

Attachment 1 - Scope of Work

Construction Management and Inspection Services for

W1810 164th St SW Transmission Main Connection

Project Description

W1810 164th St SW Transmission Main Connection

The work under this project includes construction of approximately 5,700 feet of new 30-inch ductile iron water transmission main and 4,900 feet of new 8-inch ductile iron water distribution main. The project also includes installation of water main appurtenances, abandonment of existing water distribution and transmission main, and surface restoration. The project is scheduled to begin construction in spring 2021 and last approximately 8 months.

The services for this project will include construction management and inspection services as required and detailed below:

Assumptions

The Consultant services for this project will include assisting the District with construction management and inspection services as required during construction of the W1810 164th St SW Transmission Main Connection Project. The level of effort shall be based upon the assumptions and detailed scope of work outlined below:

- The services detailed below are based on the services of one full time Construction Manager and one full time Construction Inspector as needed during the construction contract duration based on 8-hour days and night work in the areas shown in Attachment 2. An increase or decrease in the number of working days or hours affects the time the inspector is required to work on the project.
- There is potential that multiple crews may be utilized during construction. Consultant is encouraged to propose alternative staffing levels based on their approach to the project and demonstrate flexibility to accommodate different construction schedules proposed by the Contractor. This includes, but is not limited to, potentially providing a 2nd inspector.
- The Contractor will be providing a field office for use by the District and the Consultant. The field office will be equipped with a printer/copy machine, internet connection, desks, file cabinets, meeting room with table and chairs, and other items necessary to organize project documentation, track progress of the construction and to maintain good communication. The field office will be separate from the Contractor's field office.
- The District will have a separate agreement with the design team for consultation regarding submittal reviews, requests for information, design changes and conflicts.
- The vicinity of construction is generally split into two areas: west of I-5 and east of I-5. These areas are near each other and travel/coordination between the two areas is incidental to the work.
- The areas of construction are highly developed in terms of existing utilities, existing improvements, and residences along the alignments. Portions will be along roads with high traffic volumes.
- The work is within public right-of-way spanning two different jurisdictional agencies (WSDOT and Snohomish County).

- In order for the Contractor to complete the project on schedule, simultaneous construction activities at more than one location may be required. The Contractor's actual construction schedule is unknown at the time of the preparation of this scope of work. This scope of work assumes 8 months from NTP to final completion.
- The Consultant shall meet Washington State, Snohomish County, and Labor and Industries requirements for COVID-19 safety measures, including capability to participate in virtual meetings.
- Any meetings referenced in this Scope of Work may be held virtually or in person.

Scope of Work

Task 100 – Construction Management

This effort shall include the following elements:

- 101.0 Project Management Plan. The Consultant shall prepare a Project Management Plan that includes scope of work, task assignments and deliverables, responsibility matrix, communication protocols, budget, documentation and filing protocols, health and safety plan, and any other items as needed.
- 102.0 Monthly Consultant Invoices. The Consultant shall submit monthly consultant progress reports with monthly invoices to the District. The monthly reports shall include work completed, budget status, schedule variance, and risk status.
- 103.0 Monthly Contractor Pay Requests. The Consultant shall review and prepare Contractor Pay Requests on District standard form for District review and approval. The Consultant shall verify quantities, materials on hand, and any other pay items in the Contractor Pay Request.
- 104.0 Weekly Construction Progress Meetings. The Consultant's Construction Manager shall meet weekly virtually or on site with the District and the Contractor to discuss the Contractor's progress and Project issues. The Consultant shall prepare the agenda and draft and final meeting minutes. Assume 35 weekly meetings.
- 105.0 Safety Program. The Consultant shall develop a Safety Program for its staff which will include considerations for COVID-19. The Consultant shall also provide monthly coordination and administration of safety involving training all field personnel. This includes a monthly safety meeting for all Consultant staff to assure staff is adhering to all security and safety requirements in the field.
- 106.0 Monthly Project Team Meetings. The Consultant's Construction Manager shall attend monthly meetings with the District to update and discuss progress and issues with the Project. The Consultant shall prepare the agenda and draft and final meeting minutes. These meetings will be at the District offices. One "kick off" meeting prior to the preconstruction meeting and 8 monthly meetings are anticipated.
- 107.0 District Board of Commissioners Meetings. The Consultant's Construction Manager shall attend up to 2 District Board meetings to brief the Board on construction related issues if requested.
- 108.0 Daily Coordination. The Consultant's Construction Manager shall maintain on-going contact with the District's Construction Manager via informal meetings, telephone discussions, and e-mail. The nature of these communications is understood to mean activities for which the Construction Contractor is not involved.
- 109.0 Consultant shall participate in one community outreach meeting prior to construction. Consultant shall act as first point of contact for questions from property owners and the general public during construction.

Deliverables

- Project Management Plan
- Monthly Consultant reports and invoices.
- Monthly Contractor Pay Requests
- Meeting agendas and meeting minutes as described above.

Task 200 – Preconstruction Services

201.0 The Consultant shall attend a preconstruction meeting with District staff, Contractor, design team, agencies and utility stakeholders. The Consultant shall prepare an agenda in advance for District review and final meeting minutes.

Deliverables

- Preconstruction meeting agenda and meeting minutes.

Task 300 – Information Management and Document Control

301.0 Maintain Document Management System. The Consultant shall utilize an electronic web-based construction management system as determined by the District for electronic document management throughout the duration of the contract. This includes establishing requirements, processes and procedures for setting up, handling, securing, maintaining and archiving project documents to properly organize and preserve project records, transactions and communications. The District will be responsible for all subscription and service fees.

