



# RESOLUTION No. 20-489

## OF THE BOARD OF SUPERVISORS OF THE COUNTY OF NEVADA

### RESOLUTION TO APPROVE COUNTY PROJECT NO. 225035 WITH MARK THOMAS & COMPANY, INC. FOR ENGINEERING AND DESIGN SERVICES FOR THE GUARDRAIL SAFETY AUDIT PROJECT, IN THE AMOUNT OF \$216,689.01 – DISTRICTS I, II, III AND IV

WHEREAS, the County has been allocated \$999,400 of Highway Safety Improvement Project (HSIP) funds for the Guardrail Safety Audit Project, with \$285,000 of this for Preliminary Engineering; and

WHEREAS, the two formal proposals received in response to a Request for Qualifications (RFQ) released September 19, 2019 were reviewed and evaluated based on the scoring methodology identified in the RFQ; and

WHEREAS, Mark Thomas & Company, Inc., was selected as the highest-ranking firm and will provide these services for a maximum amount not to exceed \$216,689.01; and

WHEREAS, the contract will run from November 17, 2020 through November 30, 2021; and

WHEREAS, budget is available in Road Engineering budget 1114-30104-702-3000/521121 to encumber this contract.

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of Nevada County, that it approves the Personal Services Contract between the County of Nevada and Mark Thomas & Company, Inc., in the form attached hereto and authorizes the Chair of the Board of Supervisors to execute the Contract on behalf of the County of Nevada.



PASSED AND ADOPTED by the Board of Supervisors of the County of Nevada at a regular meeting of said Board, held on the 17th day of November, 2020, by the following vote of said Board:

Ayes: Supervisors Heidi Hall, Edward Scofield, Dan Miller, Susan K. Hoek and Richard Anderson.

Noes: None.

Absent: None.

Abstain: None.

ATTEST:

JULIE PATTERSON HUNTER  
Clerk of the Board of Supervisors

By: 

  
Heidi Hall, Chair





**PERSONAL SERVICES CONTRACT**

County of Nevada, California

This Personal Services Contract is made between the COUNTY OF NEVADA (herein "County"), and

**Mark Thomas & Company, Inc.**

(herein "Contractor"), wherein County desires to retain a person or entity to provide the following services, materials and products generally described as follows:

For 22 existing guardrails and one new guardrail to be constructed:

- Evaluate guardrail adherence to Caltrans Standard Specifications 2018 and the corresponding sections of Caltrans Standard Plans 2018.
- Provide PS&E for recommended changes/repairs/enhancements/replacements based upon the above evaluation.

**SUMMARY OF MATERIAL TERMS**

**Maximum Contract Price:** \$216,689.01  
**Contract Beginning Date:** 11/17/2020      **Contract Termination Date:** 11/30/2021  
**Liquidated Damages:** N/A

**INSURANCE POLICIES**

Designate all required policies:

		Req'd	Not Req'd
<b>Commercial General Liability</b>	(\$1,000,000)	<u>X</u>	<u>    </u>
<b>Automobile Liability</b>	(\$ 300,000) Personal Auto	<u>    </u>	<u>X</u>
	(\$1,000,000) Business Rated	<u>X</u>	<u>    </u>
	(\$1,000,000) Commercial Policy	<u>    </u>	<u>X</u>
<b>Worker's Compensation</b>		<u>X</u>	<u>    </u>
<b>Errors and Omissions</b>	(\$1,000,000)	<u>X</u>	<u>    </u>

**LICENSES AND PREVAILING WAGES**

Designate all required licenses:

Professional Engineer in California

**NOTICE & IDENTIFICATION**

**Contractor:**  
 Mark Thomas & Company, Inc.  
 701 University Avenue, Suite 200  
 Sacramento, CA 95825

**County of Nevada:**  
 950 Maidu Avenue  
 Nevada City, CA 95959

Contact Person: Zach Siviglia  
 (916) 381-9100  
 e-mail: zshiviglia@markthomas.com

Contact Person: Richard Poole  
 (530) 265-7104  
 e-mail: richard.poole@co.nevada.ca.us

**Contractor is a:** (check all that apply)

Corporation:      X Calif.,           Other,           LLC,           Non-profit  
 Partnership:           Calif.,           Other,           LLP,           Limited  
 Person:                 Individ.,           Dba,           Ass'n           Other

**EDD:** Independent Contractor Worksheet Required:           Yes      X No  
**HIPAA:** Schedule of Required Provisions (Exhibit D):           Yes      X No

