



Stantec Consulting Services, Inc.

WORK ORDER INITIATION FORM for the CITY OF CLEARWATER

Date:	04/24/2020
Consultant Project Number:	TBD
City Project Number:	20-0008-UT
City Plan Set Number:	2020006

1. PROJECT TITLE: Lift Station 16 Pierce St Rehab

2. SCOPE OF SERVICES:

I. PRE-DESIGN PHASE

Task 1.1 – After being given Notice to Proceed (NTP), Stantec will attend a kick-off meeting with City staff at the Lift Station 16 (LS-16) site. This meeting will also serve as the initial site visit to LS-16 and the Imagine Clearwater Project (ICP) site and will include a representative from the IC contractor. A Stantec Health and Safety Plan (HASP) and Risk Management Strategy (RMS1) will be prepared, submitted, and approved by the City Project Manager prior to mobilizing to each site.

Task 1.2 – Subsurface Utility Investigation - Stantec will provide utility designation, including pipe diameter determination, at the proposed points of connection to the existing force main. It is understood that these connection points will be located at the existing pump station and at the northern terminus of the directional bored section of the existing force main.

The investigation/designation effort will be performed with a combination of ground penetrating radar (GPR) and EM (electromagnetic signal induction) toning.

As the exact route and installation method for the proposed force main has not been determined as of the date of this proposal, the fee shown for this task reflects an estimate only and the actual amount may be more or less than the amount shown.

Task 1.3 – Level “A” Excavation - Stantec will coordinate with Sunshine State One Call of Florida, Inc. (SSOCF), to file an excavation ticket for all subject areas prior to performing excavations.

Stantec will perform three (3) Level A vacuum excavations in an attempt to expose, measure, photograph and mark the existing force main as designated under Task 1.3. In addition, Level A vacuum excavations will be performed at other locations as directed for additional fee. This effort is not intended to support evaluation of different force main routing alternatives.

The deliverable item for this task will be field markings of each excavation together with a horizontal and vertical reference point for each excavation; excavation data sheets noting the utility type, size, material, and direction together with a measured depth from the top of utility to the established reference point; and photographs at each excavation.

Restoration of pavement (in the event that such is necessary) will be by cold-patch asphalt in asphalt paved areas and concrete patch in concrete areas. In all cases, restoration will be limited to the holes cut by Stantec.

Additional subsurface utility investigation will be completed by the Contractor prior to construction commencing.

Task 1.4 – Surveying and Mapping Services - Stantec will provide surveying services as follows:

- Subsequent to the utility designation effort, Stantec will provide surveying services to map designations.
- Topographic survey to be utilized shall be provided by others and survey information provided to Stantec by the City.
- Subsequent to the Level A excavation effort, Stantec will survey the reference points established by the SUE crew and update the previously prepared topographic survey to include the Level A excavation data.
- Stantec will perform supplemental surveying services based on direction received from the Project Civil Engineer. The City of Clearwater has previously provided a topographic survey covering the area within which the proposed force main will be installed. This task contemplates only minor supplemental services not fully addressed by the City provided survey, specific to the specific project requirements.

As the extent of effort for this task cannot be quantified as of the date of this proposal, the fee shown for this task reflects an estimate only and the actual amount may be more or less than the amount shown.

The deliverable item for this task will be a map of survey signed and sealed by a Florida licensed Surveyor and Mapper.

Task 1.5 – Conduct a force main route study to determine the most feasible route, tie-in point and method of construction (open-cut vs directional drill) to avoid existing underground utilities, coordinated with ICP design elements and maintain reasonable depths. There is approximately 1,500 total linear feet (LF) of force main from LS-16 that needs to be relocated due to the ICP including approximately 135 LF of PVC pipe with the remainder 12-inch HDPE. Stantec will review routing options with the ICP Construction Manager for constructability review, costing, phasing, etc. This coordination will continue through design and construction of the project.

