable Cost of Construction (OPCC) and updating technical special provisions to include FM activities in relation to the new 12-inch FM. See detailed scope in Exhibit A for additional information.

2 SCHEDULE

Design Schedule and submittal is based on the Roadway design schedule.

100% Plans Submittals- February 12, 2024
Plans Specifications and Estimate (PS&E) – TBD
Letting Date – TBD

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, and Technical Special Provisions for the installation of the proposed wastewater pump stations and force main sewer.



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.: 429193-1-56-01
Update to Pump Station No. 25 and New Force Main along SR 907/Alton Road
From Michigan Ave to South of 43rd Street
Miami-Dade County, Florida

6 EXCLUSIONS

Permit fees will be paid by City of Miami Beach.

Environmental services for contamination clean-up if encountered.

CMB's consultant will perform the modeling required to confirm that surcharging will not occur in the Interim & Final design, and to obtain necessary DERM permit.

See Exhibit A for additional Exclusions.

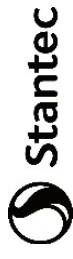
7 METHOD OF COMPENSATION

The proposed services will be compensated in the form of a Lump Sum of **\$122,343.74** 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.: 429193-1-56-01
Update to Pump Station No. 25 and New Force Main along SR 907/Alton Road
From Michigan Ave to South of 43rd 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 Charles
Signature

07/10/2024
Date

Reviewed and accepted for Stantec by:

Ramon Castella, P.E.
Name

Vice-President
Name Ramón Castella
Signature

07/10/2024
Date

10 SCOPE OF WORK

Approved for by City of Miami Beach by:

Name

Name

Signature

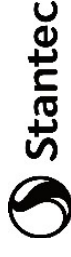
Date

Financial Project ID No's.: 429193-1-56-01
Update to Pump Station No. 25 and New Force Main along SR 907/Alton Road
From Michigan Ave to South of 43rd 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



Scope of Work

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

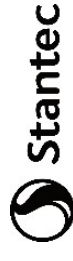
- Design updates and Renderings associated with Pump Station No. 25 which is currently being designed by Stantec on behalf of City of Miami Beach. Also included in this TWO is the design of approximately 650 LF of new 12-inch ductile iron (DI) FM along Alton Road between W 27th Street and W 29th Street. Additional task with the new 12-inch FM will include coordination with FDOT for maintenance of traffic (MOT) construction phasing and phasing notes. This amendment will also include adjustment to the water main relocation design to allow phased construction along Alton Road, final design, update permit application to include new FM, update Engineers of Probable Cost of Construction (OPCC) and updating technical special provisions to include FM activities in relation to the new 12-inch FM.

Additional Scope of work for PS No. 25 will include:

- 800 – Interim Condition Analysis – The upgrades for this project will be constructed in phases and require an Interim Condition analysis to consider a future FM from the Sunset Islands. The following subtasks will be required to provide a compliant system.
 - Design Evaluation of three design alternatives
 - Variable Frequency Drive (VFD) for the proposed 15 HP submersible pumps
 - This option will include an evaluation of new VFDs with backup across-the-line starters in the proposed control panel.
 - Smaller pumps for temporary use.
 - Stantec will identify alternative pump selections with an acceptable operating condition. This analysis will include electrical, civil, and mechanical upgrades necessary to install the smaller pumps.
 - Implement Selected Option – This subtask will include revising the drawings, specifications, calculations, and engineering report to consider and potentially select VFDs as solution for the Interim Condition. This subtask will also include addressing DERM permit comments in the permitting phase.
- 801 - FDOT Phasing Plan – FDOT will be constructing the sewer trunkline south of the PS and require PS No. 25 to be constructed, certified, and ready to receive and convey flows from the southern sewer catchment area.



