

**THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
BOARD ACTION SUMMARY**

DEPT: Public Works

BOARD AGENDA:5.C.1
AGENDA DATE: October 1, 2024

SUBJECT:

Approval of Amendment No. 1 to the Work Authorization with NorthStar Engineering Group Inc., for Design Engineering Services for the Empire Storm Drain Trunk Project

BOARD ACTION AS FOLLOWS:

RESOLUTION NO. 2024-0543

On motion of Supervisor B. Condit Seconded by Supervisor Chiesa
and approved by the following vote,

Ayes: Supervisors: B. Condit, Chiesa, Withrow, C. Condit, and Chairman Grewal


Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

- 1) Approved as recommended
- 2) Denied
- 3) Approved as amended
- 4) Other:

MOTION:



ATTEST: ELIZABETH A. KING, Clerk of the Board of Supervisors

File No.

**THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
AGENDA ITEM**

DEPT: Public Works

BOARD AGENDA:5.C.1
AGENDA DATE: October 1, 2024

CONSENT:

CEO CONCURRENCE: YES

4/5 Vote Required: No

SUBJECT:

Approval of Amendment No. 1 to the Work Authorization with NorthStar Engineering Group Inc., for Design Engineering Services for the Empire Storm Drain Trunk Project

STAFF RECOMMENDATION:

1. Approve Amendment No. 1 to the work authorization with NorthStar Engineering Group, Inc., for design engineering services in the amount of \$60,400, for a new total not-to-exceed amount of \$361,620, for the Empire Storm Drain Trunk Project.
2. Authorize the Director of Public Works to execute Amendment No. 1 with NorthStar Engineering Group, Inc., in the amount of \$60,400, and to sign any necessary documents.
3. Authorize the Director of Public Works to take any appropriate action necessary to carry out the purpose and intent of these recommendations.

DISCUSSION:

On September 20, 2022, the Stanislaus County Board of Supervisors (Board) formally adopted the 2023 Budget for the Two-Year Budget Period ending on June 30, 2024. The 2023 Adopted Budget implemented the initial investment of \$15 million to establish the Building Community Infrastructure Fund (BCIF). The funds were intended to provide a dedicated resource for each member of the Board to utilize and address community infrastructure projects of priority in their respective districts, this was intended to benefit local communities and positively affect people's lives. The funding was budgeted in the Public Works department where the appropriate oversight, technical expertise, and guidance will be employed to manage projects and identify the potential for leveraging external funding streams for even greater benefit to the communities. Funding may be used for projects that provide a public benefit at locations in the unincorporated community, including sidewalks, roads, and related infrastructure improvements.

On February 28, 2023, the Board approved an Initial Project List for Fiscal Year 2023 Building Community Infrastructure Funds.

Staff worked with each of the Supervisors to identify the specific project(s) to be funded within the Supervisors' District. One of the projects that was identified on the Initial Project List is the Empire Storm Drain Trunk Project. This project is to provide design and construction of a storm drain collection line that would collect storm run-off for the Community of Empire. The preliminary pipeline alignment would be along the west side

of Santa Fe Avenue from north of SR 132 on E Street, south to a Modesto Irrigation District (MID) irrigation junction structure, just north of the Tuolumne River. All storm run-off would then discharge from the MID structure south to the Tuolumne River. This project was conceived many years ago to relieve localized flooding that has historically taken place in the Community of Empire. This project will not install collection systems for the entire community of Empire, but it will provide the backbone conveyance pipe that will transport the storm run-off to the Tuolumne River.

Staff negotiated a scope and fee with NorthStar Engineering Group Inc., for the design engineering portion of the Empire Storm Drain Trunk Project, through the On-Call Agreement for Civil Engineering Services between the County and NorthStar Engineering Group Inc., dated August 30, 2022 (Board Resolution No. 2022-0456). The Board approved an initial Work Authorization (task order) on March 26, 2024.

At this time, Amendment No. 1 to the initial Work Authorization with NorthStar Engineering Group, Inc., will expand the effort of their design work to include improvements to Area 1B of the Community of Empire, which lies south of State Route 132, east of Santa Fe Avenue. These additional efforts include additional topographic field survey work, storm drain design, and supportive geotechnical field explorations.

Staff recommends authorizing the Public Works Director to sign this Amendment No. 1 to the Work Authorization to allow NorthStar Engineering Group, Inc., to proceed with this additional field and design work for the Empire Storm Drain Trunk Project.

The project is estimated to be ready to be listed for construction bids in early 2025, with construction commencing in the spring or summer of 2025.

POLICY ISSUE:

Public Contract Code section 20137 requires the Board of Supervisors' approval to amend a contract exceeding ten percent of the original agreement.

FISCAL IMPACT:

The cost associated to perform the additional field surveying, design engineering, and geotechnical field explorations for the Empire Storm Drain Trunk Project is \$60,400. This will bring the overall Work Authorization budget to \$361,620. This project is funded with District 5 Building Community Infrastructure Funds (Board Resolution No. 2023-0089). The Public Works Community Infrastructure Projects capital project budget unit includes a budget of \$3 million for the Empire Storm Drain Trunk Project. Therefore, there are sufficient funds in the capital project budget to fund this increase.