II. DESIGN PHASE

Task 2.1 – Utilizing the additional sanitary sewer wastewater peak flows developed under the ICP and lift station historical operating data, determine if the existing LS-16 force main has the capacity to handle the additional flows (as calculated in the WWCS Master Plan) or, if it cannot, the new required diameter for the LS-16 force main. The City will provide existing LS-16 and force main as-builts and any previous investigations, condition and/or capacity assessment reports, pump data, shop drawings, product data and pump curves for review. The City will provide the most recent 12 months of SCADA pumping flowrates and station data operating data for LS-16 plus operating data from at least a week prior to a week after the most recent extreme wet weather event.

Task 2.2 – Based on the peak capacity required determined in Task 1 above, Stantec will conduct a visual condition and desktop capacity assessment of existing LS-16 electrical and mechanical components. The City desires to raise all electrical equipment 2-feet above the 100-year flood elevation and install a back-up generator or permanently installed diesel pumps. In addition to these improvements, if the existing LS capacity is found to be adequate, Stantec will inform the City of station components that should be replaced/rehabilitated based on the visual inspection. If a capacity upgrade is necessary due to and in support of higher anticipated peak flows from events at the adjacent future Imagine Clearwater facilities, Stantec will determine necessary upgrades as part of the desktop analysis.

Task 2.3 – Stantec will produce a Basis of Design Report delineating necessary rehabilitation and/or upgrades required for LS-16 and force main, preliminary force main route plan, design criteria tables, a high-level construction cost estimate (AACE Class 5), submit report to the City for review, and attend a meeting to discuss City comments and resolve.

III. FINAL DESIGN PHASE

Task 3.1 – Stantec will produce final design documents for the improvements identified in the preceding phase to raise electrical/mechanical equipment, install backup generator/pumps, and replace failing station components. This final design scope does not include design of mechanical/ electrical/ civil/ structural improvements for capacity

upgrades (ie. wetwell re-sizing, new pumps, motors, VFD's) if they are determined to be needed. Stantec anticipates the production of the following 90% design drawings:

- Cover Sheet
- Legend, Abbreviations and General Notes Sheet
- (2) Lift Station Mechanical Plan and Section
- (1) P&ID drawing
- (3) Lift Station Electrical and Instrumentation Sheets (including arc flash labeling)
- (1) Mechanical Detail Sheet
- (1) Electrical Detail Sheet
- (4) Force Main Plan and Profile Sheets
- (1) Force Main Detail Sheet
- Deliverable will include (5) 11x17 printed copies of drawings, specifications, and a pdf file via email.
- 90% Engineer's Opinion of Probable Construction Cost (AACE Class 3). Cost estimate will be provided for City's information and Stantec will not be involved in cost negotiation/management and value engineering activities by the Contractor.

Task 3.2 – 90% design review meeting with City to resolve comments

Task 3.3 - Produce Final Construction Drawings and Specifications to be incorporated into the Imagine Clearwater construction documents. Deliverable will be (5) printed copies and a pdf file via email of drawings and specifications.

Task 3.4 – Permitting – Stantec will complete the following permit applications in collaboration with the City and submit to the permitting agency with accompanying fee for the following:

- DEP Form 62-604.300(8)(a) - Notification/Application for Constructing a Domestic Wastewater Collection/Transmission System – General Permit (\$250 fee)
- DEP Form 62-604.300(8)(b) - Request for Approval to Place a Domestic Wastewater Collection/Transmission System into Operation

If additional permits are needed based due to a force main route selection requiring right-of-way permit, etc., an amended work order will be required. Any required building-related permits will be applied for by the Contractor.

The design plans shall be compiled using the City of Clearwater CAD standards, as delineated in General Conditions, Section III, 6.11.3 CAD Standards. Specifications will utilize City standard Contract Specifications and any supplements thereto.

Design plans and technical specifications will be included in the ICP construction drawings and specifications bid set. Front end procurement documents will be provided by the City/Contractor.

