

SCOPE OF SERVICES**Clearwater Beach Gas Pipeline Intracoastal Subaqueous Crossing Consulting Services****Project No. _____****December 15, 2025****GENERAL DESCRIPTION**

Clearwater Gas Services (CGS) selected AECOM Technical Services, Inc (AECOM) for the preparation of construction documents for the installation of two (2) new 8-inch gas pipelines that will cross the Intracoastal Waterway/Clearwater Bay to provide additional interconnections between the gas main system on the mainland and the system on the barrier islands. Each 8-inch pipe will be installed in a 16-inch casing pipe.

The northern crossing will begin at the intersection of Drew Street and North Osceola Avenue and will travel approximately 3,000 lf connecting to an existing main located along the Clearwater Causeway. The southern crossing will begin at the intersection of Jeffords Street and Druid Road and will travel approximately 6,000 lf connecting to an existing main located in Gulf Blvd. near Sand Key Park.

This Scope of Services sets forth the services, activities, responsibilities that will be performed by AECOM, and the Deliverables that will be prepared. The following summarizes this.

SCOPE OF SERVICES

The following scope of services is subdivided into tasks needed to prepare the construction documents, obtain the required permits, and assist the CGS with obtaining construction bids. Engineering services during the construction phase of the project are limited to the preparation of responses to contractor submitted Requests of Information (RFIs).

Task 1 - Project Management

AECOM will set up the project within our project management system to allow for the work to proceed. In addition, as part of this task, AECOM will provide the required project management activities such as communication and meetings with the CGS, staff management, invoicing, and progress reporting throughout the duration of this portion of the project. Monthly progress meetings as well as schedule updates are included. If needed progress meeting can be held bi-monthly.

Project Goals: Overall Management of the project

Project Deliverables: Monthly progress meetings, submittal of pay applications, submittal of schedule updates as needed, communication with CGS throughout the project and staff management.

Task 2 - Basis of Design Report (BoDR) and 30% Submittal**Task 2.1 Alignment Evaluation**

AECOM will meet with the CGS to discuss the proposed alternative alignments that were provided in our responses to the project RFQ to establish the conceptual crossing alignments. Next, AECOM will schedule meetings with the various municipalities and agencies that will be impacted by this project. These agencies will include:

- 1) City of Clearwater Public Works
- 2) Pinellas County Parks Department
- 3) SWFWMD*
- 4) FDOT
- 5) FDEP*
- 6) ACOE*

*Meetings to be combined with AECOM environmental staff Task 2.3

These meetings will be used to introduce the project to the respective agencies and to discuss any potential issues that may need to be addressed. It will also be used to establish permitting requirements.

Using the information gathered from the various agencies and CGS's preferences for pipe routing, the preliminary crossing alignment will be established.

Project Goals: Introduce project to stakeholders, regulatory agencies and right-of-way permitting agencies. Determine permitting requirements. Discuss routes for the two HDD crossings.

Project Deliverables: Meeting minutes from each meeting conducted.

Task 2.2 Geotechnical Investigation

AECOM, through our subconsultant Tierra, will perform a series of soil borings along the alignment of the pipe crossings to define the subsurface geotechnical conditions. The boring program will consist of four (4) upland borings (one near each connection point) to a depth of 100 feet, and six (6) borings in the Intracoastal Waterway/Clearwater Bay to a depth of 100 feet below the mudline. In addition, soil samples will be collected for laboratory analysis to determine a soil legend using the USGS soil classification system. The analysis will include:

- 1) Fines Content Analysis
- 2) Particle Size Distribution
- 3) Atterberg Limits
- 4) Natural Moisture Content
- 5) Organic Content
- 6) Unconfined Compression- Rock
- 7) Unconfined Compression- Cohesive Soil
- 8) Splitting Tensile
- 9) Undrained Triaxial Compression- Rock
- 10) Unconsolidated-Undrained Triaxial- Cohesive Soil
- 11) Cerchar Abrasivity
- 12) Slake Durability

The work performed will be summarized in a report and will be used as the basis for developing the initial vertical alignment for each crossing, as well as the specifications for the casing pipe and the horizontal directional drill.

Project Goals: Determine soil conditions and characteristics along each HDD crossing. This information will be used to conduct geotechnical calculations supporting the HDD designs.

Project Deliverables: Geotechnical Report summarizing soil conditions.

2.3 Initial Environmental Assessment

An initial environmental assessment will be performed to determine existing conditions and what, if any, wetlands or endangered species could be impacted by this project. Once this initial

evaluation has been performed, AECOM will conduct a pre-application meeting with FDEP, ACOE and SWFWMD to introduce the project and to establish permitting requirements.