BOARD OF SUPERVISORS' PRIORITY:

The recommended actions are consistent with the Board's priorities of *Delivering Efficient Public Services* and *Enhancing Community Infrastructure* by delivering this improvement project.

STAFFING IMPACT:

Existing Public Works staff is overseeing the work related to this project.

CONTACT PERSON:

David A. Leamon, Public Works Director

Telephone: (209) 525-4130

ATTACHMENT(S):

1. Amendment No. 1 - NorthStar Engineering Group, Inc.

WORK AUTHORIZATION – AMENDMENT #1

**FOR ON-CALL LAND SURVEYING & CIVIL ENGINEERING SERVICES FOR THE EMPIRE
STORM DRAIN TRUNK PROJECT**

Date: August 20, 2024

Work Authorization – Amendment #1 for On-Call Land Surveying & Civil Engineering Services for the Empire Storm Drain Trunk Project

Agreement: Agreement dated September 12, 2022, between County of Stanislaus and NorthStar Engineering Group, Inc.

Work Authorization #: PW-2024-01.1

Consultant: NorthStar Engineering Group, Inc.

Project Title: Empire Storm Drain Trunk Project

Project Address: Modesto, CA

Name of Owner: County of Stanislaus – Department of Public Works

1 **Consultant:** NorthStar Engineering Group, Inc

2 **Agreement:** This Work Authorization - Amendment #1 is entered into as of **October 1, 2024**, in accordance with the terms and conditions of that certain Agreement between the County of Stanislaus and NorthStar Engineering Group, Inc. dated **September 12, 2022**, the terms and conditions of which are incorporated herein by this reference.

3 **Project Description:** The Empire Storm Drain Trunk Project includes the design and construction of a storm water conveyance system from the community of Empire, south to the Tuolumne River.

4 **Work of the Contract:** Provide the Services for this Amendment #1 described in Appendix A attached hereto and incorporated herein.

5 **Contract Time:** Services are to be completed as follows:

Services will be authorized upon execution of this Work Authorization and will continue until completed.

6 **Contract Sum:** The amount to be paid by the County of Stanislaus for all Services under this Work Authorization – Amendment #1 shall NOT EXCEED (unless amended through the agreement): **\$60,400**, payable in accordance with the following schedule:

Payments will be made monthly per the Professional Services Agreement dated 09/12/22.

7 **Project Manager:** Consultant’s Project Manager for Services under this Work Authorization is John Ellis.


8 **Key Personnel:** In addition to Project Manager, Consultants’ Key Personnel for Services under this Work Authorization are: Corey Walker and Tom Geiss

9 **Funding Source(s):** 2260-0040506-84020; Project Number: 230020

10 **Board Approval:** Board of Supervisors Approval Date: September 12, 2022; Board Agenda Item: 4.B.2

County of Stanislaus

By: David A. Leamon, P.E.
Director of Public Works



NorthStar Engineering Group, Inc.

By: Anthony Cannella, P.E.
President

APPENDIX A

SCOPE OF SERVICES – AMENDMENT #1



**AMENDMENT #1
FOR ADDITIONAL PHASE 1B AREA
STANISLAUS COUNTY
EMPIRE STORM WATER SYSTEM
STANISLAUS, CA
JULY 23, 2024**

1. ADDITIONAL RESEARCH AND COORDINATION, MAPPING, AND TOPOGRAPHIC SURVEY FOR PHASE 1B AREA

- A. Research County records for Subdivision Maps, Parcel Maps, and Records of Survey near the subject property. Prepare calculations of the properties and Right-of-Ways.
- B. Review the Rights-of-Way base map provided for the streets included in the project limits. Review the current record rights-of-way shown in the County's database and record maps and update the right-of-way base map to reflect the current conditions. This Scope of Work does not include procurement or consideration of Preliminary Title Reports, deeds, and information that the Title Reports may provide for each parcel of land located along the project corridor.
- C. Perform a horizontal control network survey to establish horizontal control points necessary to perform a Topographic Survey and for use at time of construction. The horizontal control network will be established utilizing the control from the previous surveys performed for the project. The primary control Survey will establish control points that are strategically located to provide optimal position for the Topographic Survey and future construction staking control. Additional control points will be set outside of the limits of construction at each intersection during the Topographic Survey to ensure that two control points with clear line of sight will be available after the demolition of existing improvements.
- D. Review the topographic survey provided with the project to confirm completeness. Perform a Topographic Survey to update the survey provided with current improvements necessary for the design of the proposed storm drain improvements. The Topographic Survey will be limited to the street improvements within the Phase 1B area only. The survey will also include existing utility improvements installed since the initial topographic survey was completed.
- E. Prepare an electronic Topographic Drawing in 2020 AutoCAD Civil 3D format. The electronic Topographic file will include line work, symbols, surface model, 1-foot contours, and all Survey points. All text and blocks will be sized appropriately for 20 scale final drawings.