302.0 Document Tracking and Management. The Consultant shall identify, secure, maintain and control all field documents. This includes establishing an audit process to verify that documents are properly distributed to and available for the project team. Consultant shall assume that the construction documents will be audited.

303.0 Record (Red Line) Drawings. The Consultant shall review the Construction Contractor's record (red line) drawings throughout the duration of the project to provide up-to-date plans for the Project Team.

Task 400 – Technical Services

401.0 The Consultant will receive and track submittals from the contractor and forward the District's response to submittals. The District intends to take the lead role on submittal review and will request Consultant support on reviews as needed.

402.0 The Consultant will receive and track RFIs from the contractor and forward the District's response to RFIs. The District intends to take the lead role on request for information (RFI) questions relating to design and intent and will request Consultant support as needed.

403.0 Change Order Control. The Consultant shall develop change orders in coordination with the District and provide technical assistance to negotiate the change orders.

404.0 Change Analysis or Alternative Approach Document Preparation. The Consultant shall analyze potential changes and offer an alternative, if feasible. The Consultant shall also provide projections to include pending change orders, quantity projections, and other information.

Deliverables

- Submittal reviews and approvals as needed
- RFIs and responses as needed
- Prepared change orders to be executed by the District

Task 500 – Inspection Services

- 501.0 The Consultant will have primary responsibility for full time inspection. The District may provide limited inspection support. The Consultant shall provide comprehensive field inspection services that observe the technical conduct of the construction and include day-to-day contact with the Contractor and the District. On-site observation duties shall include observation for compliance with the conditions specified in the Construction Contract, permits, and temporary construction easements. Inspection time is based upon an 8-hour workday. Extended hours may be required for night or weekend work.
- 502.0 The Consultant shall prepare daily construction reports detailing the Contractor's operations performed for each day of work inspected by the Consultant. The inspection reports shall include a log of Contractor's equipment and staff and other items such as equipment not used, weather conditions, visitors and other pertinent information.
- 503.0 The Consultant shall assist the District to fulfill permit management responsibilities for work inspected by the Consultant for the following permits:
- a. WSDOT Utility Accommodation.
 - b. Snohomish County Right-of-Way.
 - c. Washington State Parks and Recreation Permit
 - d. DOE Construction Stormwater General Permit.
 - e. Any and all Traffic Control Permits
- 504.0 The Consultant shall ensure that the Contractor's activities are in compliance with the terms and conditions of permits including but not limited to:
- a. Proper notification to regulatory agencies prior to start of work.
 - b. Implementation of Temporary Water Pollution/Erosion Control Measures including required submittals and certifications.
 - c. Work is commenced and completed within the stipulated time frames.
 - d. Daily cleanup.
 - e. Permanent restoration.
 - f. Acceptance of the completed work from the regulatory agency as stipulated in the permit conditions.
- 505.0 The Consultant shall monitor the Contractor's activities with respect to construction activities on private property for work inspected by the Consultant during the course of construction. The Consultant shall ensure that the terms and conditions of any temporary construction easements are adhered to including but not limited to:
- a. Proper notification prior to start of work.
 - b. Work is commenced and completed within the stipulated time frames.
 - c. Daily cleanup.
 - d. Permanent surface restoration.
 - e. Contractor obtains fully executed Property Release forms to be signed and dated by both the Contractor and the property owner (easement holder).
- 506.0 The Consultant shall track quantities, prepare field records, and review Contractor's record (red-lined) drawings of work inspected by the Consultant during the course of construction.
- 507.0 The Consultant shall provide daily photographs of work inspected by the Consultant during the course of construction. Photographs shall be labeled with date taken and subject matter.

- 508.0 Upon substantial completion of work, the Consultant shall coordinate with the District and perform a project inspection and assist in developing a comprehensive 'punch list' of items to be completed. This will be issued with the Certificate of Substantial Completion. The Certificate of Substantial Completion will be issued by the District. Punch list follow-up shall be performed by the District with assistance from the Consultant until all items are complete and accepted.
- 509.0 The Consultant shall verify materials and provide coordination of material testing requirements which will be performed by the Contractor and review material test reports provided by the Contractor.
- 510.0 The Consultant shall track Contractor supplied labor equipment and materials for force account work inspected by the Consultant during the course of construction.

Deliverables

- Daily inspection reports electronically published within two days
- Preconstruction photographs – 1 electronic set
- Construction photographs – 1 electronic set
- Post construction (restoration) photographs – 1 electronic set
- Material test reports provided by the Contractor
- Executed property release forms
- Force account tracking documentation
- Punch lists

Task 600 – Post Construction Tasks

- 601.0 The Consultant shall organize and transfer all project documents to the District for permanent storage.

Task 700 – Additional Services

The services described under this task, and any other additional services requested by the District shall be performed only when authorized by the District in writing.

- 701.0 The Consultant shall provide engineering assistance as requested by the District.
- 702.0 The Consultant shall provide additional services resulting from changes in scope or design of the Project due to circumstances beyond the Consultant's control. Changes include, but are not limited to, changes in size, complexity, the schedule, character of construction, or method of financing which may include but not limited to:
- a. Investigations, meetings, and negotiations with the Contractor involving claims and legal complaints, or a significant amount of defective or rejected work, on an as needed basis.
 - b. Delinquency or insolvency of the Contractor or as a result of damage to the construction project caused by fire, flood, earthquake or other acts of God, all exclusive of additional work resulting from litigation.
 - c. Strikes, walkouts, or other acts of trade or labor unions or work required resolving disputes or goals involving minorities.
 - d. Significant delays or acceleration of the work by the Contractor.
 - e. Assistance to legal, financial, or other consultants engaged by the District beyond the services previously described.
- 703.0 The Consultant shall assist the District in the investigation of malfunctions, failures, or accidents during construction.