**ATTACHMENTS**

Designate all required attachments:

	Req'd	Not Req'd
<b>Exhibit A: Schedule of Services</b> (Provided by Contractor)	<u>X</u>	<u>    </u>
<b>Exhibit B: Schedule of Charges and Payments</b> (Paid by County)	<u>X</u>	<u>    </u>
<b>Exhibit C: Schedule of Changes</b> (Additions, Deletions & Amendments)	<u>X</u>	<u>    </u>
<b>Exhibit D: Schedule of HIPAA Provisions</b> (Protected Health Information)	<u>    </u>	<u>X</u>

Contractor approves this page

### Terms

Each term of this Contract below specifically incorporates the information set forth in the Summary at page one (1) above as to each respective section (§) therein, as the case may be.

### Services

#### 1. **Scope of Services:**

Contractor shall provide all of the services, materials and products (herein "Services") generally described in **Exhibit "A"**, according to a performance schedule, if applicable, as set forth in said exhibit (herein "Performance Schedule") . If requested, Contractor agrees to serve as an expert witness for County in any third party action or proceeding arising out of this Contract.

### Payment

#### 2. **Charges and Payments:**

The charges (herein "Charges") for furnishing the aforesaid Services under this Contract are set forth in **Exhibit "B"**, including, if applicable, hourly rates, unit pricing, and expense, mileage and cost limits. Said Charges shall be presented monthly by invoice, and shall be due within thirty (30) days of receipt unless payment is otherwise set forth in said **Exhibit "B"**, and shall remain in effect for the entire term of this Contract, and any extension hereof. In no event will the cost to County for Services to be provided under this Contract, including direct non-salary expenses, exceed the **Maximum Contract Price** set forth at §2, page one (1), above.

### Time for Performance

#### 3. **Contract Term:**

This Contract shall commence on the **Contract Beginning Date** set forth at §3, page one (1), above. All Services required to be provided by this Contract shall be completed and ready for acceptance no later than the **Contract Termination Date** set forth at §3, page one (1), above.

#### 4. **Liquidated Damages:**

County and Contractor agree that damages to County due to delays in timely providing Services in accordance with the aforesaid Performance Schedule and Contract Termination Date are impractical and difficult to ascertain. Therefore, if §4 at page one (1) hereof shall indicate a daily amount as **Liquidated Damages**, County shall have the right to assess said daily sum, not as a penalty, but as and for damages to County due to delays in providing Services not in accordance with the said Performance Schedule, or later than the Contract Termination Date (herein "Delay"). Liquidated Damages shall be offset against amounts owing to Contractor, including retention sums.

To the extent that any Delay is a result of matters or circumstances wholly beyond the control of Contractor, County may excuse said Liquidated Damages; provided however, that County may condition such excuse upon Contractor having given prompt notice to County of such delay immediately by telephone and thereafter by written explanation within a reasonable time. The time for Contractor's performance shall be extended by the period of delay, or such other period as County may elect.

#### 5. **Time of the Essence:**

Time is of the essence with respect to Contractor's performance under this Contract. Delay in meeting the time commitments contemplated herein will result in the assessment of liquidated damages, if indicated at §4 at page one (1), hereof. If Liquidated Damages are not so indicated, damages shall be as otherwise provided by law.

### Insurance

#### 6. **Commercial General Liability Insurance:** (County Resolution No. 90674)

If §6 at page one (1) hereof shall indicate a **Commercial General Liability** insurance policy is required, Contractor shall promptly provide proof of such insurance evidenced by a certificate of insurance with properly executed endorsements attached, which insurance shall include the following:

- (i) Broad form coverage for liability for death or bodily injury to a person or persons, and for property damage, combined single limit coverage, in the minimum amount indicated at said §6;

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- (ii) An endorsement naming County as an additional insured under said policy, with respect to claims or suits arising from the Services provided or the relationships created under this Contract;
- (iii) A provision that said insurance shall be primary and other insurance maintained by the County of Nevada shall be excess only and not contributing with Contractor's insurance;
- (iv) A provision that said insurance shall provide for thirty (30) days written notice to County of any termination or change in coverage protection, or reduction in coverage limits (except ten (10) days notice for non-payment of premium).