Project Goals: Perform a site investigation of both HDD crossings to identify environmental areas and endangered species that could be impacted by the construction work. This task will be performed prior to initial meetings with environmental and regulatory agencies.

Project Deliverables: N/A

2.4 Survey and Utility Locates

AECOM, through our subconsultant CivilSurv, will conduct a survey of the proposed alignments. A detailed survey will be performed of the landside portions of the project. A bathymetric survey will also be performed to define the mudline of the Intracoastal Waterway/Clearwater Bay. Existing utilities located on the landside portion of the project will be located. A total of 60 Level A locates have been assumed. In addition, a Sovereign Submerged Lands (SSL) Sketch and Legal description meeting FDEP standards will be prepared for each crossing. For billing purposes, the total cost for this task will be based on the actual number of Level A locates actually performed.

Project Goals: complete survey and utility locating necessary for preparation of construction documents. Prepare SSL sketch and legal description for easements across Clearwater Bay.

Project Deliverables: AutoCAD DWG survey file and a verified utility spreadsheet for the Level A SUE services. Provide up to five (5) signed and sealed SSL easement sketches and legal descriptions. .

2.5 Conceptual Vertical Alignment

Utilizing the information obtained from the Geotechnical investigation and the Survey, AECOM will establish a vertical alignment for the two crossings. To determine this, a series of geotechnical calculations will be performed, these calculations include:

- 1) Borehole stability analysis
- 2) Borehole heaves/collapse analysis
- 3) Pipe pull back and stress analysis.

The goal of this analysis will be to:

- 1) Establish acceptable pipe materials for the crossings.
- 2) Establish vertical alignment required to minimize borehole collapse or frac-out.
- 3) Establish the need for a surface casing pipe.
- 4) Establish casing and carrier pipe specifications.

Project Goals: Establishment of horizontal and vertical alignment for each HDD crossing. Determine DR rating of casing and carrier pipe. Determine if any soil enhancements or surface casings are necessary.

Project Deliverables: No separate deliverable, but a detailed description of the work performed will be included in the Basis of Design Report

Task 2.6 Preliminary Opinion of Probable Construction Costs

A Class III level construction cost estimate will be prepared based on the conceptual design developed as part of this Task. The estimate will be developed based on AECOM's library of costs, using similar projects as a basis. The accuracy range of this estimate will be (-) 20% to

(+) 30%. It is understood that CGS will be providing the contractor(s) with piping, valves and fittings.

Project Goals: Establish a preliminary construction cost estimate for the project so it can be compared to available funding.

Project Deliverables: No separate deliverable, but a detailed description of the work performed will be included in the Basis of Design Report

Task 2.7 Basis of Design Report (BoDR) and 30% Design Submittal

The work performed in the previous tasks will be summarized in a BoDR. This report will provide a recommendation for horizontal and vertical alignment for the two crossings, the permitting requirements, and a preliminary construction cost estimate. A draft version of the report will be provided to CGS for review and comment. A workshop style meeting will be held to address CGS comments so that the report can be finalized. Once finalized, the BoDR will become the basis for preparing the construction documents.

Project Goals: Summarize work performed in Task 2, develop preliminary drawings detailing the proposed alignments for the HDD crossings, establish permitting requirements and establish preliminary construction cost estimate.

Project Deliverables: submit Draft Basis of Design Report to CGS for review and comment, address comments, finalize report and submit to CGS.

Task 3 - Detailed Design

Task 3.1 - 3.3 – 60%, 90% and Final Design Submittals

AECOM will prepare and submit to the CGS for review and comment 60%, 90% and Final design document submittals. The construction plans and specifications will detail the pipe installation and direction drill crossings. Each submittal will include plan and profile views of the pipeline, as well as updated construction cost estimate and maintenance of traffic details. Following each submittal, AECOM will meet with the CGS to discuss any comments the CGS may have. The finalized, ready for bid documents will include a formal Statement of Work to assist bidders.

Project Goals: provide CGS with progress submittals at the 60%, 90% and Final Design stages for CGS to review and provide comments. Submittals will include construction plan set, specification and an updated construction cost estimate.

Project Deliverables: progress submittals to CGS at 60%, 90% and Final design stages. Submittals can be electronic or hard copy.

