

SH 7A Lower Construction Administration

Scope of Work

**Region 4
November 14, 2019**

PROJECT NUMBER: ER 007A-023
PROJECT CODE: 20252
PROJECT LOCATION: SH 7 Lower Permanent Repair Project MP 19 - MP 33
Larimer County
CONTRACT TYPE: Project Specific
CONTRACT SUBJECT: Task Order 1 / Construction Management, Inspection, and Testing
Services

The Contract Administrator for this Contract will be:
Brian Varrella, US 34 Resident Engineer
Region 4, Boulder Residency

Mobile: (970) 373-6121

Active Day to Day administration and monitoring of this contract will be delegated to the
following CDOT employee:
Monte Malik, SH 7 Construction Manager / Project Engineer
Region 4, Boulder Residency

Mobile: (303) 916-1563

Scope of Work

This scope of work was prepared to provide CDOT with project management, inspection, and material testing services for the SH 7 Lower Construction Packages project in CDOT Region 4 (R4). The project is located on SH 7, in Boulder County, between Raymond and Lyons.

Work Duration

The time period for the work described in this scope of work will be from Notice to Proceed to December 31, 2023 or until 90 days after the project is accepted, whichever is earlier. This time period includes the duration of the construction plus pre and post construction activities as required. This will include the processing of all final documentation as directed by the CDOT Construction Manager/Project Engineer. Amount of consultant staff will be mutually agreed upon and closely coordinated with CDOT Construction Manager/Project Engineer. Work may be required night and/or day, on weekend, holidays, and/or on a split shift basis. Workweeks may be in excess of or less than the standard 40-hour week.

General Work Description

The consultant shall provide support to the CDOT project staff through assignment of the following personnel:

- 1 – Assistant Project Engineer (minimum 10 years CDOT project experience)
- 1 – Office Engineer (minimum 5 years CDOT project experience)
- 1 – Environmental Compliance Manager
- 0.5 – Field Engineer (minimum 10 years CDOT project experience)
- 1 – Roadway Rock Blasting Specialist (part time as needed)
- ~7 – Inspectors (approximate number, total number required will be adjusted to reflect the contractor's schedule and concurrence with CDOT Project Manager/Engineer)
- 1.5 – Materials Testers (minimum of one tester with a minimum 5 years CDOT experience with LIMS and CDOT Field Materials Manual)
- 2 – River Restoration Specialists (approximate number, total number required will be adjusted to reflect the contractor's schedule and concurrence with CDOT Project Manager/Engineer)

Consultant personnel responsibilities in assisting the CDOT Construction Manager/Project Engineer may include but not necessarily limited to:

Project Management:

- The Consultant Assistant Project Engineer will be in direct responsible charge of the day to day project work, as directed by the CDOT Construction Manager/Project Engineer and duties associated with CDOT contract administration.
- Supervision of project staff.
- Verbal and written correspondence with the Prime and Sub-Contractors.
- Inspection of materials and methods of construction to verify compliance with CDOT and contract specifications.
- Prepare monthly pay estimates.
- Review and approve Methods of Handling Traffic (MHT's).
- Monitor the project schedule and financial status.
- Resolve material and traffic control issues.
- Monitor Contractor EEO, DBE, and OJT contract requirements.
- Monitor Contractor compliance to PI specification.
- Pre-Construction and weekly progress meetings.
- Project documentation/data shall be electronic (including, but not limited to daily diaries, meeting agendas/notes, correspondence, typical CDOT forms, material testing, photos...)
- Provide data management system and coordination of electronic documentation into ProjectWise.
- Maintain project submittal register, RFI register, issues log, and track project correspondence.
- Check daily diaries.
- Update plans and specification for the As-Constructed plans.

- Develop CMO's for the CDOT Construction Manager/Project Engineer.
- Coordinate with the designer during construction for implementation of revisions to the plans as may be required.
- Notify the CDOT Construction Manager/Project Engineer immediately if hazardous, historical other unplanned material is encountered or developed on the project.
- Conduct a final inspection with the Contractor, Resident Engineer, CDOT Project Engineer, and CDOT Maintenance representative(s) upon substantial completion.
- Following the completion of all punch list items by the Contractor, conduct a final inspection with representative from the Contractor and CDOT to confirm the completion of all work.
- Prepare final pay estimate.
- Prepare monthly progress reports.
- Submit all deliverables required as detailed in the prime contract.
- Attend, comment, and review items or meetings associated with all SH 7 construction packages, as requested by CDOT Project Engineer.

Environment Compliance Management (ECM)

