



City of North Port
PURCHASING

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WORK ASSIGNMENT

Stantec Consulting Services, Inc.

CONSULTANT

CONTINUING CONTRACT NO. & TITLE

2020-58-12 - Professional Engineering Services - Continuing Services Contracts for City of North Port Utilities

THIS WORK ASSIGNMENT

Table with 2 columns: Field Name (WORK ASSIGNMENT #, SHORT TITLE, DATE SUBMITTED, AMOUNT (LUMP SUM), SCHEDULED COMPLETION) and Value (2021-04, Sumter Blvd Utility Extensions, 10/26/2020, \$178,160.03, TBD - see attached schedule)

CONTRACT AND BUDGET OVERVIEW FOR FISCAL YEAR 2021

Table with 3 columns: Field Name (TOTAL OF PREVIOUS ASSIGNMENTS, THIS WORK ASSIGNMENT, TOTAL WORK ASSIGNMENTS, ACCOUNT NO/PROJECT NO), DEPARTMENT, and CITYWIDE (completed by Purchasing). Includes values like \$0, \$178,160.03, and U20WES 306-6064-536.63-00.

All work assignments require City Manager approval. In presenting this work assignment, it is understood that:

- 1. All associated supporting documentation and justification for this work assignment is attached hereto.
2. Unless specified herein, work does not involve watercraft, boat piers and/or other activities requiring additional workers compensation endorsements.
3. Contact or involvement with hazardous materials is not anticipated, should hazardous materials be encountered, the City shall be informed.
4. THIS WORK ASSIGNMENT SHALL NOT EXCEED \$200,000 & ANY RESULTING CONSTRUCTION SHALL NOT EXCEED \$2,000,000 PER FLORIDA STATUTE 287.055.

SUBMITTED BY:

Tracy C Anderson Digitally signed by Tracy C Anderson Date: 2020.10.29 10:07:02 -04'00'

CONSULTANT DATE

APPROVED BY:

Richard Newkirk Digitally signed by Richard Newkirk Date: 2020.10.29 11:36:39 -04'00'

DEPARTMENT DIRECTOR DATE BUDGET ADMINISTRATOR DATE

PURCHASING DATE FINANCE DIRECTOR DATE

ASSISTANT CITY MANAGER DATE CITY MANAGER DATE

Print Form

Clear All Fields



Utilities Department
Administration Division
Office: 941.240.8000
Fax: 941.240.8022



TO: Purchasing Department

THRU: Rick Newkirk, Utilities Director

FROM: Michael Acosta, Utilities Engineering Manager

SUBJECT: Sumter Blvd Utility Extension Project Engineering Services

DATE: October 26, 2020

North Port Utilities (NPU) has budgeted the extension of water and wastewater utility infrastructure along Sumter Road to and under the interchange at Interstate 75 (I-75) for the 2020/2021 fiscal year. In 2015 Stantec completed a permitting level design and obtained the following permits for this project: Florida Department of Environmental Protection (FDEP) for Constructing a Domestic Wastewater Collection System, FDEP Generic Permit for the Construction of Water Main Extensions for Public Water Systems, and FDEP Environmental Resource Permit. Those permits all had a five-year expiration. In 2019 NPU contracted with Stantec and renewed the wastewater collection system and water main extension permits. The FDEP Environmental Resource Permit was not eligible for an extension and expired on 10/30/2019. A Florida Department of Transportation permit for the crossing under I-75 was never applied for since those permits have a one-year expiration and the project construction was not planned.

Since construction is budgeted for the current fiscal year, NPU needs to prepare bid and construction level plans, conduct geotechnical investigations for the crossings under I-75, develop project specifications, bid the project and finally construct the project. In order to accomplish these tasks, NPU requires an engineering consultant to prepare plans, specifications and permit applications, assist with bidding, provide general project oversight, prepare record drawings, and certify the project to the FDEP upon completion.

To date, Stantec has provided all the engineering services for this project. NPU proposes to continue to use Stantec for this project and forego the request for letter of interest process. NPU will benefit from using Stantec because of the institutional knowledge that Stantec brings to the project. With that knowledge, they will be able to complete the design more quickly and efficiently than another consultant coming into the project for the first time. Any other engineering firm would need to confirm all the work that has been done to date or start from the beginning. This would add time and cost to the project. The scope and fee that Stantec has provided has been reviewed and found to be very competitive, representing a single digit percentage (less than 7%) of the estimated construction cost. As a reference, NPU uses fifteen (15%) percent of construction cost as a typical cost estimate for engineering services.