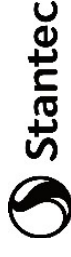
-
- Evaluate and document compliance with FDEP for this temporary phasing condition. Will include revising of the Engineering report, calculations, and plans.
 - Prepare three sets of permit plans and obtain three permit approvals from DERM. This will allow the sewer project to be certified and put into operation at the end of their respective phase.
 - This subtask will also include addressing DERM permit comments in the permitting phase.
- 802 - Flow Meter – The City has requested a flow meter be implemented as part of the Pump Station design. The following subtasks will be included as part of this design:
- Evaluation and recommendation on proposed flow meter location and configuration.
 - Structural design of a new precast meter vault and access hatch.
 - Civil and mechanical redesign of site to accommodate flow meter, piping and isolation valves.
 - Update hydraulic calculations to reflect the reconfigured piping layout.
- 803 - Landscape Rendering (up to 2 renderings with 1 round of comments)
- 3D rendering model of the PS No. 25 site with elevated electrical equipment and perimeter landscape buffer to depict a visual of the PS and the adjacent golf course and street.
- 804 - Forcemain Update at PS No. 25
- Update hydraulic calculations with 8-inch and 12-inch FM
 - Update site layout with new FM connection on latest set of plans.
- 805 – New 8-inch and 12-inch Forcemain – The scope of the work for the Force main along Alton Road includes:
- Design of proposed 8-inch and 12-inch FM along SR 907/Alton Road from W 27th Street and W 29th Street. The 8-inch FM will extend to Pump Station 25 from the 12-inch FM to facilitate connection the future Force Main across the Golf Course.



- Coordinating with FDOT for MOT for construction phasing.
 - Updating permit application to include new FM.
 - Permit Coordination meeting with DERM with meeting minutes.
 - Updating Technical Special Provisions to include new 12-inch FM.
- 806 – Site adjustment at PS No. 25 associated with a larger odor control unit and Terminal MH and BABA Coordination:
- Update PS No. 25 site and design to accommodate a larger odor control unit and a different set of access hatches.
 - Adjust terminal manhole at PS No. 25 site.
 - Update Gravity sewer plans to accommodate terminal MH adjustment.
 - BABA Compliance Coordination
- 807 – Update Water main to allow for FDOT Phase Construction:
- Update water main plans to include temporary connection and details to allow for Phase Construction
 - Update watermain quantities, estimate and Technical Special Provisions

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



Pump Station No. 25 Update

1. Update of design drawing, Engineering Report, technical special provisions and report to consider an Interim Condition design for the new Pump Station. The Design will consider lower pressures associated with discharge into a temporary gravity manhole. Two (2) options will be considered including Variable Frequency Drive (VFD) or throttling the valve.
2. Flow meter design including structural design of precast vault and access hatch, redesign of the site, and update of hydraulic calculations.
3. 3D Rendering model of site adjacent to golf course and street.
4. Update of hydraulic calculations with 12-inch FM and update of site plan to include new 12-inch and 8-inch FM

Permitting and Support and Applications

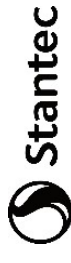
1. Preparation and submittal of permit applications to the following:
 - a. Miami-Dade Department of Regulatory Economic Resource (RER) formerly DERM
 - b. City of Miami Beach Public Works
 - c. City of Miami Beach Building Department (Electrical, Plumbing, Structural, & Electrical)
 - d. City of Miami Beach Design Review Board
 - e. DERM Sewer Extension
2. 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

1. N/A

Financial Project ID No's.: 429193-1-56-01

Proposed BODR & Final Design for new Pump Station and Gravity Sewer 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

Deliverables

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

a) Permit Package:

Update Permit submittal and resolution of permit review comments for the agencies listed above. (Deliverables include: four (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).

b) 100% Submittal:

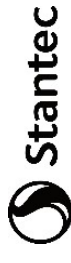
Prepare and submit 100% Final drawings, technical specifications, schedule of values and class 1 (expected accuracy between 5% to 10%) Opinion of Probable Construction Cost to City of Miami Beach and FDOT to execute Construction JPA. (Package shall include five (5) copies of approved 100% Construction Plans in 11" x 17" format, Final Technical specifications (One (1) original not bound, and four (4) copies bound, 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. CMB's consultant will perform the modeling required to confirm that surcharging will not occur in the Interim & Final design. Stantec will utilize the modeling results as an Appendix to the PS 25 BODR and to help obtain the required DERM permit. CMB's consultant will update the master model as required to address all RFIs during permitting.
2. 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.
3. Transient analysis is not required for either replacement of water mains or force mains.
4. Design for relocation of other utilities (gas, electric, telecommunications etc.) is not included in this scope of work.
5. 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.
6. Lighting plans for the PS site is excluded from scope of work.
7. Scope of work does not include submittals to, or City of Miami Beach Historical Preservation Board. Permitting with City of Miami Beach Urban Forestry or Public Works is not included as part of this scope.
8. Subsurface geotechnical investigations have been completed for the roadway design and provide sufficient data and design recommendations to complete the gravity sewer main design. Available data and geotechnical reports will be provided to the Engineer.
9. CAD drawings will be in Microstation (FDOT Requirements)
10. With the exception of the design of the wet well and PS Structures, no other structural analysis or design is required for this project.
11. Design and/or specification of cathodic protection systems is not required for this project.
12. Summary of Water and sanitary valve box & manhole adjustment provided a tabular table.
13. Design of sheet piling is not required for this project.



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

14. Prepare backout Utility Work Schedule for City of Miami Beach to review and sign. City will review schedule and submit to FDOT.
15. Project limits of proposed water, force main and gravity sewer utility improvements do not extend beyond the limits of the proposed FDOT roadway construction.
16. Engineer shall prepare and make two submittals to City of Miami Beach for review (Permit Package and 100% Plans) as well as one submittal of the Rendering. Engineer shall be entitled to additional compensation for additional and/or supplemental submittal requests.
17. Engineer shall prepare and make a total of six (6) submittals to FDOT which coincide with the 100%, PS&E, Plans Completed, Production Date, Plans to specs and plans to Tally per Project Schedule milestones.
18. Environmental services for contamination clean-up, if encountered, would be additional services and Stantec will be entitled to compensation for any effort required.
19. This scope does not include pump drawdown tests for existing sewer pump stations, or installations of pressure loggers to verify existing pumping conditions.
20. This scope does not include permitting with DERM's following departments - Pollution Remediation Section, Water Control, or obtaining Class I – Class VI permits.
21. Permit fees will be paid by City of Miami Beach.
22. Coordination of Temporary Construction Easements with private property owners are not included as part of this scope.
23. This scope only includes a design for up to one new pump station. Design of any additional pump station will require additional compensation.
24. Public Outreach is not included in this scope of work.



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.: 429193-1-56-01
Proposed BODR & Final Design for new Pump Station and Gravity Sewer along SR 907/Alton Road
From south of Ed Sullivan Drive/ 43rd Street to W 63rd Street
Miami-Dade County, Florida

Current FDOT Projects Information

Project Manager: Raymond Valido, P.E.

Contact Number: (305) 470-5162

Email: raymond.valido@dot.state.fl.us

FDOT Scope of Work: Roadway reconstruction, intersection improvements, milling and resurfacing, adjustment of valves and manholes, sidewalk and curb ramps, signing and pavement markings signalization.

Production Schedule:

100 Plans Completed – February 12, 2024

PS&E – TBD

Letting Date – TBD

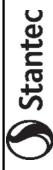
Financial Project ID No's.: 429193-1-56-01

Proposed BODR & Final Design for new Pump Station and Gravity Sewer 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 B - Work Effort Spreadsheet



FINANCIAL PROJECT No.: 429193-L-56-02

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ESTIMATE OF WORK EFFORT AND FEE

CONSULTANT: STANTEC CONSULTING SERVICES INC.

WPI NO.: N/A

DESCRIPTION: Pump Station No. 25 Update and new 48/12-inch Force Main JPA Installation on SR 907/Allon Road.