**7. Automobile Liability Insurance:** (County Resolution No. 90676)

If §7 at page one (1) hereof shall require either a Business Rated or a Commercial Automobile Liability insurance policy, for each vehicle used including non-owned and hired automobiles, Contractor shall promptly provide proof of such insurance evidenced by a certificate of insurance with properly executed endorsements attached, which insurance shall include the following provisions:

- (i) Liability protection for death or bodily injury to a person or persons, property damage, and uninsured and underinsured coverage, combined single limit coverage, in the minimum amount indicated at said §7;
- (ii) An endorsement naming County as an additional insured under said policy, with respect to claims or suits arising from the Services provided or the relationships created under this Contract;
- (iii) A provision that said insurance shall be primary and other insurance maintained by the County of Nevada shall be excess only and not contributing with Contractor's insurance;
- (iv) A provision that said insurance shall provide for thirty (30) days written notice to County of any termination or change in coverage protection, or reduction in coverage limits (except ten (10) days notice for non-payment of premium).

If §7 at page one (1) hereof shall require a Personal Auto policy, for each vehicle used including non-owned and hired automobiles, Contractor shall promptly provide proof of such insurance for a minimum of three hundred thousand dollars, (\$300,000), in combined single limits, and naming the County as additionally insured.

**8. Worker's Compensation:** (County Resolution No. 90674)

If §8 at page one (1) hereof shall indicate a **Worker's Compensation** insurance policy is required, Contractor shall maintain said policy as required by law, and shall promptly provide proof of such insurance evidenced by a certificate of insurance, or other documentation acceptable to County.

Before commencing to utilize employees in providing Services under this Contract, Contractor warrants that it will comply with the provisions of the California Labor Code, requiring Contractor to be insured for worker's compensation liability or to undertake a program of self-insurance therefor.

**9. Errors and Omissions:**

If §9 at page one (1) hereof shall indicate **Errors and Omissions** insurance is required, Contractor shall maintain Technology Professional Liability Errors and Omissions Insurance in the minimum amount indicated, and shall promptly provide proof of such insurance evidenced by a certificate of insurance, or other documentation acceptable to County. Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by the Contractor in this agreement and shall include, but not be limited to, claims involving infringement of intellectual property, copyright, trademark, invasion of privacy violations, information theft, release of private information, extortion and network security. The policy shall provide coverage for breach response costs as well as regulatory fines and penalties as well as credit monitoring expenses with limits sufficient to respond to these obligations.

- (i) The Policy shall include, or be endorsed to include, **property damage liability coverage** for damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of the County in the care, custody, or control of the Contractor. If not covered under the Contractor's liability policy, such "property" coverage of the County may be endorsed onto the Contractor's Cyber Liability Policy as covered property as follows:
- (ii) **Cyber Liability coverage** in an amount sufficient to cover the full replacement value of damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of the County that will be in the care, custody, or control of Contractor.

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- (iii) The Insurance obligations under this agreement shall be the greater of 1—all the Insurance coverage and limits carried by or available to the Contractor; or 2—the minimum Insurance requirements shown in this agreement. Any insurance proceeds in excess of the specified limits and coverage required, which are applicable to a given loss, shall be available to County. No representation is made that the minimum Insurance requirements of this agreement are sufficient to cover the indemnity or other obligations of the Contractor under this agreement.

**10. Miscellaneous Insurance Provisions:** (County Resolution No. 90675)

All policies of insurance required by this Contract shall remain in full force and effect throughout the life of this Contract and shall be payable on a "per occurrence" basis unless County specifically consents to "claims made" coverage. If the County does consent to "claims made" coverage and if Contractor changes insurance carriers during the term of this Contract or any extensions hereof, then Contractor shall carry prior acts coverage.

Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by County, its officers, agents and/or employees, shall be excess only and not contributing with insurance required or provided under this agreement.

At all times, Contractor shall keep and maintain in full force and effect throughout the duration of this Contract, policies of insurance required by this Contract which policies shall be issued by companies with a Best's Rating of B+ or higher (B+, B++, A-, A, A+ or A++), or a Best's Financial Performance Rating (FPR) of 6 or higher (6, 7, 8 or 9) according to the current Best's Key Rating Guide, or shall be issued by companies approved by the County Risk Manager. In the event the Best's Rating or Best's FPR shall fall below the rating required by this paragraph, Contractor shall be required to forthwith secure alternate policies which comply with the rating required by this paragraph, or be in material breach of this Contract.

Failure to provide and maintain the insurance policies (including Best's ratings), endorsements, or certificates of insurance required by this Contract shall constitute a material breach of this agreement (herein "Material Breach"); and, in addition to any other remedy available at law or otherwise, shall serve as a basis upon which County may elect to suspend payments hereunder, or terminate this Contract, or both. (See §13, ¶2, below, as these provisions additionally apply to subcontractors.)