EXHIBIT "A"

CITY OF NORTH PORT AGREEMENT CONTRACT #2020-58-12 PROFESSIONAL ENGINEERING SERVICES – CONTINUING CONTRACTS FOR CITY OF NORTH PORT UTILITIES

SUMTER BOULEVARD UTILITY EXTENSIONS

Work Assignment #2021-04

SCOPE OF SERVICES

Introduction

The City of North Port Utilities (NPU) has requested engineering services from Stantec Consulting Services Inc. (Stantec) for the design, permitting, procurement, and construction phase services for the construction of a new potable water main and a new wastewater force main along Sumter Boulevard. The project will support future development at the Sumter Boulevard interchange with Interstate 75.

The project will include 7,500± LF of new water main along the western edge of Sumter Boulevard from Sylvania Avenue to a location just south of Kalish Avenue and 11,150± LF wastewater force main along the eastern edge of Sumter Boulevard from City Hall Boulevard to a location just south of Kalish Avenue. Stub-outs for future connections will be provided along the route. Designs for both the water main and force main include horizontal directional drill crossings of the I-75/Sumter Boulevard interchange. The force main also includes a directional drill crossing under the Snover Waterway. Additional directional drills will be necessary to cross under other drainage features and roadways as determined during detailed design.

Stantec completed preliminary design work and prepared permit level plans in 2015 that consisted of 56 sheets. Stantec obtained the following permits based on those plans:

- FDEP Permit for Constructing a Domestic Wastewater Collection System
- FDEP Generic Permit for the Construction of Water Main Extensions for PWSs
- FDEP Environmental Resource Permit

The FDEP potable water and wastewater construction permits were extended in 2019. The potable water is valid until 2/12/2024 and the wastewater construction permit is valid until 3/13/2024. The FDEP Environmental Resource Permit was not eligible for an extension and expired on 10/30/2019. An FDOT Right-of-Way Use Permit will be required for construction but has not been obtained.



Through this Work Assignment, Stantec will use the 2015 Issued for Permit plans as the basis for preparing construction plans and technical specifications for the proposed water and force mains. Stantec will prepare an engineer's opinion of probable cost (EOPC) for the construction of the proposed improvements. Stantec will also obtain the FDEP Environmental Resource Permit and the FDOT Right-of-Way Use Permit. Also included in this Work Assignment are limited procurement and construction-phase services to be provided by Stantec.

Scope of Services

1.0 Design and Permitting Phase Services

Stantec will provide engineering, design and permitting services to prepare plans and technical specifications and obtain permits required for construction. The work included in this task is discussed in detail below.

1.1 Coordination Meetings

Stantec will coordinate and schedule the following meetings.

NPU kick-off meeting-The purpose of this meeting will be to review the scope of work; discuss the existing design and NPU's expectations; and review permitting requirements. Immediately following the kick-off meeting, representatives of Stantec and NPU will complete a site walk along the proposed alignment to review changes that have occurred since 2015 that may impact design and construction of the new mains.

90-percent review meeting-This will be held at the end of NPU's review period for the 90-percent submittal. NPU's comments on the submittal and Stantec's proposed resolutions to the comments will be discussed at this meeting.

FDOT pre-application meeting.

1.2 Geotechnical Investigations

Tierra Inc. will provide geotechnical engineer services as a subconsultant to Stantec. Tierra will obtain information concerning subsurface conditions along the alignments of the two mains. This will include both reviewing published soils and topographic information and completing subsurface exploration.



- Review of Published Soils and Topographic Information

Tierra will review information obtained from the appropriate Florida Quadrangle Map published by the U.S. Geological Survey (USGS) and the Soil Survey of Sarasota County published by the U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS).

- Subsurface Exploration

Tierra will perform borings, subsurface sampling, and field testing. Standard Penetration Test (SPT) borings will be performed. Groundwater level measurements will be collected. SPT resistances (“N” counts) will be recorded continuously to a depth of 10 feet and then at intervals of 5 feet thereafter. SPT boring samples will be collected. Samples will be visually classified in a laboratory using the Unified Soil Classification System (USCS) with laboratory testing completed as necessary to confirm the visual classifications.