CONST. YR. 2024

COUNTY: MIAMI-DADE

From: Michigan Ave

To: South of 43 Street

		MANHOURS				HOURLY RATE (W/OUT OM)	FIXED FEE (OM)	TOTAL HOURLY RATE	ESTIMATED COST
		A	B	TOTAL WORK EFFORT	ELEMENTS				
W O R K %		DESIGN ANALYSIS & PLANS	POST DESIGN SERVICE						
CLASSIFICATION									
S	CHIEF ENGINEER	33	0	33		\$ 211.43	\$ 23.52	\$ 234.95	\$7,753.35
T	PROJECT MANAGER	260	0	260		\$ 184.15	\$ 20.48	\$ 204.63	\$53,203.80
A	SENIOR ENGINEER	227	0	227		\$ 150.20	\$ 16.71	\$ 166.91	\$37,888.57
N	PROJECT ENGINEER	68	0	68		\$ 118.51	\$ 13.18	\$ 131.69	\$8,954.92
T	SR. ENGINEERING TECHNICIAN	165	0	165		\$ 79.32	\$ 8.82	\$ 88.14	\$14,543.10
E									
C	SUB TOTAL	752	0	753	STANTEC SUB TOTAL			\$162.48	\$122,343.74
H		0	0	0		\$ 75.48	\$ 8.12	\$ 83.60	\$0.00
A		0	0	0		\$ 45.95	\$ 4.94	\$ 50.89	\$0.00
D		0	0	0		\$ 90.68	\$ 9.76	\$ 100.44	\$0.00
O		0	0	0		\$ 40.42	\$ 4.35	\$ 44.77	\$0.00
N									
E					HADONNE SUB TOTAL			0	\$0.00
Survey	Prepare up to three sketch to accompany legal description for FPL Easement	1.00		1				\$0.00	\$0.00
						HADONNE SURVEY TOTAL			\$0.00
						TOTAL CONTRACT FEE COMPUTATIONS-(STANTEC)			\$122,343.74
						(a)	Total Loaded Salary		\$0.00
						(b)	TOTAL OVERHEAD ⁽¹⁾		\$0.00
						(c)	OPERATING MARGIN ⁽²⁾		\$0.00
						(d)	FCCM ⁽³⁾		\$0.00
						(e)	DIRECT EXPENSE ⁽⁴⁾		\$0.00
						SUB TOTAL CONTRACT AMOUNT (LUMP SUM)-STANTEC			\$122,343.74
						TOTAL CONTRACT FEE COMPUTATIONS (HADONNE)			\$0.00
						(a)	Total Loaded Salary		\$0.00
						(b)	TOTAL OVERHEAD ⁽¹⁾		\$0.00
						(c)	OPERATING MARGIN ⁽²⁾		\$0.00
						(d)	FCCM ⁽³⁾		\$0.00
						(e)	DIRECT EXPENSE ⁽⁴⁾		\$0.00
						TOTAL CONTRACT AMOUNT (LUMP SUM)-HADONNE			\$0.00
						SUB TOTAL CONTRACT AMOUNT (LUMP SUM)-SURVEY			\$0.00
						GRAND TOTAL CONTRACT AMOUNT (LUMP SUM)			\$122,343.74

Notes:

- (1) Total Overhead (General) = Included in (a) Total Loaded Salary
(2) Operating Margin = Included in (a) Total Loaded Salary
(3) Facilities Capital Cost of Money (FCCM) = Included in (a) Total Loaded Salary
(4) Direct Reimbursables (Out-of-Pocket) = Included in (a) Total Loaded Salary

Services for Hadonne Sub consultant are included in Sub activities 5 & 6

Estimator: Dwe E. Clarke
Date: 7/10/2024

If revised estimate, give reasons for revisions

Proposed BODR, New Pump Stations and Force Main JPA Installation on SR 907/Alton Road.
 FINANCIAL PROJECT No.: 429193-1-98-02
 Pump Station No. 25 Update and New 48/12-Inch Force Main

ACTIVITY: A. No. 25 Update and New 12-Inch Force Main

SUBACTIVITY: 1 (Design Analysis)