**11. Indemnity:**

Nothing herein shall be construed as a limitation of Contractor's liability, and Contractor shall indemnify, defend and hold harmless the County and its officers, officials, employees, agents and volunteers from any and all liabilities, claims, demands, damages, losses and expenses (including, without limitation, defense costs and attorney fees of litigation) which result from the negligent act, willful misconduct, or error or omission of Contractor, except such loss or damage which was caused by the sole negligence or willful misconduct of County or its officers, officials, employees, agents and volunteers.

**Personal Services**

**12. Contractor as Independent:**

In providing services herein, Contractor, and the agents and employees thereof, shall act in an independent capacity and as an independent contractor and not as agents or employees of County.


**13. Assignment and Subcontracting:**

Except as specifically provided herein, the rights, responsibilities, duties and Services to be performed under this Contract are personal to the Contractor and may not be transferred, subcontracted, or assigned without the prior written consent of County. Contractor shall not substitute nor replace any personnel for those specifically named herein or in its proposal without the prior written consent of County.

Contractor shall cause and require each transferee, subcontractor and assignee to comply with the insurance provisions set forth herein at §§6, 7, 8, 9 and 10, to the extent such insurance provisions are required of Contractor under this Contract. Failure of Contractor to so cause and require such compliance by each transferee, subcontractor and assignee shall constitute a Material Breach of this agreement, and, in addition to any other remedy available at law or otherwise, shall serve as a basis upon which County may elect to suspend payments hereunder, or terminate this Contract, or both.

**14. Licensing and Permits:**

Contractor warrants (i) Contractor is qualified and competent to provide all Services under this contract; (ii) Contractor and all employees of Contractor hold all necessary and appropriate licenses therefor, including those licenses set forth at §14, page one (1) hereof; and, (iii) Contractor shall obtain, and remain in compliance with, all permits necessary and appropriate to provide said Services. Contractor shall cause said licenses and permits to be maintained throughout the life of this Contract. Failure to do so shall constitute a Material Breach of this agreement, and, in addition to any other remedy available at law or otherwise, shall

Contractor approves this page  \_\_\_\_\_

serve as a basis upon which County may elect to suspend payments hereunder, or terminate this Contract, or both.

### Public Contracts

#### **15. Prevailing Wage and Apprentices:**

To the extent made applicable by law, performance of this Contract shall be in conformity with the provisions of California Labor Code, Division 2, Part 7, Chapter 1, commencing with Section 1720 relating to prevailing wages which must be paid to workers employed on a public work as defined in Labor Code §§1720, et seq.; and shall be in conformity with Title 8 of the California Code of Regulations §§200 et seq., relating to apprenticeship. Where applicable:

(i) Contractor shall comply with the provisions thereof at the commencement of Services to be provided herein, and thereafter during the term of this Contract. A breach of the requirements of this section shall be deemed a material breach of this contract. Applicable prevailing wage determinations are available on the California Department of Industrial Relations website at <http://www.dir.ca.gov/OPRL/PWD>.

(ii) Contractor and all subcontractors must comply with the requirements of Labor Code Section 1771.1(a) pertaining to registration of contractors pursuant to Section 1725.5. Registration and all related requirements of those Sections must be maintained throughout the performance of the Contract.

(iii) Contracts to which these prevailing wage requirements apply are subject to compliance monitoring and enforcement by the Department of Industrial Relations. Each contractor and subcontractor must furnish certified payroll records to the Labor Commissioner at least monthly.

(iv) The County is required to provide notice to the Department of Industrial Relations of any public work contract subject to prevailing wages within five (5) days of award.

#### **16. Accessibility (County Resolution No. 00190):**

It is the policy of the County of Nevada that all County services, programs, meetings, activities and facilities shall be accessible to all persons, and shall be in compliance with the provisions of the Americans With Disabilities Act and Title 24, California Code of Regulations. To the extent this Contract shall call for Contractor to provide County contracted services directly to the public, Contractor shall certify that said direct Services are and shall be accessible to all persons.

#### **17. Nondiscriminatory Employment:**

In providing Services hereunder, Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, age, sex, national origin, political affiliation, ancestry, marital status or disability. This policy does not require the employment of unqualified persons.