Subsurface exploration will include the following SPT borings:

- One (1) Standard Penetration Test (SPT) boring to a depth of 20-feet below existing grade
- Three (3) SPT borings to a depth of 25-feet below existing grade
- Seven (7) SPT borings to a depth of 30-feet below existing grade
- One (1) SPT boring to a depth of 40-feet below existing grade
- Six (6) SPT borings to a depth of 50-feet below existing grade

Tierra will provide a report summarizing the work completed, the field data generated, and the subsurface conditions encountered.

Stantec’s trenchless team will identify preferred locations for the planned borings based on the current directional drill locations. The trenchless team will also analyze the geotechnical report along with other boring information that may be available from FDOT. The geotechnical data will be used for the design of the directional drills as described in Section 1.3.



1.3 90-Percent Design (Issued for Permit Plans)

The 90-percent design submittal will include plans, directional drill design, technical specifications, an engineer's opinion of probable cost (EOPC), and permit applications. The design will be based on the 2015 Issued for Permit plans, record drawings provided by NPU, findings of the site walk completed with NPU, findings of the geotechnical investigations, and applicable regulations for construction of the respective mains.

Stantec will submit a Sunshine State One Call design ticket to obtain the contact information for existing utility owners with facilities within the area. The 2015 Issued for Permit plans of the water and force mains will be submitted as part of the request to obtain general locations of existing utilities affecting the pipeline design and alignment.

Stantec will further develop the 2015 Issued for Permit plans to prepare plans that are consistent with 90-percent design level plans. Engineered designs for the horizontal directional drill crossings of roadways and drainage features will be developed. The profiles will be updated to show the design and construction details for the horizontal directional drill crossings.

The previously collected topographic survey will be utilized to prepare the plans. Available right-of-way line work from GIS will be shown on the plans to represent the approximate right-of-way location. It is assumed no additional survey will be necessary.

The 90-percent design plans will incorporate the latest revision of NPU's standard details. NPU's standard technical specifications will be used to the extent practical. Project-specific details and technical specifications will be developed as necessary to supplement NPU standards.

Detailed calculations for directional drills will be performed by the trenchless team as follows:

- Ground surface and utility settlement or heave estimates for seven (7) directional drills
- Pipe stress analysis to properly size the thickness and material specification of the pipe for six (6) directional drills
- Hydrofracture factor of safety estimates for eight (8) directional drills



A full set of calculations for each directional drill is not included to optimize the evaluation. This assumes calculations results from individual drills can be applied to other drills where appropriate. This assumption may not be valid if ground conditions vary significantly across the site or other changes are identified.

A directional drill memorandum will be prepared to summarize the frac-out and heave/settlement analysis. The memo will be provided to FDEP and FDOT as part of supporting documentation submitted for project permits.

Stantec will prepare a technical specification section for Measurement and Payment that will provide details for each bid item proposed by Stantec. An EOPC will be prepared based on the plan quantities and available unit costs from previously bid projects for each bid item. The line items listed in the EOPCs will reflect the bid items that Stantec proposes to be included in the Issued for Bid submittal.

Stantec will deliver the following to NPU for the 90-percent submittal:

- One full-size set of 90-percent plans (22"x34")
- One half-size set of 90-percent plans (11"x17")
- One hard copy of the horizontal directional drilling memorandum
- One hard copy of 90-percent technical specifications
- One hard copy of the 90-percent EOPC
- Permit applications for signature by NPU (See note below.)
- Digital copies of the 90-percent plans, 90-percent technical specifications, 90-percent EOPC, permit applications, and geotechnical report (prepared by Tierra) in PDF format

Note: Refer to Section 2.0 for additional discussion on permitting.

1.4 Issued for Bid

NPU's review comments on the 90-percent plans, technical specifications, and EOPC, along with comments received during the permitting process (if any), will be addressed by Stantec to prepare an "Issued for Bid" submittal. A Bid Form for use by bidders when submitting their bids will be prepared based on the bid items listed in the EOPC.



The full-size “Issued for Bid” plans and the “Issued for Bid” technical specifications will be signed and sealed by a Professional Engineer licensed in Florida. The half-scale “Issued for Bid” plans will be prepared by printing scanned copies of the signed and sealed full-size plans at 50-percent scale.