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1 Variable Frequency Drive (VFD) for Interim Conditions Evaluate VFD Option Evaluate Pump & valve throttling option Implement Option	LS	1	112		112		
2 PS design updates - report, plans, calcs, specs Separate plans to (3) packages - FM, WM, GRAVITY, PS	LS	1	70		70		
3 Flow Meter	LS	1	86		86		
4 Rendering of PS Site (up to 2 renderings with 1 round of comments)	LS	1	40		40		
5 Legal Sketches and Description for New FPL Easement	LS	1	0		0		
6 FM Update at Pump Station Site	LS	1	46		46		
7 New 8-inch and 12-inch FM Along Alton Road (Design Plans, specifications, OPCC, coordination with FDOT)	LS	1	240		240		
7 Site adjustment to accommodate a larger odor control unit and a different set of access hatches at PS. No 25 and BABA Compliance Coordination; Update FM, PS site plan, gravity sewer plans	LS	1	80		80		
8 FDOT Computation Book & Quantities	LS	0	12		0		
9 Bidding Support	LS	0	4		0		
10 Meeting Via Teams	EA	0	4		0		
11 Meetings In-Person	EA	0	4		0		
SUBACTIVITY SUBTOTAL					674		
12 Quality Assurance/Quality Control	%	5%			34		
SUBACTIVITY TOTAL					708		

Proposed BODR, New Pump Stations and Force Main JPA Installation on SR 907/Alton Road.
FINANCIAL PROJECT No.: 429193-1-66-02
Pump Station No. 25 Update and New 48/12-inch Force Main

ACTIVITY: **FM PLANS**

SUBACTIVITY: **3 (Permits)**

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO. OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1 Update Permit Applications FDEP	EA	0.75	8		6		
2 Update Permit Applications DERM Sewer	EA	0.75	0		0		
3 Prepare Permit Applications Building	EA	0.75	16		12		
4 Prepare Permit Applications Public Works	EA	1.5	8		12		
5 Coordination and RFI with Permitting Agencies	EA	0.5	12		6		
6 Permit Meetings	LS						To be paid by City of Miami Beach. Stantec will request check from City once permit package is ready to be submitted.
7 Permit Fees							
SUBACTIVITY TOTAL					42		

Financial Project ID No's.: 429193-1-56-01

Proposed BODR & Final Design for new Pump Station and Gravity Sewer 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 C – Preliminary Engineer’s Estimate of Probable Construction Cost