#### **18. Prior Nevada County Employment (County Resolution No. 03-353):**

Effective July 22, 2003, it is the policy of the County of Nevada that former members of the Board of Supervisors, a former CEO, or a former Purchasing Agent, for a period of twelve (12) months following the last day of employment, shall not enter into any relationship wherein that former employee or former Board member receives direct remuneration from a legal entity that, during the last twelve (12) months of said employment or Board member's service, entered into a contract with, or received a grant from the County of Nevada. Provided however, that this prohibition shall not apply to any employee that did not personally approve a contract with or grant to said legal entity during the last twelve (12) months of said employment, and shall not apply when the Board of Supervisors did not approve a contract with or grant to said legal entity during the last twelve (12) months of said Board member's service.

A violation of this policy shall subject Contractor to all of the remedies enumerated in said resolution and as otherwise provided in law, which remedies shall include but not be limited to injunctive relief, cancellation and voiding of this contract by County, a return of grant money, a cause of action for breach of contract, and entitlement to costs and reasonable attorney fees in any action based upon a breach of contract under this provision.

#### **19. Cost Disclosure:**

In accordance with Government Code Section 7550, should a written report be prepared under or required by the provisions of this Contract, Contractor agrees to state in a separate section of said report the numbers and dollar amounts of all contracts and subcontracts relating to the preparation of said report

Contractor approves this page          
ZS



### Default and Termination

**20. Termination:**

A Material Breach of this Contract pursuant to the terms hereof or otherwise, in addition to any other remedy available at law or otherwise, shall serve as a basis upon which County may elect to immediately suspend payments hereunder, or terminate this contract, or both, **without notice**.

If Contractor fails to timely provide in any manner the services materials and products required under this Contract, or otherwise fails to promptly comply with the terms of this Contract, or violates any ordinance, regulation or other law which applies to its performance herein, County may terminate this Contract by giving **five (5) days written notice** to Contractor.

Either party may terminate this Contract for any reason, or without cause, by giving **thirty (30) calendar days written notice** to the other, which notice shall be sent by registered mail in conformity with the notice provisions, below. In the event of termination not the fault of the Contractor, the Contractor shall be paid for services performed to the date of termination in accordance with the terms of this Contract. Contractor shall be excused for failure to perform services herein if such performance is prevented by acts of God, strikes, labor disputes or other forces over which the Contractor has no control.

County, upon giving **sixty (60) calendar days written notice** to Contractor, shall have the right to terminate its obligations under this Contract at the end of any fiscal year if the County or the State of California, as the case may be, does not appropriate funds sufficient to discharge County's obligations coming due under this contract.

### Miscellaneous

**21. Books of Record and Audit Provision:**

Contractor shall maintain complete records relating to this Contract for a period of five (5) years from the completion of Services hereunder. Said records shall include but not be limited to bids and all supporting documents, original entry books, canceled checks, receipts, invoices, payroll records including subsistence, travel and field expenses, together with a general ledger itemizing all debits and credits

Contractor shall permit County to audit said records as well as such related records of any business entity controlled by Contractor. Said audit may be conducted on Contractor's premises or at a location designated by County, upon fifteen (15) days notice. Contractor shall promptly refund any moneys erroneously charged and shall be liable for the costs of audit if the audit establishes an over-charged of five percent (5%) or more of the Maximum Contract Price.

**22. Intellectual Property:**

All original photographs, diagrams, plans, documents, information, reports, computer code and all recordable media together with all copyright interests thereto (herein "Intellectual Property"), which concern or relate to this Contract and which have been prepared by, for or submitted to Contractor, shall be the property of County, and upon fifteen (15) days demand therefor, shall be promptly delivered to County without exception. Provided however, for personal purposes only and not for commercial, economic or any other purpose, Contractor may retain a copy of Contractor's work product hereunder.

**23. Entire Agreement:**

This Contract represents the entire agreement of the parties, and no representations have been made or relied upon except as set forth herein. This Contract may be amended or modified only by written, fully executed agreement of the parties.

**24. Jurisdiction and Venue:**


This Contract shall be construed in accordance with the laws of the State of California and the parties hereto agree that venue shall be in Nevada County, California.

**25. Compliance with Applicable Laws:**

The Contractor shall comply with any and all federal, state and local laws, codes, ordinances, rules and regulations which relate to, concern or affect the Services to be provided by this Contract.

**26. Notices:**

This Contract shall be managed and administered on County's behalf by the department and the person set forth at §26, page one (1) of this Contract, and all invoices shall be submitted to and approved by this Department. In addition to personal service, all notices may be given to County and to Contractor by first class mail addressed as set forth at said §26. Said notices shall be deemed received the fifth (5th) day following the date of mailing or the earlier date of personal service, as the case may be.