LUMP SUM - \$6,760.00

2. ADDITIONAL CIVIL ENGINEERING CONSTRUCTION DOCUMENTS AND SPECIFICATIONS FOR PHASE 1B AREA

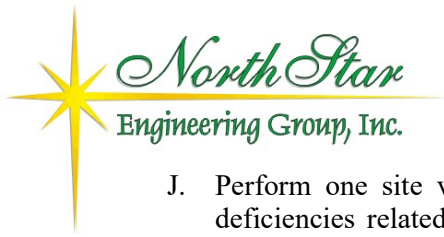
- A. Prepare an off-site base plan for the project site which includes only storm water improvements and missing curb and gutter located within the Empire Phase 1B area only. If off-site improvements extend beyond the limits described in this project, additional fees will be required. Any modifications to the approved off-site public base plan will require additional fees.
- B. Identify additional demolition requirements within the Phase 1B Area and prepare a Demolition Plan with notes, call-outs, and specifications.

- C. Design Grading and Drainage Plans for off-site street improvements for the curb and gutter located within the Phase 1B area only utilizing the approved base plan.
- D. Design storm drainage for the Empire Phase 1B Area only. Storm Drainage design will include stubs for future curb inlets, manholes and storm drainage piping conveying run-off to existing public facilities to achieve a positive drainage system. The storm drainage design included the design of a storm water filtration system.
- E. Call out additional striping and signage within the Phase 1B Area per the California MUTCD within project limits. Existing striping removed or impacted by proposed storm water improvements will be replaced.
- F. Prepare 65%, 90%, and 100% Off-Site Public Improvement Plans for Phase 1B Area per Agency Standards that will include a Cover Sheet, Notes-Specification Sheet, Construction Detail Sheet(s), Topography Plan(s), Demolition Plan(s), Dimension Plan(s), Grading and Drainage Plan(s), Signage and Striping Plan(s), Storm Drainage Plan(s), Profile(s), and Erosion Control Plan(s). Submit an electronic copy and a minimum of 3 sets of 11x17 plans, specifications, and estimated of the Off-Site Public Improvement Plans to the Agency for review and comment. Make requested Agency corrections to the Off-Site Public Improvement Plans.
- G. Provide Project Specifications for the Phase 1B Area for the 90% and 100% submittal packages in Microsoft Word. Project Specifications will be related to the Civil Engineering improvements and provided to the County to include in the overall project documents. The County will provide the front-end boiler plate specification templates for the Civil Engineer to utilize and modify for the project.
- H. Prepare an Engineer's Estimate and Bid Quantity for bidding purposes for the 90% and 100% submittal packages only to include the Phase 1B Area . One Engineer's Estimates and one Bid Quantity Sheet will be provided for the project at the 90% and 100% phase of the project.

LUMP SUM - \$18,420.00

3. ADDITIONAL BIDDING ASSISTANCE, CONSTRUCTION ADMINISTRATION AND RECORD DRAWINGS FOR PHASE 1B AREA

- A. Attend one pre-construction/field project kick-off meeting.
- B. Provide supplemental instructions and clarifications to bidders, as necessary.
- C. Produce addendums to modify the bid documents (plans and specifications), as required.
- D. Respond to Contractor's Requests for Information (RFI) during the bidding process.
- E. Respond to Contractor's Requests for Information (RFI) during the course of construction.
- F. Produce addendums to modify the construction documents (plans and specifications), as required to address unforeseen conditions that arise during construction.
- G. Review and process submittals and shop drawings from Contractor.
- H. Assist in determining and processing request for information and change orders.
- I. Perform periodic field visits at the major construction stages of the project to answer construction questions.



- J. Perform one site visit after completion of construction and prepare one 'punchlist' to address visible deficiencies related to the Civil Drawings. Perform one follow up visit after deficiencies are addressed. Record Drawing preparation and review of Contractor field revision documents (total of two site visits).

TIME AND MATERIALS NOT TO EXCEED - \$4,720.00

4. GEOTECHNICAL INVESTIGATION

- A. Geocon Consultants, Inc. will provide Geotechnical Investigation services per the attached Proposal.

LUMP SUM - \$29,500.00

5. ADDITIONAL SERVICES

- A. Geocon Consultants, Inc. will provide review services as needed per the attached Proposal.

TIME AND MATERIALS NOT TO EXCEED - \$1,000.00

GRAND TOTAL FOR AMENDMENT #1 - \$60,400.00

EXCLUSIONS:

- 1. Any task not listed in the above Scope of Work.
- 2. Exclusions from Contract and Change Orders Still Apply.



Client's Initials _____ Consultant's Initials _____

RATE SCHEDULE

Engineering:

PRINCIPAL / DIRECTOR	\$245.00
CIVIL ENGINEER	\$200.00
PROJECT MANAGER	\$200.00
DESIGNER III	\$175.00
DESIGNER II	\$165.00
DESIGNER I	\$155.00
DRAFTER / CAD III	\$140.00
DRAFTER/CAD II	\$130.00
DRAFTER/CAD I	\$120.00

Surveying:

PRINCIPAL / DIRECTOR	\$245.00
LAND SURVEYOR	\$200.00
LAND SURVEYOR ASSISTANT	\$165.00
SURVEY CREW COORDINATOR	\$165.00
ONE-MAN SURVEY CREW	\$220.00
TWO-MAN SURVEY CREW	\$295.00

Planning:

PRINCIPAL	\$245.00
PLANNER	\$200.00
ASSISTANT PLANNER	\$165.00

Field Services:

CONSTRUCTION OBSERVATION / QSP INSPECTOR / QSD	\$205.00
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Administration:

CLERICAL	\$95.00
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Overtime and Saturday work will be billed at time and a half and Sunday work will be billed at double time.
Expedited Project Schedule will be subject to increased rates, provided upon request.