IV. “BIDDING” PHASE – N/A – Bid under Imagine Clearwater Project.

V. CONSTRUCTION PHASE

Stantec will provide engineering services during construction including the following:

- Task 5.1 - Attend pre-construction meeting (2 staff in attendance)
- Task 5.2 - Perform shop drawing reviews
- Task 5.3 - Responding to RFIs
- Task 5.4 - Conduct construction site visits. Site visits will occur bi-weekly during LS-16 and force main construction activities.
- Task 5.5 - Final inspection (1 site visit)
- Task 5.6 -Project closeout and certification (close-out punchlist)
- Task 5.7 –At project completion, a project “catalog” that includes items below will be produced, as appropriate:
 - Files of correspondence, meeting minutes, contract documents, change orders, field orders, RFIs, work change directives, addenda, additional drawings issued subsequent to the execution of the Contract, progress reports, shop drawing and progress submittals, regulatory correspondence and other project-related documents such as O&M manuals and warranty information, as available. At the conclusion of the project, Stantec will combine this information into a project catalog and submit to the City for review and comment. The project catalog will be submitted electronically on CD/DVD ROM.

Assumptions:

- Total shop drawing reviews assumed to be 15 total with re-submittals; average time for review 3 hours each.
- Total RFIs responded to assumed to be 3.
- Four (4) month construction period for lift station (8 site visits).
- All construction meetings and site visits are assumed to be attended by 1 Stantec staff member, unless stated otherwise.
- No alternate equals without Owner approval.
- No use of City owned equipment (i.e. sampling equipment, etc.) by consultants/contractors.

3. PROJECT GOALS:

The goals of this Work Order are as follows:

- Perform a visual condition assessment of Lift Station 16 located at the southeast corner of Pierce Street and the Memorial Causeway Bridge to determine what rehabilitation is

needed. Based on anticipated additional flows, conduct a desktop analysis to determine if a capacity upgrade is necessary for the lift station and force main due to and in support of higher anticipated peak flows from events at the adjacent future Imagine Clearwater facilities.

- Produce a Basis of Design Report in pdf and word (with track changes) format delivered via email summarizing the findings of the lift station assessment and potential increase in capacity. Provide operations and maintenance costs for proposed improvements.
- Determine the required sizing of the force main discharging from LS-16 using additional flows anticipated to be generated from ICP site.
- Produce an opinion of probable construction cost for the lift station and force main improvements.
- Relocate the LS-16 force main to avoid new construction and other existing utilities not being relocated via open-cut/direct bury or horizontal directional drill method,
- At project completion, a project “catalog” that includes items below will be produced., as appropriate:
 - Files of correspondence, meeting minutes, contract documents, change orders, field orders, RFIs, work change directives, addenda, additional drawings issued subsequent to the execution of the Contract, progress reports, shop drawing and progress submittals, regulatory correspondence and other project-related documents such as O&M manuals and warranty information, as available.
 - At the conclusion of the project, Stantec will combine this information into a project catalog and submit to the City for review and comment. The project catalog will be submitted electronically on CD/DVD ROM.

4. BUDGET:

Attachment “B”

This price includes all labor and expenses anticipated to be incurred by Stantec Consulting Services, Inc. for the completion of these tasks in accordance with Professional Services Method “A” – Hourly Rate Basis for **a fee not to exceed one hundred ninety-eight thousand six hundred and eight Dollars (\$198,608).**

Permit application fees will be paid by Stantec Consulting Services, Inc. and invoiced to the City as a reimbursable.