- The ECM will support the CDOT Construction Manager/Project Engineer in the field implementation of environmental mitigation commitments, federal, state, and local environmental permits, and partner agency requirements during construction.
- Manage field implementation of environmental mitigation commitments that have been incorporated into project plans and specifications or by reference in project plans and specifications that are assigned to CDOT Construction Manager/Project Engineer or Contractor.
- Provide daily inspections of project site and work being performed that relates to or may affect environmental commitments, specifications, and permits. Provide daily report to CDOT Construction Manager/Project Engineer outlining any practices or conditions that require approval or affect schedule and/or budget.
- Upload and/or ensure that Contractor or project staff upload environmental compliance forms and documentation (to be provided by CDOT R4) into ProjectWise as directed by CDOT R4.
- Participate in weekly progress meetings with Contractor and lead discussion of environmental topic.
- Provide and maintain monthly look ahead schedule of construction activities and corresponding environmental requirements using Contractor's project schedule, including providing notification to CDOT R4 Environmental Unit Manager as directed in plans and specifications when upcoming work requires R4 Environmental Unit oversight or survey, or regulatory and partner agency coordination of field visits, inspections, and approvals. The look ahead schedule will be updated weekly and discussed at the weekly progress meetings to ensure the Contractor implements the requirements in conjunction with or prior to construction activities.
- Conduct bi-weekly meetings with CDOT Construction Manager/Project Engineer, CDOT R4 Environmental Unit Manager, and others as directed by CDOT R4 to review construction activities previously performed, environmental compliance form and documentation submittals, and any outstanding environmental issues; preview monthly look ahead schedule, provide official notification to CDOT R4 Environmental Unit Manager of work outlined above (previous bullet) and discuss any changes in site conditions, permits, or activities that may affect the project schedule, budget, or environmental compliance status.
- Attend inspections and field visits with partner agencies and CDOT R4 Environmental Unit staff as requested by CDOT Construction Manager/Project Engineer.
- Provide immediate notification to CDOT Construction Manager/Project Engineer and CDOT Environmental Unit Manager as required in project communication plan when time sensitive and impactful environmental issues arise.
- Monitor and work closely with Contractor Erosion Control Management Inspector and/or SWMP Administrator to ensure adherence to specifications, plans, CDPS Stormwater Construction Permit, dewatering permit (if applicable) and activities, CDPS Permit/404 Permit coordination, and any other work that may affect stormwater management compliance.
- Attend CDOT R4 monthly stormwater inspections.
- Attend or conduct Environmental Pre-construction Conference, as directed by CDOT Construction Manager/Project Engineer.
- Attend final inspection and completion inspection to review environmental contract items, as directed by the CDOT Construction Manager/Project Engineer.

- Attend inspections (if any) by regulatory agencies (USACE, CDPHE, EPA, etc). Provide guidance to CODT Construction Manager/Project Engineer and Contractor in response to inspections.
- Observe and track implementation of the CDOT R4 provided Integrated Weed Management Plan and associated plans and specifications.
- Monitor construction activities for hazardous or contaminated materials encountered or created. Provide immediate notification to CDOT Construction Manager/Project Engineer when encountered and provide guidance/review of Contractor contamination mitigation plan.
- Provide daily guidance as needed to project personnel on implementation of environmental project specification and plans.
- Provide cost estimate review of environmental and stormwater pay items as requested by CDOT Construction Manager/Project Engineer.
- Provide plan and specification review as requested by CDOT Construction Manager/Project Engineer.

Daily Quality Control Inspections

- Inspect and document construction activities for conformance with the contract documents.
- Measure and record quantities of work elements constructed and document on Form 266.
- Supervise and document time and material work.
- Prepare daily diaries documenting contractor activities and relevant observations.
- Participate in weekly progress meetings with contractor, subs, utilities and other interested parties.
- Secure project documentation for the contractor.
- Maintain accurate notes reflecting actual construction details to be used in the preparation of as-constructed drawings.
- Monitor and document contractor payroll compliance.
- Monitor compliance with and take appropriate action to preserve safety on the project for all workers and traveling public in accordance with MHT's and the Manual of Uniform Traffic Control Devices.
- Perform initial, follow up, and final inspections of work in progress including interim and final measurements and coordination with Consultant Tester to ensure materials testing requirements are met.
- Promptly notify contractors, CDOT Construction Manager/Project Engineer and Consultant Assistant Project Engineer of non-compliance with the contract plans and specifications.
- Performance of special tests, investigation, or monitoring which are required to fulfill the intent of the CDOT inspection program.
- Assist in preparing responses to contractors' and suppliers' requests for information, submittals, change notices, claims, and correspondence.
- Day to day activities as assigned by the CDOT Construction Manager/Project Engineer and/or Consultant Assistant Project Engineer.

Materials Tester

- Direct, coordinate, supervise, monitor, manage and administer all materials sampling and testing to ensure that the required sampling, materials testing and documentation is obtained in a timely manner and maintained in accordance with the Materials Manual and Contract requirements to verify the quality of the work performed by the construction contractor
- Sample, test, inspect, and document all materials generated and produced on the project.
- Review project quantities on a monthly basis to ensure that sufficient tests have been performed for the material placed to date.
- Document and transport samples of any and all materials to the R4 Materials Laboratory and/or CDOT Central Laboratory that are required to be tested by CDOT.
- Prepare daily diaries documenting contractor activities and relevant observations.
- Any other services as requested by the CDOT Resident Engineer or the Consultant Project Engineer.

Conditions Applicable to all Consultant Personnel: Overtime/Travel/Pay/Commute Miles/Per Diem

Overtime hours will be paid by CDOT at the same rate as regular, non-overtime hours. Travel time will be paid (limited to one hour per day or actual commute time, whichever is less). Commuting mileage (limited to 120 miles

per day or actual round-trip commuting distance, whichever is less) will be paid. In lieu of payment for commuting mileage, CDOT will pay per diem in accordance with State fiscal Rules.

Future task orders may be issued as requested by CDOT. In order to balance workloads and accommodate CDOT priorities; other services may be required as needed and as approved by the Resident Engineer.