Materials will be billed at cost plus 10%

The above rate schedule is effective through December 31, 2024 and is subject to adjustment January 1, 2025.



Proposal No. SA-24-0927-S-GT
May 22, 2024
Revised July 23, 2024

VIA ELECTRONIC MAIL

Corey Walker, PE, LSIT, QSD/QSP
NorthStar Engineering Group, Inc.
620 12th Street
Modesto, California 95354

Subject: PROPOSAL FOR GEOTECHNICAL INVESTIGATION
EMPIRE IMPROVEMENTS PROJECT
EMPIRE, STANISLAUS COUNTY, CALIFORNIA

- Reference: 1.) *Geotechnical Services Report, Proposed Empire Improvements Project, Stanislaus County, California*, prepared by Kleinfelder West, Inc., File No. 89759.G01, January 10, 2008.
- 2.) *Improvement Plans for Empire Improvement Project Phase 1B, Stanislaus County, Empire, California*, prepared by Stanislaus County, July 31, 2013.

Mr. Walker:

In accordance with your request, we are pleased to present this proposal to perform a geotechnical investigation for the storm drain and pavement improvements project for a portion of Santa Fe Avenue, including F Street, South G Street, Sunshine Court, and an alley way on the east side of Santa Fe Avenue in Empire, Stanislaus County, California. The project area is generally bordered by the BNSF railroad on the west, Yosemite Boulevard on the north, the Tuolumne River on the south, and the east side of Santa Fe Ave and/or Sunshine Court.

We understand that Kleinfelder, Inc. previously prepared a geotechnical report for a similar project in 2008 (Ref. 1), which included the current project area. Project plans for the project were subsequently prepared by Stanislaus County in 2013 (Ref. 2). However, the proposed improvements have not been constructed and given the dated nature and limited coverage of the project area in the referenced report, we understand that additional geotechnical investigation is necessary. To aid in preparing this proposal, we reviewed the previous geotechnical report (Ref. 1) and improvements plans (Ref. 2).

The project consists of installing approximately 6,700 linear feet of new storm drain pipe and removal and replacement of the existing pavement section within the project area. On Santa Fe Avenue, the project will install approximately 700 linear feet of 30- to 36-inch storm drain and 4,500 linear feet of 66-inch horizontal drain. On F Street, South G Street, Sunshine Court, and the alley way, the project will install a total of approximately 1,500 linear feet of 18-inch storm drain. The horizontal drain will consist of a perforated corrugated metal pipe bedded, shaded, and partially backfilled with crushed rock which will be designed to allow infiltration of the runoff into the soil. The material of the other storm drain pipes is unspecified. We understand that the storm drain pipes will be buried on the order of 10 to 15 feet below the proposed finished grade (similar to existing), and the horizontal (infiltrating) drain will be buried on the order of 20 to 30 feet below the proposed finished grade. The approximate project limits are highlighted in red and blue in Figure 1 below. Associated improvements will include several manholes along the storm drain alignments. The project will also remove and/or abandon-in-place approximately 3,900 linear feet of an existing 36-inch storm drain on Santa Fe Avenue.