5. SCHEDULE:

The project is to be completed 6 months from issuance of notice-to-proceed. The project deliverables are to be phased as follows:

Basis of Design Report

60 calendar days

City Review Period – BODR	21 calendar days
90% Construction Plans and Permit Applications	60 calendar days
City Review Period – 90%	21 calendar days
100% Construction Documents and Permit Applications	45 calendar days

6. STAFF ASSIGNMENT

Hamid Sahebkar (Principal)
 Jarah Parke (PM/Civil)
 Jeovanni Ayala-Lugo (Mechanical)
 John Nel/Bradley Buchanan (electrical/I&C)
 Mark Foster (Survey/SUE)
 Soli Rojas (Construction Manager)

STAFF ASSIGNMENT (City of Clearwater):

David Ojeda	Project Manager
Kervin S. Aimie	Public Utilities Site Representative LS
Jerry Wells	Public Utilities Site Representative FM
Mike Gilliam	Public Utilities Manager LS
Glenn Daniel	Public Utilities Manager FM
Jeremy J. Brown, PE	Utilities Engineering Manager
Richard G. Gardner, PE	Public Utilities Assistant Director

7. CORRESPONDENCE/REPORTING PROCEDURES:

ENGINEER's project correspondence shall be directed to:

Jarah Parke, jarah.parke@stantec.com or
[Jeovanni Ayala-Lugo, jeovanni.ayala-lugo@stantec.com](mailto:Jeovanni.Ayala-Lugo@stantec.com)
 777 S. Harbour Island Blvd.
 Suite 600
 Tampa, Florida 33602

All City project correspondence shall be directed to:

David Ojeda, David.Ojeda@myclearwater.com with copies to the Utilities Engineering Manager and Public Utilities Assistant Director and others as may be appropriate.

ENGINEER shall provide a minimum of forty-eight (48) hours' notice prior to conducting fieldwork/site visits. ENGINEER shall provide a minimum of seven (7) days notification for site visits requiring the assistance of City Operations and Maintenance personnel.

ENGINEER acknowledges that all City directives shall be provided by the City Project Manager.

In addition to the original copies delivered as stated in the scope of work, all project deliverables will be submitted in electronic format on CD or other City approved device prior to approval of final invoice.

8. INVOICING/FUNDING PROCEDURES:

For work performed, invoices shall be submitted monthly to the:

**City of Clearwater, Engineering Department
Att. Veronica Josef, Senior Staff Assistant
PO Box 4748
Clearwater, Florida 33758-4748.**

Contingency services will be billed as incurred only after written authorization provided by the City to proceed with those services.

City Invoicing Code: **_3217321-561300-96686**

9. INVOICING PROCEEDURES

At a minimum, in addition to the invoice amount(s) the following information shall be provided on all invoices submitted on the Work Order:

- A. Purchase Order, Project and Invoice Numbers and Contract Amount.
- B. The time period (begin and end date) covered by the invoice.
- C. A short narrative summary of activities completed in the time period
- D. Contract billing method – Lump Sum or Hourly Rate
- E. If Lump Sum, the percent completion, amount due, previous amount earned and total earned to date for all tasks (direct costs, if any, shall be included in lump sum amount).
- F. If Hourly Rate, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, total earned to date for each task and other direct costs (receipts will be required for any single item with a cost of \$50 or greater or cumulative monthly expenses greater than \$100).
- G. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

10. SPECIAL CONSIDERATIONS:

The consultant named above is required to comply with Section 119.0701, Florida Statutes (2013) where applicable.

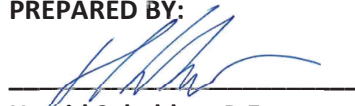
Sanitary sewer wastewater flows generated by any future use of the old City Hall property and Water's Edge Condominium property are included in the capacity analyses of LS-16. Additional flows generated by the addition of another level to the City Main Library will be included.

The methods outlined herein for discovery and designation of subsurface utilities are consistent with industry recognized procedures. While such methods are effective, the potential exists that all underground utilities may not be discovered due to soil condition, water table, utility depth and utility placement (i.e. Utilities on top of one another).

As the exact route and installation method for the proposed force main has not been determined as of the date of this proposal, the fee shown for survey and SUE reflects an estimate only and the actual amount may be more or less than the amount shown.