Stantec will provide the following to NPU for the Issued for Bid submittal:

- One full-size original set of “Issued for Bid” plans (22”x34”)
- One half-size copies of “Issued for Bid” plans (11”x17”)
- One hard copy original set of “Issued for Bid” technical specifications
- One hard copy of the “Issued for Bid” EOPC
- One hard copy of the “Issued for Bid” bid form
- CD with digital copies of the plans, technical specifications, permit, EOPC, and geotechnical report (prepared by Tierra) in PDF format; and bid form in Excel format

2.0 Permitting

Stantec will prepare and submit the following permit applications:

- Florida Department of Environmental Protection (FDEP) Notice of Intent to Use an Environmental Resource General Permit (ERP)
- Florida Department of Transportation (FDOT) Right-of-Way Use Permit

Stantec will prepare and deliver the permit applications to NPU for signature. NPU will provide checks for the applicable review fees. Stantec will submit the completed permit applications and NPU checks to the regulatory agencies. The updated 90-percent design plans prepared by Stantec under this Work Assignment will be used for the permit submittals, with the title blocks revised to indicate “Issued for Permit-Not for Construction.” Cross sections through FDOT right-of-way will be included in the plans to satisfy FDOT permit requirements. The plans used for permit submittals will be signed and sealed by a Professional Engineer licensed in Florida.

Stantec will respond to requests for additional information from the permitting agencies. This scope of work assumes that no more than one request for additional information will be received for each permit application.



3.0 Procurement Phase Services

Stantec will provide support to NPU during the bidding process. The work included in this effort is discussed below.

3.1 Services During Procurement

Stantec will attend one pre-bid meeting at North Port City Hall. The meeting will be led by the City of North Port Procurement Department and NPU. Stantec will discuss the scope of work and respond to technical questions during the meeting.

Stantec will assist the Procurement Department in preparing addendums during bidding. The Procurement Department will prepare a draft addendum in Word format. The draft addendum will incorporate technical questions received from bidders inserted into the document with spaces provided for responses by Stantec. Stantec to prepare written responses to the technical questions and will then return the addendum to the Procurement Department to be finalized and distributed to bidders. This scope of work assumes that no more than six (6) addendums will be issued during bidding.

3.2 Bid Review and Award Recommendation

Following the bidding process, the Procurement Department will review all bids for responsiveness. All responsive bids will then be provided to Stantec in PDF format. Stantec will prepare a bid tabulation summarizing the responsive bids. Stantec will review the apparent low bid for conformance with the bidding requirements and will contact three references for the apparent low bidder. Stantec will prepare a letter summarizing the findings and (if appropriate) recommending award to the apparent low bidder.

4.0 Construction Phase Services

The work will be constructed by a general contractor who will be responsible for all aspects of the work. The services provided by Stantec during the construction phase is discussed below.

4.1 Issued for Construction Plans and Specifications

Stantec will prepare conformed "Issued for Construction" plans and technical specifications. These will be based on the "Issued for Bid" plans and technical



specifications, with revisions made to incorporate the changes and clarifications from addendums issued during bidding.

The full-size “Issued for Construction” (22”x34”) plans and the “Issued for Construction” technical specifications will be signed and sealed by a Professional Engineer licensed in Florida. The half-size “Issued for Bid” plans (11”x17”) will be prepared by plotting scanned copies of the signed and sealed full-size construction plans at 50-percent scale.

Stantec will provide the following to NPU for the “Issued for Construction” submittal:

- One full-size original signed set of “Issued for Construction” plans (34”x22”)
- One hard copy original signed set of “Issued for Construction” technical specifications
- CD with digital copies of the “Issued for Construction” plans and technical specifications in PDF format and AutoCAD files in DWG format

4.2 Meetings

Stantec will attend one pre-construction meeting and up to three progress meetings. The meetings will be held at a location within the City of North Port and chosen by NPU. All meetings will be led by NPU including preparation of agenda and meeting minutes.

4.3 Submittals and Shop Drawing Review

Stantec will review contractor directional drilling plan and shop drawing submittals for conformance with the bid documents. This scope of services assumes up to two directional drilling plan reviews and one resubmittal along with 24 product/shop drawing submittals and 8 re-submittals, will be reviewed.

4.4 Requests for Information and Contractor Change Orders

Stantec will prepare responses to requests for information (RFIs) received during construction. The Contractor will be required to submit RFIs using a standard RFI form. This scope of services assumes Stantec will respond to up to three RFIs.