Exhibit A

ENGINEER'S OPINION OF PROBABLE COST		PROJECT DESCRIPTION		Technical Special Provision for Bidders	
		CITY OF MIAMI BEACH 12" & 8" DIP WATER MAIN, GRAVITY SEWER, 12" FORCE MAIN, AND PUMP STATION INSTALLATION			
99926	LOCAL AGENCY INITIAL CONTINGENCY AMOUNT (DO NOT BID)	LS	1		
105016002	UTILITY PIPE REMOVE & DISPOSE, WATER, 2" - 4.9"	LF	560	\$25.00	\$14,000.00
105016003	UTILITY PIPE REMOVE & DISPOSE, WATER, 5" - 7.9"	LF	70	\$45.00	\$3,150.00
105016004	UTILITY PIPE REMOVE & DISPOSE, WATERSEWER, 8" - 19.9"	LF	1680	\$65.00	\$1,092,000.00
105016002	UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, WATER, 2" - 4.9"	LF	680	\$20.00	\$13,600.00
105016003	UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, WATERSEWER, 5"-7.9"	LF	1225	\$25.00	\$30,625.00
105016004	UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, WATERSEWER, 8"-19.9"	LF	8225	\$30.00	\$246,750.00
105021206	UTILITY PIPE, PVC, F&I, SEWER, 8"	LF	3245	\$115.00	\$373,175.00
105021208	UTILITY PIPE, PVC, F&I, SEWER, 8"	LF	1280	\$125.00	\$157,500.00
105021210	UTILITY PIPE, PVC, F&I, SEWER, 10"	LF	720	\$175.00	\$126,000.00
105021212	UTILITY PIPE, PVC, F&I, SEWER, 12"	LF	1150	\$200.00	\$230,000.00
105021215	UTILITY PIPE, PVC, F&I, SEWER, 15"	LF	1600	\$25.00	\$360,000.00
105021218	UTILITY PIPE, PVC, F&I, SEWER, 18"	LF	320	\$250.00	\$80,000.00
105021222	UTILITY PIPE, PE, F&I, WATER, 2"	LF	4533	\$50.00	\$226,650.00
105021202	UTILITY PIPE, DICI, F&I, WATER, 2"	LF	360	\$100.00	\$36,000.00
105021204	UTILITY PIPE, DICI, F&I, WATER, 4"	LF	300	\$300.00	\$90,000.00
105021206	UTILITY PIPE, DICI, F&I, WATER, 6"	LF	430	\$250.00	\$107,500.00
105021208	UTILITY PIPE, DICI, F&I, WATER, 8"	LF	1480	\$325.00	\$481,000.00
105021210	UTILITY PIPE, DICI, F&I, WATER, 10"	LF	20	\$450.00	\$9,000.00
105021212	UTILITY PIPE, DICI, F&I, WATERSEWER, 12"	LF	5320	\$350.00	\$1,862,000.00
105531608	UTILITY FITTING, PVC, F&I, SEWER, 8" WYE	EA	19	\$200.00	\$3,800.00
105531610	UTILITY FITTING, PVC, F&I, SEWER, 10" WYE	EA	10	\$250.00	\$2,500.00
105531612	UTILITY FITTING, PVC, F&I, SEWER, 12" WYE	EA	17	\$300.00	\$5,100.00
105531615	UTILITY FITTING, PVC, F&I, SEWER, 15" WYE	EA	27	\$350.00	\$9,450.00
105531618	UTILITY FITTING, PVC, F&I, SEWER, 18" WYE	EA	3	\$400.00	\$1,200.00
105531706	UTILITY FITTING, PVC, F&I, SEWER, 8" CLEAN OUT	EA	76	\$200.00	\$15,200.00
105551106	UTILITY FITTING, DICI, F&I, WATER, ELBOW, 8"	EA	64	\$3,400.00	\$217,600.00
105551110	UTILITY FITTING, DICI, F&I, WATER, ELBOW, 10"	EA	5	\$3,800.00	\$19,000.00
105551112	UTILITY FITTING, DICI, F&I, WATERSEWER, ELBOW, 12"	EA	53	\$4,000.00	\$212,000.00
105551206	UTILITY FITTING, DICI, F&I, WATER, TEE, 8"	EA	2	\$3,500.00	\$7,000.00
105551212	UTILITY FITTING, DICI, F&I, WATER, TEE, 12"	EA	23	\$4,800.00	\$110,400.00
105551308	UTILITY FITTING, DICI, F&I, WATER, REDUCER, 8"	EA	5	\$3,400.00	\$17,000.00
105551312	UTILITY FITTING, DICI, F&I, WATER, REDUCER, 12"	EA	8	\$4,000.00	\$32,000.00
105551608	UTILITY FITTING, DICI, F&I, WATER, CAP, 8"	EA	11	\$3,375.00	\$37,125.00
105551512	UTILITY FITTING, DICI, F&I, WATERSEWER, CAP, 12"	EA	5	\$3,400.00	\$17,000.00
105551608	UTILITY FITTING, DICI, F&I, WATER, CROSS, 8"	EA	2	\$3,800.00	\$7,600.00
105551812	UTILITY FITTING, DICI, F&I, WATER, CROSS, 12"	EA	3	\$5,000.00	\$15,000.00
106011211	UTILITY STRUCTURE, BELOW GROUND, F&I, SEWER, 3-8FT3, 6.1-12"	EA	2	\$16,000.00	\$32,000.00
106011222	UTILITY STRUCTURE, BELOW GROUND, F&I, SEWER, 3-8FT3, 6.1-12"	EA	28	\$20,000.00	\$560,000.00
106016	UTILITY STRUCTURE, BELOW GROUND, SEWER, REMOVE & DISPOSE LESS THAN 2.5'	EA	17	\$6,000.00	\$102,000.00
107011	UTILITY AUXILIARY ITEMS, WATERSEWER, 8" CONCRETE SLAB FOR GROUND COVER LESS THAN 2.5'	SF	2356	\$120.00	\$282,960.00
108021102	UTILITY FIXTURE, VALVE/METER BOX, F&I, WATER, 2"	EA	92	\$2,750.00	\$253,000.00
108021600	UTILITY FIXTURE, VALVE/METER BOX, WATER, REMOVE	EA	104	\$750.00	\$78,000.00
108023102	UTILITY FIXTURE, SOLID SLEEVE, F&I, WATER, 2"	EA	1	\$2,800.00	\$2,800.00
108023104	UTILITY FIXTURE, SOLID SLEEVE, F&I, WATER, 4"	EA	3	\$5,000.00	\$15,000.00
108023106	UTILITY FIXTURE, SOLID SLEEVE, F&I, WATER, 6"	EA	4	\$6,500.00	\$26,000.00