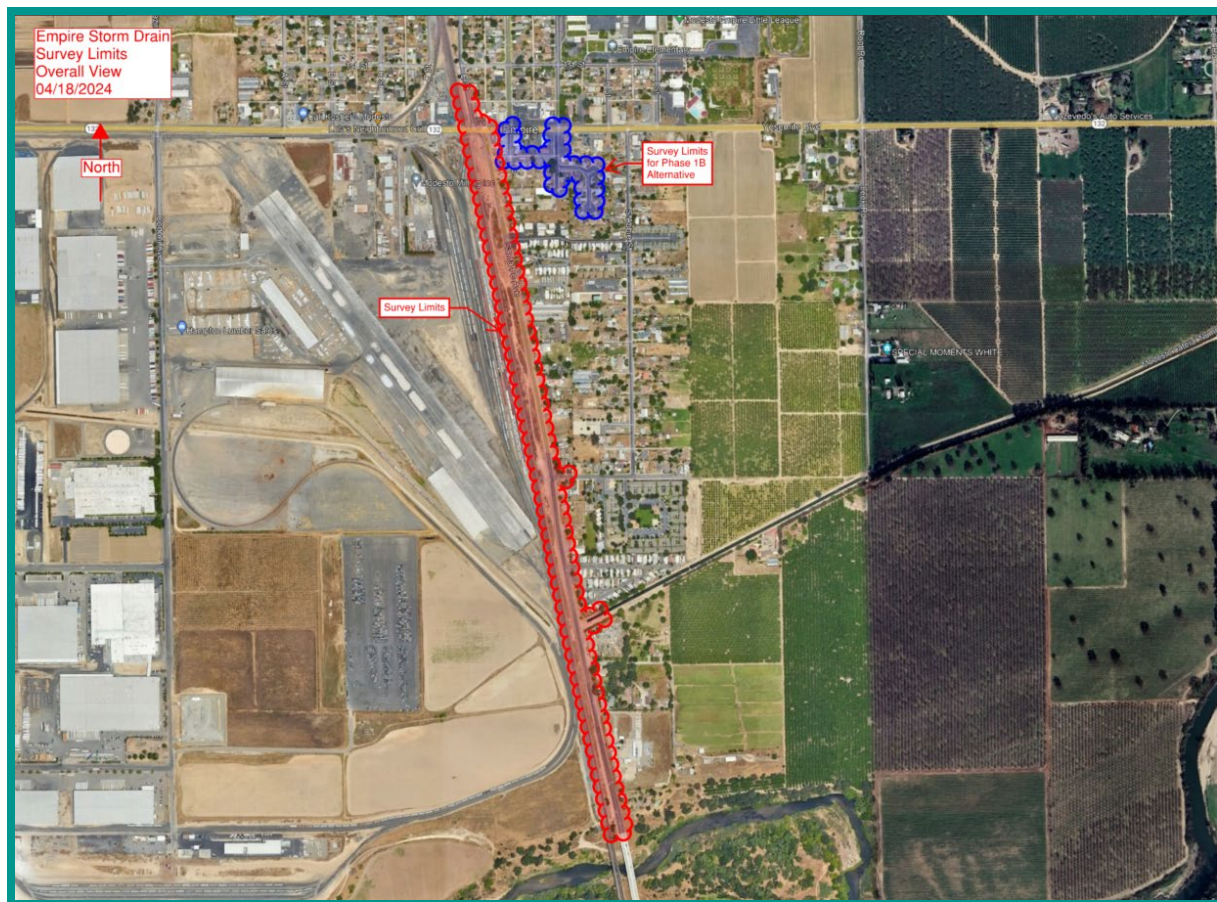


Figure 1 Approximate Project Limits

The purpose of our services will be to evaluate the subsurface soil and geologic conditions along the project alignment and provide conclusions and recommendations relative to the geotechnical aspects of designing and constructing the project as presently proposed. Our investigation will include a field exploration program, infiltration testing, geotechnical laboratory testing, engineering analysis, and report preparation.

SCOPE OF SERVICES

Based on our understanding of the project, we will perform the following scope of services:

Task A – Geotechnical Investigation

- Perform a limited geologic/geotechnical literature review to aid in evaluating the geologic and geotechnical conditions in the project area, including Kleinfelder, Inc.'s previous geotechnical report (dated January 10, 2008) which included three 25- to 30-foot-deep borings within the current project area. We will reference subsurface and geotechnical laboratory testing information from the previous report that is pertinent to the current project and use it to supplement our geotechnical investigation.
- Perform a site reconnaissance to determine access and mark out the proposed exploration locations.
- Notify subscribing utility companies via Underground Service Alert (USA) a minimum of two working days (as required by law) prior to performing exploratory excavations at the site.
- Apply for, pay the required fees, and obtain a drilling permit from the Stanislaus County Department of Environmental Resources (SCDER).
- Apply for and obtain an encroachment permit from Stanislaus County. We assume that any fees will be waived by the County for this project.
- Perform five (5) exploratory borings (three borings on Santa Fe Avenue and two in the "blue" area comprised of the alley and other streets) using a truck-mounted drill rig equipped with solid flight and hollow-stem augers to depths of 15 to 30 feet, or refusal if shallower.
- Perform two (2) infiltration tests within two of the borings on Santa Fe Avenue using an Aardvark permeameter at depths ranging from 20 to 30 feet, depending on location, to aid in the design of the proposed horizontal drain. We assume that we can complete this work in a single mobilization.
- Provide necessary traffic control measures during our field exploration activities.
- Measure the existing pavement section material thicknesses at each boring location.
- Obtain representative soil samples for the exploratory borings.
- Measure the depth to groundwater in each boring location, if encountered.
- Log the borings in accordance with the Unified Soil Classification System (USCS).
- Upon completion, the borings will be backfilled in accordance with SCEDR permit requirements and the surface restored with high-strength rapid set concrete dyed black. Excess drill cuttings, if any, will be spread within unpaved portions of the City right-of-way. We assume that saw cutting and patching our boring locations with hot-mix asphalt (HMA) is not required due to future construction of the proposed improvements and therefore have excluded this effort from our fee estimate. If saw cutting and HMA patching is required, a revision to our scope and fee will be required for this project.
- Perform laboratory testing to evaluate the index and engineering properties of the soils encountered.

- Analyze the field and laboratory testing data and develop geotechnical recommendations and design parameters with respect to open-cut pipeline installation and new pavement sections. A summary report with our findings, conclusions, and recommendations will be prepared and the report will include, but not be limited to, the following:
 - Site plan showing the locations of the exploratory borings, including previous borings considered pertinent to the current project;
 - Description of site geology;
 - Logs of the exploratory borings, including depth to groundwater (if encountered);
 - Laboratory test results;
 - Infiltration test results and recommended design infiltration rates(s);
 - Anticipated excavation characteristics;
 - Temporary excavation and shoring conditions;
 - Utility trench excavation and backfill recommendations;
 - Screening-level soil corrosion potential; and
 - Pavement structural section design recommendations.
- Submit a draft report for your review. Any comments will be addressed prior to finalizing the report and one electronic copy (PDF format) of our final report will follow.

