5. Scope of Work



Section 01	Section 02	Section 03	Section 04	Section 05	Section 06	Section 07	Section 08	Appendix A	Appendix B
Firm	Relevant	Key Personnel	Client	Scope of	Proposed	Work	Additional	SHN Team	SHN 2024
Description	Experience	Qualifications	References	Work	Budget	Schedule	Information	Resumes	Fee Schedule

Inspection and Materials Testing

SHN's familiarity with the City's needs, procedures, and staff will allow pre-construction assistance to progress smoothly and efficiently. We will continue reviewing and familiarizing ourselves with the project specifications, design plans, environmental constraints, and geotechnical investigation to prepare for construction. We will coordinate with City staff and Coleman Engineering as we review the design plans, geotechnical investigation/slope creek memorandum, and project specifications, and we will obtain any needed clarifications. We will also obtain and review all relevant environmental documents, including issued and pending Coastal Development Permits and/or exemptions, 401 and 404 permits, and the adopted Mitigated Negative Declaration to understand and prepare for project constraints. The SHN project team attended the December 12, 2023, bid walk with City staff to familiarize ourselves with the project terrain.

SHN's surveyors will coordinate with City of Fort Bragg staff, Coleman Engineering, and Project Contractor to identify survey control along the project footprint to verify the contractor's construction staking. The verification surveying will require a complete horizontally and vertically controlled CAD file of the Project site to provide our surveyors with the information needed to confirm the Project Contractor's staking. We anticipate that the CAD file will include the survey control points for the design of the Project. We understand that the Project Contractor has construction staking responsibilities and we will coordinate with the Contractor.

Field and laboratory data (Daily Inspection Records and Lab test) will be both bound in hard copy and submitted digitally to the City. Our approach to field inspections and documentation will be to continue procedures that have been successful with the City in the past, which is to provide reports that are comprehensive, clear, and timely. Our Inspectors will provide the required inspection documentation for the Project. The reports will be completed and distributed to the project team on a weekly basis, or as needed. We will document the following in our Inspection Records: construction activities, adherence to construction schedules, anticipated changes, important conversations, weather conditions, names of all workers, equipment used, hours of work, safety concerns or accidents, quality of work and materials, materials testing performed, environmental compliance considerations, a record of any other significant information, information for record drawings ("as-builts"), construction photos/videos, and a record of visitors to the site.

We will assign staff based in our Fort Bragg office for site visits when possible throughout construction. We will obtain materials samples and perform the laboratory testing for materials including determining in-place density of materials.

Use of our in-house certified materials testing laboratory will allow samples to be processed and handled properly. Our inspectors and field technicians are cross-trained and hold numerous certifications, so often a single person can perform tests and/or collect samples. This allows for a smooth and efficient workflow.



Submittal review will be timely, with our Resident Engineer consulting our staff and technical advisors when needed to verify adherence to project specifications. In our review of submittals, we will coordinate with the City and Contractor as needed and respond in a timely manner, and ensure submittals are compliant with the American Iron and Steel requirement.

SHN will use SHN's Caltrans, ASTM, and AASHTO certified lab located in Willits for testing materials. Relying on in-house lab and lab technicians provides continuity and uniformity in data and documentation. All testing and inspections will be performed in accordance with the appropriate Caltrans (CTM), ASTM test methods, or as otherwise specified in the contract documents and specifications. The results of all lab tests will be recorded and provided as part of the inspection record.

During the materials testing, we will compare maximum material density from the laboratory analysis to the in-place density indicated by the nuclear moisture density gauge. We will determine in-place density of the compacted materials using a nuclear moisture gauge in accordance with the appropriate Caltrans test method. Our inspector will complete an Inspection Record of all site inspections for project documentation.

Our construction inspector will verify that traffic control devices, where necessary to preserve emergency access and logging road functionality, are in place and consistent with a reviewed and approved Traffic Control Plan.

SHN's Construction Inspector and Resident Engineer are well versed in environmental compliance and specifically how it applies to projects in Fort Bragg. Stormwater inspections will be performed under the direction of SHN staff who hold QSD/QSP certifications and by CASQA-trained stormwater inspectors. We will perform all required stormwater inspections, record keeping, and report preparation needed for compliance with the SWPPP. We have extensive stormwater inspection experience and a history of successfully completing stormwater inspections for the City on past projects. Given the Project timeline and construction window, we anticipate the possibility of wet weather inspections. Our proximity to the Project site will allow us to be onsite when required by weather conditions or forecasts. We will respond quickly to unexpected weather events should they arise during construction.