Task 4 - Permitting

4.1 Prepare Permit Applications and Obtain Permits

Based on information obtained in Tasks 2 and 3, AECOM will apply for and obtain the following permits:

FDEP/SWFWM:	Application for an ERP
USACE:	National Permit SAJ-14 for Subaqueous Utility and Transmission Lines in Florida (SAJ-2005-09981)

To support the permitting activity, the AECOM Scientific Diving Team will conduct a submerged aquatic vegetation (SAV) survey. Based on previous experience, AECOM has assumed that state and/or federal agencies will require these features to be mapped and protected in the case of an inadvertent return during the horizontal directional drill (HDD). For the purposes of this estimate, AECOM has assumed that the survey for the northern crossing will be comprised of a footprint of 1,300 feet in length by 20 feet in width and the southern crossing is 6,200 feet in length by 20 feet in width. Transect lines will be spaced 10 feet apart and will run parallel to the proposed pipeline route.

Draft permit applications will be submitted to the CGS for review. Typically permit applications are submitted once the 90% design submittal has been approved. However, due to extensive review time for several of the environmental permits, they will be submitted once the 60% design submittal has been approved. Permits for the City of Clearwater, Pinellas County and FDOT will be handled by CGS.

The cost for obtaining the permits that AECOM is responsible for includes response to any RFIs that might be generated by the regulatory agencies as well as application modifications that may be necessary to obtain the permits.

4.2 Post Construction Services (if needed)

AECOM will perform a post construction sea grass survey if the grasses are disturbed by construction work as required by FDEP.

Project Goals: Prepare the appropriate permit application for each regulatory or environmental agencies, submit applications, address comments and obtain permits.

Project Deliverables: Each permit application will be submitted to CGS for review and comment prior to submitting them to the appropriate agency.

Task 5 - Bidding Phase Services

AECOM will provide technical support to the CGS during the bidding phase portion of the project. Our role during this phase will be limited to attendance at two Pre-bid meetings, and addressing technical questions submitted by bidders. All other work, such as review of bids with a recommendation for award and preparation of Conformed Drawings, will be performed by CGS.

Project Goals: Provide technical support to CGS during the bidding phase portion of the project.

Project Deliverables: Provide CGS with written responses to technical questions submitted by bidders.

Task 6 - Public Outreach and Engagement Meetings

AECOM will provide technical assistance to CGS in providing outreach type meetings to make the public aware of the upcoming project. Attendance at a total of three (3) meetings has been included in the project budget. It is assumed that CGS will be responsible for organizing and leading these meetings, with AECOM attending the meetings and providing technical support. This will be a Time and Materials task.

Project Goals: keep public informed on status of project via meetings scheduled by CGS.

Project Deliverables: provide graphics to support meetings as requested by CGS.

Task 7 - Limited Services During Construction

At the request of CGS, AECOM's services during the construction phase of the project will be limited to reviewing and responding to contractor submitted Request for Information (RFIs). For costing purposes, this will be limited to 16 RFIs in total for both projects. Other services such as attendance at the Preconstruction Conferences and monthly construction meetings, shop drawing reviews, pay application reviews, periodic site inspections, permit close out, and preparation of Record Drawings will be performed by CGS.

Project Goals: provide limited technical assistance to CGS during the construction phase of the project which is limited to developing responses to RFIs submitted by the selected contractor(s).

Project Deliverables: provide written responses to RFI's submitted by the selected contractor(s)

FEE SCHEDULE

This price includes all labor and expenses to be incurred by AECOM for the completion of these tasks for a Lump Sum amount of nine hundred and thirty four thousand dollars (\$934,000.00), with Task 2.4 being based on the number of Level A locates performed, Task 4.2 only being performed if sea grasses are disturbed by construction and Task 6 (\$8,000.00) being time and materials. A detailed breakdown is provided below:

Task	Labor Cost	Additional Labor costs	Subconsultant Services Revised	Fee Estimate
1.0	\$46,000.00			\$46,000.00
2.0				
2.1	\$44,000.00			\$44,000.00
2.2	0	\$5,000.00	\$210,000.00	\$215,000.00
2.3	\$12,000.00			\$12,000.00
2.4	0		\$174,000.00	\$174,000.00
2.5	\$35,000.00			\$35,000.00
2.6	\$21,000.00			\$21,000.00
2.7	\$62,000.00			\$62,000.00
3.0				
3.1	\$76,000.00			\$76,000.00
3.2	\$54,000.00			\$54,000.00
3.3	\$34,000.00			\$34,000.00
4.0				
4.1	\$85,000.00			\$85,000.00
4.2	\$50,000.00			\$50,000.00
5.0	\$8,000.00			\$8,000.00
6.0*	\$8,000.00			\$8,000.00
7.0	\$10,000.00			\$10,000.00
	\$545,000.00	\$5,000.00	\$384,000.00	\$934,000.00

*Time and Materials