Task B – Plan Review and Consultation during Final Design

We will review the progress project plans and specifications to verify that our recommendations have been properly implemented and/or to provide additional recommendations, if necessary.

Task C – Construction Services

To maintain continuity of geotechnical interpretation, we recommend that we be retained to provide geotechnical testing and observation services during construction. Our testing and observation services are important to verify that conditions encountered during grading/earthwork are similar to those encountered during our investigation, and that our recommendations have been properly implemented. Our experience indicates that maintaining the same Geotechnical Engineer of Record throughout design and construction significantly reduces the potential for contractor change orders. We will prepare a cost agreement for construction services once a general project construction schedule has been established.

PROPOSED SCHEDULE

The following approximate schedule is anticipated for the project:

<u>Task</u>	<u>Completion Milestone</u>
Coordination, USA, Permitting	Weeks 1-2
Field Exploration, Laboratory Testing	Weeks 2-4
Engineering Analysis, Report Preparation	Weeks 4-6

We will strive to expedite this schedule if possible; however, we are constrained by drilling subcontractor availability.

PROPOSED FEES

We propose to perform the scope of services described herein for the following fees:

Services	Fee
Task A – Geotechnical Investigation	\$29,500 (Lump Sum)
Task B – Plan Review/Consultation	\$1,000 (T&M, NTE)
Task C – Construction Services	TBD*
<i>*We will prepare a cost agreement for construction services once a project construction schedule has been established.</i>	

Our fees are based on our *2024 Schedule of Fees/Terms and Conditions*, which is incorporated into and made a part of this proposal, and current subcontractor rates. If we encounter unforeseen conditions, or if we experience delays or circumstances beyond our control, we will notify you immediately to discuss modifications to the scope of services and/or project fees.

We prepared this proposal with the understanding that this is a prevailing wage project; however, Skilled and Trained Workforce Requirements are **not** applicable. If Client should conclude the foregoing understanding is incorrect, please so advise us in writing immediately. If failure to so advise us results in the imposition of fines, penalties, claims or damages against us, Client will reimburse us for all costs and expenses.

CONTRACT EXECUTION

If the contents of this proposal meet with your approval, please issue a *Professional Services Agreement* authorizing our services.

ASSUMPTIONS/LIMITATIONS

We assume the following:

- Client will coordinate site access/permission to enter.
- The site is accessible to truck-mounted drilling equipment.
- Fieldwork will be allowed during regular daytime business hours, Monday through Friday.
- Spreading excess drill cuttings in unpaved City right-of-way will be acceptable.
- The geotechnical investigation may require heavy equipment to access various paved and unpaved areas within the project limits. While we will attempt to avoid ground surface disturbance, there may be ruts or other disturbances/damage in the accessed areas. We are not responsible for restoring these areas to pre-existing conditions.
- Site plans and/or as-built plans provided for our use will show the locations of all underground utility lines and structures. We will not be responsible for damage to any such lines or structures that are not shown accurately on the plans provided to us or properly marked by USA subscriber companies.
- The scope of services detailed in this proposal does not include the evaluation or identification of environmental contamination. If environmental contamination is encountered, we have the experience and expertise to provide rapid assessment and remedial action, if required.

We look forward to working with you and providing continuing geotechnical services on this project. Please contact us if you have any questions regarding this proposal or if we may be of further service.

Respectfully,

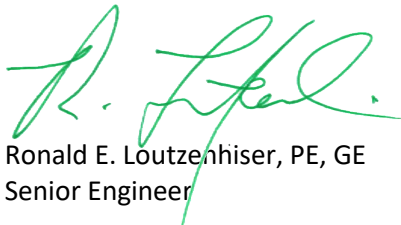
GEOCON CONSULTANTS, INC.



Victor M. Guardado, PE
Project Engineer



Jeremy J. Zorne, PE, GE
Senior Engineer



Ronald E. Loutzenhiser, PE, GE
Senior Engineer

Attachments: 2024 Schedule of Fees



2024 SCHEDULE OF FEES

PROFESSIONAL SERVICES

Engineering Field Technician/Special Inspector I	\$90/hr.
Engineering Field Technician/Special Inspector II	100/hr.
Engineering Field Technician/Special Inspector III/Equipment Operator.....	110/hr.
Laboratory Technician/Engineering Assistant	95/hr.
Senior Laboratory Technician	110/hr.
Laboratory Supervisor	140/hr.
Word Processor/Technical Editor/Drafter	95/hr.
Research Assistant/Technical Illustrator/Senior Drafter	110/hr.
Project Coordinator/GIS Specialist	120/hr.
Staff Engineer/Geologist/Scientist/Field Supervisor	135/hr.
Senior Staff Engineer/Geologist/Scientist	145/hr.
Project Engineer/Geologist/Scientist/Construction Supervisor	155/hr.
Senior Project Engineer/Geologist/Scientist	170/hr.
Senior Engineer/Geologist/Scientist/Certified Industrial Hygienist	185/hr.
Associate Engineer/Geologist/Scientist	210/hr.
Principal Engineer/Geologist/Scientist/Litigation Support	240/hr.
Deposition or Court Appearance	425/hr.
Attorney Fees (General)	400/hr.
Overtime (>8 to 12 hrs.), Saturday, and Night Rate	1.5x Regular Hourly Rate
Overtime (>12 hrs.), Sunday, and Holiday Rate	2x Regular Hourly Rate
Minimum Professional Fee	\$500/Project
Minimum Field Services Fee (per day or call-out)	4 Hours
Prevailing Wage Surcharge per California Labor Code §1720, et seq.	\$50/hr.