Stantec will assist NPU with contractor Change Orders (CO). The CO’s will be prepared by NPU and reviewed by Stantec for concurrence and reasonableness of the



additional services and amount of the CO. Stantec assumes there will be no more than two contractor CO's.

4.5 Pressure Testing and Certification

Stantec will observe pressure testing. It is assumed that the contractor will perform up to three pressure tests on the water main and five pressure tests on the force main.

Stantec will perform a walk-through with NPU staff and the contractor during the pressure testing to observe the completed work and note any deficiencies of the section being tested.

Upon successful completion of the pressure testing and receipt of the contractor-provided signed and sealed as-built survey and ACAD file, Stantec will submit permit closeout and/or partial certification documents for the water main and wastewater construction permits.

Upon the completion of the project record drawings outlined in Section 4.6, Stantec will close out the FDOT right-of-way use permit.

4.6 Record Drawings and Closeout

Stantec will prepare Record Drawings using redline as-built drawings and field survey (completed by a qualified surveyor who is licensed in Florida) provided by the contractor. The Record Drawings will be signed and sealed by qualified Professional Engineers who are licensed in Florida. Stantec will provide the following to NPU:

- Two full-sized sets of Record Drawing plans (22"x34")
- CD with a scanned copy of the Record Drawings in PDF format and an AutoCAD file of the Record Drawings in DWG format



5.0 Allowance

This is an allowance added for additional work not expressly included in this scope of services. Examples of work that may be included in this task are the additional geotechnical soil borings by the sub consultant (which may be necessary if soil conditions are discovered to be varying greatly in areas), additional permitting requirements currently excluded, or additional work during the construction phase.

No work will be completed under this task without written advance approval by NPU. Payment for work under this task will be performed on a time and materials basis. Any work completed under this task may impact the project schedule.

Scope Assumptions and Clarifications

There following assumptions are included in this scope of work.

- NPU will provide record drawings and utility information along the project route and surrounding areas to Stantec promptly following the Notice to Proceed.
- A single FDEP ERP General Permit that covers all work will be submitted.
- An FDOH water main construction permit and an FDEP wastewater construction permit has already been issued and will be valid for the work.
- The work will not require a permit from the U.S. Army Corps of Engineers.
- All permits required that have not already been obtained and are not specifically identified herein as being obtained by Stantec will be the responsibility of others.
- Permitting agencies will issue permits within 30 days of receipt of the permit applications.

Items not specifically detailed in the Scope shall not be included in the contracted Scope of Services. Items that are excluded from the scope include but are not limited to:

- A U.S. Army Corps of Engineers and North Port Right of Way Use permit
- Additional topographic and boundary surveys
- Cultural resource assessment survey
- Wetland delineations
- Contamination assessment
- Other alternate trenchless installation design
- MOT plans
- Field observation of construction (with the exception of pressure tests and final walk-through as discussed herein)
- Assistance with Contractor Applications for Payment



Reference: WA #2021-04 (Contract 2016-23) Sumter Boulevard Utility Extensions

Schedule

<u>Task</u>	<u>Days to Complete</u>	<u>Days from NTP</u>
Kick-Off Meeting/Site Walk	1	1
Geotech	60	61
90-Percent Milestone Submittal	60	121
90-Percent Review (NPU) & Meeting	14	135
Permit Submittals	7	142
Permitting Agency Review *	30	172
Issued for Bid Submittal	14	186
Procurement Time	90	276
Construction Phase Services	TBD	TBD

* Permit review time may vary depending on agency.

Fees

See Exhibit B for a summary of hours and fees.

Stantec FEE ESTIMATE - Sumter Blvd Utility Extensions

EXHIBIT "B"

City of North Port Utilities
 Agreement Contract #2020-58-12
 Work Assignment #2021-04

Stantec hourly rates verified.
 Backup for Sub-consultant
 fees attached. (gd 10-29-20)