108023108	UTILITY FIXTURE SOLID SLEEVE, F&I, WATERSEWER, 8"	EA	4	\$12,500.00	\$50,000.00	
	UTILITY FIXTURE TAPPING SADDLE/SLEEVE F&I, WATER, 8"					
	UTILITY FIXTURE SOLID SLEEVE, F&I, WATER, 12"	EA	2	\$20,000.00	\$40,000.00	
108023112	UTILITY FIXTURE TAPPING SADDLE/SLEEVE F&I, WATER, 12"	EA	1	\$5,000.00	\$5,000.00	
108024103	UTILITY FIXTURE VALVE ASSEMBLY, F&I, WATER, 3"	EA	6	\$7,000.00	\$42,000.00	
108024104	UTILITY FIXTURE VALVE ASSEMBLY, F&I, WATER, 4"	EA	13	\$7,500.00	\$97,500.00	
108024106	UTILITY FIXTURE VALVE ASSEMBLY, F&I, WATER, 6"	EA	11	\$8,000.00	\$88,000.00	
108024108	UTILITY FIXTURE VALVE ASSEMBLY, WATER, F&I, 8"	EA	1	\$8,750.00	\$8,750.00	
108024110	UTILITY FIXTURE VALVE ASSEMBLY, F&I, WATER, 10"	EA	26	\$9,500.00	\$247,000.00	
108024112	UTILITY FIXTURE VAC/AIR ASSEMBLY, WATERSEWER, F&I, 2"	EA	17	\$8,000.00	\$136,000.00	
15011	LIFT STATION SANITARY SEWER	EA	1	\$2,875,000.00	\$2,875,000.00	
15013	TEMPORARY BY-PASS SYSTEM FOR EXISTING SANITARY SEWER	LS	1	\$100,000.00	\$100,000.00	
16441308	FIRE HYDRANT, F&I STD 21 NOSE, ONE PUMPER, WATER, 8"	EA	12	\$7,500.00	\$90,000.00	
1644800	FIRE HYDRANTS, WATER, REMOVE	EA	12	\$2,500.00	\$30,000.00	
	Exhibit B - Utility Work by Highway Contractor					
108015	UTILITY STRUCTURE, BELOW GROUND, SEWER, ADJUST/MODIFY	EA	55	\$3,500.00	\$192,500.00	
108021600	UTILITY FIXTURE, VALVE/METER BOX, WATER, ADJUST	EA	75	\$850.00	\$63,750.00	
Subtotal Construction					\$10,791,265.00	
	Contamination Assessment Remediation Services - To be determined during construction	DA	1	\$1,244,012.88	\$1,244,012.88	
Subtotal Construction and CAR Services					\$11,945,277.88	
01021	Maintenance of Traffic (8%)	AS	1	8%	\$1,075,076.81	
01011	Rehabilitation/Modernization (6%)	AS	1	6%	\$1,075,076.81	
	Contingency Allowance (10%)	AS	1	10%	\$1,194,528.79	
	Construction Engineering Administration (CEA) (6%)	AS	1	6%	\$716,717.67	
Subtotal Construction Allowances					\$4,061,401.28	
GRAND TOTAL BASE BID (SUBTOTAL CONSTRUCTION + CAR SERVICES + ALLOWANCES)					\$16,006,699	