TRAVEL

Personnel	Regular Hourly Rate
Subsistence (Per Diem)	\$200/day
Vehicle Mileage	0.75/mile

EQUIPMENT & ANALYTICAL TESTS

Nuclear Gauge	Included in Technician Hourly Rate	Level D PPE/Decon Rinse Equipment	\$50/day
Pick-up Truck	\$150/day	pH/Conductivity/Temperature Meter	60/day
Equipment Truck	225/day	55-gallon drum	90/ea.
Direct-Push Rig/Operator	200/250(PW)/hr.	TPHg (EPA 8015M)	90/ea.
Direct-Push Sample Liner	10/ea.	TPHd/mo (EPA 8015M)	85/ea.
Equipment Trailer	100/day	Fuel Oxygenate Compounds (EPA 8260B)	135/ea.
Wenner 4-Pin Earth Resistivity Meter	150/day	Volatile Organic Compounds (EPA 8260B)	165/ea.
Coring Machine (concrete, asphalt, masonry)	250/day	Semi-Volatile Organic Compounds (EPA 8270)	300/ea.
Dynamic Cone Penetrometer	250/day	CAM 17 Metals (EPA 6010B)	210/ea.
Dilatometer (DMT) Test Equipment	800/day	Single Metal (EPA 6010B)	45/ea.
Generator or Air Compressor	150/day	STLC or TCLP Extraction	80/ea.
GPS Unit	160/day	Soil pH (EPA 9045C)	30/ea.
Drive-Tube Sampler or Hand-Augur	50/day	Organochlorine Pesticides (EPA 8081)	130/ea.
Soil Sample Tube (Brass or Stainless)	12/ea.	Naturally Occurring Asbestos (CARB 435)	125/ea.
Water Level Indicator	50/day	Asbestos PLM	25/ea.
Battery-Powered Pump	80/day	Asbestos 1,000-pt Count	100/ea.
Photo-Ionization Meter	150/day	48-hr/24-hr Turnaround Time	60%/100% surcharge

LABORATORY TESTS

COMPACTION CURVES

4-inch mold (D1557/D698)	\$250/ea.
6-inch mold (D1557/D698)	250/ea.
California Impact (CAL216)	250/ea.
Check Point	100/ea.

SOIL AND AGGREGATE STABILITY

Resistance Value, R-Value (D2844/CAL301)	\$320/ea.
R-Value, Treated (CAL301)	340/ea.
California Bearing Ratio (D1883)	175/pt.
Stabilization Ability of Lime (C977)	210/ea.

SOIL AND AGGREGATE PROPERTIES

#200 Wash (D1140/C117)	\$90/ea.	Moisture Determination, tube sample (D2216)	\$20/ea.
Wet Sieve Analysis to #200 (D422/CAL202)	125/ea.	Moisture Determination and Unit Weight (D2937)	40/ea.
Dry Sieve Analysis, 1.5"+ Aggregate (D6913)	350/ea.	Atterberg Limits: Plasticity Index (D4318)	210/ea.
Hydrometer Analysis (D422)	175/ea.	Sand Equivalent (D2419/CAL217)	100/ea.
Sieve Analysis with Hydrometer (D422)	200/ea.	pH and Resistivity (CAL643)	125/ea.
Specific Gravity, Soil (T100)	100/ea.	Sulfate Content (CAL417)	95/ea.
Specific Gravity Coarse Aggregate (C127)	75/ea.	Chloride Content (CAL422)	55/ea.
Specific Gravity Fine Aggregate (C128)	100/ea.	Organic Content (D2974)	85/ea.
		Cut/Extract Shelby Tube	100/ea.

SHEAR STRENGTH

Unconfined Compression (D2166)	\$110/ea.
Direct Shear (3 points) (D3080)	350/ea.
Unconsolidated-Undrained Triaxial Shear (D2850)	135/pt.
Unconsolidated-Undrained Triaxial Staged (D2850)	185/ea.
Consolidated-Undrained Triaxial Shear (D4767)	325/pt.
Consolidated-Undrained Triaxial Staged (D4767)	415/ea.
Consolidated-Drained Triaxial Shear (EM1110)	400/pt.
Consolidated-Drained Triaxial Staged (EM1110)	600/ea.

PERMEABILITY, CONSOLIDATION AND EXPANSION

Permeability, Flexible Wall (D5084)	\$325/ea.
Permeability, Rigid Wall (D5856)	325/ea.
Consolidation (D2435)	65/pt.
Expansion Index (D4829/UBC 29-2)	225/ea.
Swel/Collapse (D4546)	175/pt.