Task No.	Task Name	Units	Total Hours													Sub-Contractor	Total	
			Principal	Senior Trenchless Principal	Senior Project Engineer	QC	Senior Trenchless Engineer	Project Manager / Engineer	Trenchless Engineer	Trenchless Engineer	Project Engineer	Ecologist	Jr. Engineer	Senior CAD Designer	Inspector			Admin Assistant
	Project Billing Rate		\$225.00	\$192.00	\$183.00	\$174.00	\$149.00	\$149.00	\$149.00	\$149.00	\$149.00	\$123.00	\$123.00	\$123.00	\$98.00	\$98.00	\$1.00	
	Total Units		10	6	33	73	37	256	179	256	32	96	250	26	28	8	23,612.03	\$172,160.03
	Fee		\$2,250.00	\$1,152.00	\$6,039.00	\$12,702.00	\$5,513.00	\$38,444.00	\$26,671.00	\$38,444.00	\$4,788.00	\$11,808.00	\$30,750.00	\$3,198.00	\$2,744.00	\$784.00	\$23,612.03	\$179,160.03
	Total																	
1	Design & Permitting Phase Services																	
1.1	Coordination Meetings	1				8	2	8							1	2		\$3,103.00
1.2	Geotechnical Investigations	1			2	1	2	8	8	3							2,3612.03	\$0.00
1.3	90-Percent Design (Issued for Permit Plans)	5	7	4	27	20	31	107	155	107	36	176		4	2			\$4,176.00
1.4	Issued for Bid	2	2			7		39			18	10		5	2			\$82,210.00
2	Permitting																	
2.1	Permitting	1				6		12	32			8						\$5,809.00
3	Procurement Phase Services																	
3.1	Services During Procurement					2		6			6				2			\$2,176.00
3.2	Bid Review and Award Recommendation					2		2			8				2			\$1,826.00
4	Construction Phase Services																	
4.1	Issued for Construction Plans & Specs					1		3				4			1	1		\$1,309.00
4.2	Meetings (Kick-off plus three additional)					8		8							2			\$2,780.00
4.3	Submittals and Shop Drawing (2 HDD & 1 resubmittal and 24 shops & 8 resubmittals)					2		8	28		28			8				\$11,648.00
4.4	Requests for Information (2) and Contractor Change Order (2)					2		8			10			2				\$4,862.00
4.5	Pressure Testing and Certification	1	1			5	2	8										\$0.00
4.6	Record Drawing and Close-out					4		22					28		1			\$7,172.00
5	Allowance																	
5.1	Allowance (NFU approved)																	\$0.00
	Total																	
	Total Hours																	
	Labour																	\$101,484.00
	Sub-Contractor																	\$23,612.03
	Total																	\$125,096.03

ATTACHMENT B – FEE SCHEDULE

Stantec Consulting Services Inc. Contract 2020-58 Billing Rate Table	
Staff Category	Rate
Principal	\$ 225.00
Senior Project Manager	\$ 192.00
Project Manager	\$ 174.00
Senior Engineer / Architect / Scientist	\$ 183.00
Project Engineer / Architect / Scientist	\$ 149.00
Staff Engineer / Architect / Scientist	\$ 137.50
Junior Engineer / Architect / Scientist	\$ 123.00
Senior CADD Designer	\$ 123.00
CADD Designer	\$ 108.00
CADD Technician	\$ 98.00
Senior Construction Manager	\$ 192.00
Construction Inspector	\$ 123.00
Professional Surveyor	\$ 174.00
One Person Survey Crew	\$ 98.00
Two Person Survey Crew	\$ 135.00
Admin. Assistant	\$ 98.00

2020-58-12
 Contracted
 rates
 attached-
 gd - 10-29-20

Principal: The Principal-in-Charge is a registered professional who holds full project responsibility and authority to represent the firm. It is the Principal-in-Charge's responsibility to assure that all the necessary corporate and staff resources are available. The authority of the Principal-in-Charge provides the project team and staff with strong leadership, technical direction, and expert supervisory guidance of all work undertaken by the firm.

Senior Project Manager: Project Manager with a minimum of 15-years of experience including managing unique and complex projects.

Project Manager: Licensed professional with a minimum of 10-years of experience who is responsible for accomplishing the stated project objectives. Key project management responsibilities include following the Stantec Project Management Framework (ISO 9001 Quality Management Standard) which includes creating clear and attainable project objectives through the Project Plan and managing the cost, time, and quality of the deliverable. This is the person who is the client contact for the specific Work Order, the person who works with the client to fully understand the project, and the person who schedules and directs staff to accomplish the Project Plan goals and complete the Work Order

deliverable. The Project Manager may also perform work on the Work Order to complete the deliverables.

Senior Engineer / Architect /Scientist: Licensed Professional with a minimum of 15 years of experience or a Stantec technical expert.