The designs produced herein will be submitted a separate construction specification and drawings package but constructed under the ICP construction contract.

PREPARED BY:



Hamid Sahebkar, P.E.
Principal
Stantec Consulting Services

May 4, 2020

Date

APPROVED BY:

Tara Kivett, P.E.
City Engineer
City of Clearwater

Date



CITY OF CLEARWATER ENGINEERING DEPARTMENT

WORK ORDER INITIATION FORM CITY DELIVERABLES

1. FORMAT

The design plans shall be compiled utilizing the following methods:

1. City of Clearwater CAD standards.
2. Datum: Horizontal and Vertical datum shall be referenced to North American Vertical Datum of 1988 (vertical) and North American Datum of 1983/90 (horizontal). The unit of measurement shall be the United States Foot. Any deviation from this datum will not be accepted unless reviewed by City of Clearwater Engineering/Geographic Technology Division.

3. DELIVERABLES

The design plans shall be produced on bond material, 24" x 36" at a scale of 1" = 20' unless approved otherwise. Upon completion the consultant shall deliver all drawing files in digital format with all project data in Autodesk Civil 3D file format. If not available Land Desktop files are still acceptable, however the City or Clearwater is currently phasing out Land Desktop.

NOTE: If approved deviation from Clearwater CAD standards are used the Consultant shall include all necessary information to aid in manipulating the drawings including either PCP, CTB file or pen schedule for plotting. The drawing file shall include only authorized fonts, shapes, line types or other attributes contained in the standard release of Autodesk, Inc. software. All block references and references contained within the drawing file shall be included. Please address any questions regarding format to Mr. Tom Mahony, at (727) 562 4762 or email address Tom.Mahony@myClearwater.com.

All electronic files (including CAD and Specification files) must be delivered upon completion of project or with 100% plan submittal to City of Clearwater.

Project # 20-0008-UT Lift Station 16 Pierce St Rehab
Stantec Consulting Services, Inc.

WORK ORDER INITIATION FORM
PROJECT BUDGET

Task	Description	Labor	ODCs	Total
1.0	Pre-Design			
1.1	Project Kick-off, Site Visit and Pre-design Meeting	\$4,120	\$100	\$4,220
1.2	Subsurface Utility Investigation	\$3,380	\$200	\$3,580
1.3	Level "A" Excavation	\$6,400	\$200	\$6,600
1.4	Survey and Mapping Services	\$4,280	\$200	\$4,480
1.5	Force Main Route Study	\$5,540		\$5,540
Subtotal				\$24,420
2.0	Design			
2.1	Data Collection and Review	\$3,940		\$3,940
2.2	LS-16 Condition and Capacity Assessments	\$13,360		\$13,360
2.3	Basis of Design Report	\$30,240		\$30,240
Subtotal				\$47,540
3.0	Final Design Plans and Specifications			
3.1	90% Design	\$46,980		\$46,980
3.2	90% Design Review Meeting	\$3,120	\$100	\$3,220
3.3	Final Design Documents	\$18,930	\$500	\$19,430
3.4	Permitting	\$8,200	\$500	\$8,700
Subtotal				\$78,330
4.0	Bidding – N/A			
5.0	Construction Phase Services			
5.1	Pre-Construction Meeting	\$3,040	\$100	\$3,140
5.2	Shop Drawing Reviews	\$13,945		\$13,945
5.3	Respond to RFIs	\$2,895		\$2,895
5.4	Construction Site Visits	\$8,520	\$450	\$8,970
5.5	Final Inspection	\$1,880	\$50	\$1,930
5.6	Project Closeout and Certification	\$4,300		\$4,300
5.7	Project Catalog	\$3,680		\$3,680
Subtotal				\$38,860
Subtotal, Labor and Subcontractors				\$189,150
Task Allowance (5%)				\$9,458
Grand Total				\$198,608