AGGREGATE QUALITY

Sieve Analysis to #200 (C136)	\$125/ea.
L.A. Rattler Test (500 rev.) (C131)	225/ea.
Durability Index (D3744/CAL229)	165/ea.
Fine Aggregate Angularity (CAL 234)	125/ea.
Flat and Elongated Particles (D4791/CAL 235)	150/ea.
Percent Crushed Particles (CAL205)	150/ea.

CONCRETE / MASONRY / REINFORCING STEEL

Compressive Strength, Cast Cylinders (C39)	\$32/ea.
Compressive Strength, Cores (C42)	85/ea.
Flexural Strength Beam (C78/C293)	80/ea.
Splitting Tensile Test (C496)	80/ea.
DSA Masonry Shear (DSA-207)	75/ea.
Shotcrete Panel Coring and Comp. Strength (C1140) ..	100/ea.
Rebar Tensile/Bend (up to #11/#11 and larger)	275/300/ea.
CMU Compressive Strength (C140)	100/ea.
Compressive Strength, Grout (C1019/UBC 21-19)	35/ea.
Compressive Strength, Mortar (C109/UBC 21-15,16) ..	35/ea.
CMU Unit Wt., Dimen., Absorption (C140)	75/ea.
Compressive Strength, Masonry Prism (C1314)	250/ea.

HOT MIX ASPHALT

HMA Air Voids, Gyrotory (T269)	\$525/ea.
Hamburg Wheel Tracker (T324)	1,000/ea.
Theoretical Max. Specific Gravity (D2041/CAL309)	180/ea.
Ignition/Sieve Analysis (C136/CAL202)	220/ea.
HMA Core Unit Weight (D1188/CAL308)	100/ea.
% Asphalt, Ignition Method (D6307/CAL382)	140/ea.
% Asphalt, Ignition Calibration (D6307/CAL382)	400/ea.
Tensile Strength Ratio (T283)	1,000/ea.

***2X surcharge on rush turnaround for laboratory testing**

TERMS AND CONDITIONS

- Listed are typical charges for the services most frequently performed by Geocon. Prices for unlisted services as well as special quotations for programs involving volume work will be provided upon request. Laboratory test prices shown are for laboratory work only, and include reporting of routine results not calling for comments, recommendations or conclusions.
- Sampling and testing is conducted in substantial conformance with the latest applicable or designated specifications of the American Society for Testing and Materials, Caltrans, American Association of State Highway and Transportation Officials, or other pertinent agencies.
- Saturday, night work, and overtime hours are charged at time and one-half; Sundays and holidays at double time. Per diem may apply when location of work dictates.
- Equipment and materials will be billed at cost plus 15%. Outside services including subcontractors and rental of special equipment are billed at cost plus 15%. Hourly services are billed portal to portal from closest office in accordance with the stated hourly rates herein, with a minimum four-hour charge.
- Invoices will be submitted at four-week intervals. Terms of payment are met upon presentation of invoice. Invoices become delinquent thirty (30) days from invoice date and subject to one and one-half percent (1-1/2%) service charge per month, or the maximum rate allowed by law, whichever is lower. If Client objects to all or any portion of any invoice, Client will so notify Geocon in writing within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay that portion of the invoice not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. Payment on delinquent invoices will first be applied to accrued interest and then to the principal amount. All time spent and expenses incurred (including any attorney's fees and costs) in connection with collection of any delinquent amount will be paid by Client to Geocon per Geocon's current fee schedule.
- Client and Geocon shall allocate certain of the risks so that, to the fullest extent permitted by law, Geocon's (the term "Geocon" includes Geocon's partners, officers, directors, employees, agents, affiliates, subcontractors and subconsultants) total aggregate liability to Client is limited to the greater of **\$50,000** or the total compensation received from Client by Geocon for services rendered on this project, for any and all of Client's injuries, damages, claims, losses, expenses, or claim expenses arising out of this Agreement from any cause or causes, including attorneys' fees and costs which may be awarded to the prevailing party, and Client agrees to indemnify and hold harmless Geocon from and against all liabilities in excess of the monetary limit established above.
 Client and Geocon shall allocate certain of the other risks so that, to the fullest extent permitted by law, Client shall limit Geocon's total aggregate liability to all third parties, including contractors, subcontractors of all tiers, materialmen, and others involved in Client's project, as well as persons and other entities not involved in the project, to the greater of **\$100,000** or the total compensation received from Client by Geocon for services rendered on this project, for any and all injuries, damages, cause or causes, including attorneys' fees and costs which may be awarded to the prevailing party, and Client agrees to indemnify and hold harmless Geocon from and against all liabilities in excess of the monetary limit established above, including all liability incurred by Geocon for acts, errors, or omissions, pursuant to entering into agreements with third parties on behalf of Client in order to obtain access or entry onto property not owned by Client. Client agrees to notify all contractors and subcontractors of any limitation of Geocon's liability to them, and require them to abide by such limitation for damages suffered by any contractor or subcontractor arising from Geocon's actions or inactions. Neither the contractor nor any subcontractor assumes any liability for damages to others which may arise on account of Geocon's actions or inactions.