Project Engineer / Architect /Scientist: Licensed Professional with a minimum of 10 years of experience who is responsible for a particular technical aspect of the project and who usually does the layout or calculations for the Project Manager or their delegated authority.

Staff Engineer / Architect /Scientist: Recently licensed Professional working under the Project Engineer or Project Manager who is typically responsible for completing tasks for a technical aspect within a Work Order. Work developed is reviewed by the supervising Engineer / Architect /Scientist.

Junior Engineer / Architect /Scientist: Graduate of a 4-year college in their respected profession currently working toward earning their professional registration. Work is closely reviewed by the Project Engineer / Architect /Scientist or the Project Manager.

Senior CADD Designer: CADD Designer with 10-years of experience who may perform the CADD duties or supervise other CADD Designers/Technicians to complete the drawing component of the deliverable.

CADD Designer: CADD operator with a minimum of 5 years of experience that is fluent with the CADD software for the specified project and able to work independently to layout the drawings/systems from defined or limited sketches or direction from the Project Engineers/Architects/Scientists or Project Manager.

CADD Technician: CADD operator taking explicit direction from the CADD Designer, Engineering Staff, or Project Manager to complete the drawings of the deliverable.

Senior Construction Manager: Construction Inspector with 15 years of experience and a minimum of 5 years supervising the construction inspections or a Stantec technical expert to complete the inspection services of the Work Order.

Construction Inspector: Inspector with 10 years of experience performing inspection duties as outlined in the Work Order.

Professional Surveyor: Registered Professional Surveyor performing surveying duties of the Work Order.

One Person Survey Crew: One person survey crew directly supervised by a Registered Professional Surveyor executing field surveying duties.

Two Person Survey Crew: Two person survey crew directly supervised by a Registered Professional Surveyor executing field surveying duties.

Admin. Assistant: Personnel whose primary job is the engagement of office work such as but not limited to: communication, filing, word processing, spreadsheets, deliveries, proposals, copying, and scanning.

- **Direct costs are not reimbursable. Direct costs are defined as, but not limited to, the use of communication equipment, computers, copiers, and all other equipment required to perform services. Mileage and meals are considered direct costs and are not reimbursable.**
- **Permit Fees: Cost**
- **The City will allow rate adjustments to be submitted for each successive year prior to the end of the current contractual year. Rates are to be firm for each one-year period. No price adjustments will be considered mid-year. Adjustments should not exceed the Bureau of Labor Statistics, Producer Price Index for the industry in the North Port market area.**

END OF ATTACHMENT B

TIERRA

September 10, 2020

Stantec
6900 Professional Parkway East
Sarasota FL 34240-8414

Attention: Mr. Stephen MacEachern P.E., P.S.M

**RE: Proposal for Geotechnical Engineering Services
City of North Port – Sumter Boulevard Extension HDD
Sarasota County, Florida
Tierra Proposal No. 65-20-461**

Mr. MacEachern:

Project Description

The project, as we understand it, consists of geotechnical services to support the development of construction plans for proposed utility extensions along Sumter Boulevard in the City of North Port, Florida. We understand that Horizontal Directional Drilling (HDD) techniques are anticipated to install the pipelines associated with the utility extension.

This proposal addresses geotechnical services associated with the evaluation of subsurface conditions with respect to the HDD operation for the proposed utility extension as requested by Stantec. We understand that future phases of the project may be required based on the results of the HDD design.

Preliminary plans, USDA Soil Survey data, historical topographic maps, and the proposed HDD alignments were reviewed in preparing this proposal.

Scope of Services

The objective of our study will be to obtain information concerning subsurface conditions along the project alignment to base engineering estimates and recommendations in each of the following areas:

1. General location and description of potentially deleterious materials discovered in the borings that may interfere with the HDD operation for the proposed utility extension.
2. Identification of groundwater levels at the time of the field work.

In order to meet the preceding objectives, we propose to provide the following services.

1. Review published soils and topographic information. This published information will be obtained from the appropriate Florida Quadrangle Map published by the United States Geological Survey (USGS) and the Soil Survey of Sarasota County, Florida, published by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).

2. Execute a program of subsurface exploration consisting of borings, subsurface sampling and field-testing to support the proposed HDD operation. We propose the following distribution of test borings based on discussions with Stantec:
 - a. One (1) Standard Penetration Test (SPT) boring to a depth of 20-feet below existing grades along the proposed HDD alignment at the location selected by Stantec.
 - b. Three (3) SPT borings to a depth of 25-feet below existing grades along the proposed HDD alignment at locations selected by Stantec.
 - c. Seven (7) SPT borings to a depth of 30-feet below existing grades along the proposed HDD alignment at locations selected by Stantec.
 - d. One (1) SPT boring to a depth of 40-feet below existing grades along the proposed HDD alignment at the location selected by Stantec.
 - e. Six (6) SPT borings to a depth of 50-feet below existing grades along the proposed HDD alignment at locations selected by Stantec.

In each of the SPT borings, soil samples will be collected and SPT resistances (“N” counts) will be recorded continuously to a depth of 10 feet and at intervals of 5 feet thereafter.
3. Provide Maintenance of Traffic (MOT) services in accordance with FDOT Standard Plans Indices and Sarasota County requirements as required.
4. Visually classify the samples in the laboratory using the Unified Soil Classification System (USCS). Perform laboratory testing as necessary to confirm our visual classification. Identify soil conditions at each boring location.
5. Collect groundwater level measurements encountered in the borings.
6. Prepare an engineering report that will summarize the course of study pursued, the field data generated and the subsurface conditions encountered.

Service Fee

We propose geotechnical not-to-exceed service fees based on the scope of services described above in the amount of **\$23,612.03**. Please see the attached Fee Schedule for details on the proposed service fee.

This proposal is based on the following:

- The site will be readily accessible to our field personnel.
- The site will be accessible with our standard drilling equipment.
- Clearing operations to provide access and/or special equipment will not be required to perform the field work.
- Permitting fees and bonds will be waived by Sarasota County.
- Authorization and access to private property should be secured prior to Tierra mobilizing to the project site.

We will provide you with verbal results of tested conditions and immediately notify you should conditions impacting our scope, schedule, or cost of services occur.

Tierra, Inc. appreciates the opportunity to be of service to Stantec on this important project. Should you have any questions in regard to our proposed services, please do not hesitate to contact this office.

Respectfully Submitted,

TIERRA, INC.


Susan E. Fries, E.I.

Geotechnical Engineering Intern


Thomas E. Musgrave, P.E.
Geotechnical Engineer

Attachment A: Fee Schedule

ATTACHMENT A

**TIERRA, INC.
UNIT RATE FEE SCHEDULE
NORTH PORT SUMTER BOULEVARD UTILITY EXTENSION
SARASOTA COUNTY, FLORIDA
TIERRA PROPOSAL NO. 65-20-461**

	Unit	# of Units	Unit Price		Total
I. FIELD INVESTIGATION					
Mobilization of Men and Equipment					
Truck-Mounted Equipment	Trip	1	\$	337.00	\$ 337.00
Support Vehicle	Trip	6	\$	152.00	\$ 912.00
Standard Penetration Test Borings (By Truck-Mounted Equipment)					
Land: 0 - 50 ft depth (Assume 35 @ 35-feet each)	L.F.	645	\$	12.32	\$ 7,946.40
Grout-Seal Boreholes (By Truck-Mounted Equipment)					
Land: 0 - 50 ft depth (Assume 35 @ 35-feet each)	L.F.	645	\$	5.03	\$ 3,244.35
Index 603 Lane Closures with Flagmen & Barricades (Assume 3-4 borings per day)	Day	2	\$	1800.00	\$ 3,600.00
II. LABORATORY TESTING					
Natural Moisture Content Tests	Test	10	\$	9.58	\$ 95.80
Grain-Size Analysis - Single Sieve	Test	18	\$	40.92	\$ 736.56
Organic Content Tests	Test	4	\$	44.02	\$ 176.08
Atterberg Limit Tests	Test	6	\$	124.62	\$ 747.72
III. ENGINEERING AND TECHNICAL SERVICES					
Project Manager	Hour	4	\$	174.00	\$ 696.00
Engineer	Hour	16	\$	99.21	\$ 1,587.36
Engineering Intern	Hour	24	\$	80.08	\$ 1,921.92
Computer Technician	Hour	5	\$	76.12	\$ 380.60
Sr Engineering Technician	Hour	16	\$	76.89	\$ 1,230.24
				Estimated Project Fee	\$ 23,612.03