Contractor approves this page 

**27. Authority:**

All individuals executing this Contract on behalf of Contractor represent and warrant that they are authorized to execute and deliver this Contract on behalf of Contractor.

**IN WITNESS WHEREOF**, the parties have executed this Contract effective on the Beginning Date, above.

**CONTRACTOR:**

**Zach Siviglia**

Digitally signed by Zach Siviglia  
Date: 2020.11.23 11:23:28 -08'00'

~~Zach~~ Siviglia  
Title:  
Vice President

Dated: Nov 23, 2020

**COUNTY OF NEVADA:**


\_\_\_\_\_  
Heidi Hall  
Chair, Board of Supervisors

Dated: \_\_\_\_\_

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EXHIBIT "A"  
SCHEDULE OF SERVICES

Contractor approves this page

  
ZS



## **PROJECT APPROACH**

The County of Nevada (County) has been awarded Highway Safety Improvement Program (HSIP) grant to conduct a countywide Guardrail Safety Audit Project. The County has conducted a guardrail safety audit and provided a table with recommendations for repair and replacement of existing guardrails at 22 locations and installation of new guardrail at one (1) location. A copy of the County's Guardrail Table is attached. Mark Thomas will conduct topographic surveys, field reviews, structures assessments, prepare plans, specifications and estimates (PS&E), and provide environmental services for the implementation of guardrail repairs, replacements and enhancements consistent with the recommendations of the County's safety audit. The second stage of the project is implementation of the safety audit recommendations and is not included in this Scope of Work.

Preliminary cost estimates will be prepared early on during preparation of the 30% design plans, before substantial effort has been expended on the design, to confirm each segment to be included in the project implementation phase. We will work with the County to develop strategies to minimize potentially unfunded items of work for needed reconstruction of roadway elements beyond what HSIP will allow. This may include rehabilitation of roadway pavement, signing and striping improvements, widening shoulders, and replacing non-standard bridge railings. Guardrail designs will be prepared based on the 2018 Caltrans Standard Plans and Specifications.

We assume repair, replacement and enhancement of existing guardrails to be included in the implementation phase project will be exempt under CEQA and NEPA using a Categorical Exclusion, Category 23 CFR 771.117(c)(8) – Installation of fencing, signs, pavement markers, small passenger shelters, traffic signals, and railroad warning devices when no substantial land acquisition or traffic disruption will occur. Technical studies for biological resources, cultural resources, and hazardous materials will be prepared by LSA and Crawford as described in the Scope of Work below. LSA will prepare a Preliminary Environmental Study (PES) form as required by Caltrans. We assume the County and Caltrans will take the lead for filing environmental clearance documents need for the project and conducting any field reviews required by Caltrans. Mark Thomas and LSA will attend the field review kick-off meeting with the County and Caltrans and support the County to provide technical information from our design plans and specifications as needed for the field reviews.

The following section includes a description of our services to be provide for the Guardrail Safety Audit Project.

## **SCOPE OF SERVICES**

### **Task 1. PROJECT ADMINISTRATION**

#### **Task 1.1. Project Management**

Mark Thomas will provide ongoing general project management for this project, including coordinating subconsultant activities and submittals. General project management will also include organizing and maintaining files and records to track correspondence, contractual matters, data requests, transmittals and other pertinent data. Mark Thomas will prepare monthly invoices including a monthly progress report which will be included as part of the monthly invoice package.

Mark Thomas will coordinate design activities with County staff through regular communication via telephone calls, emails and other correspondence. We will also prepare, update, maintain and distribute a Critical Path Method (CPM) schedule for project activities. Schedule updates will be distributed on a monthly basis. The initial schedule will be prepared for and approved by County staff at the outset of the project. It is assumed the duration of this project is 10 months.

**Task 1.2. Project Team Meetings**

Mark Thomas will attend a project kick-off meeting and participate in monthly coordination meetings with the County as needed. Coordination meetings will include representatives from Mark Thomas, County staff and other stakeholders as directed by the Client. During the meeting, Mark Thomas will discuss data extraction needs and format with the County. This discussion will refine exact needs for both data extraction and schedule, and define attribute criteria the County may wish to provide additional input upon.

This task includes preparation of agendas, meeting minutes and a log of action items. The project CPM schedule identified above will be distributed and reviewed during coordination meetings.

Attendance and support for County Board or Committee Meetings is not included in this scope of services.

**Task 1.3. Quality Control**

The Mark Thomas Quality Control plan consists of established procedures for performing the work (which are reassessed with each project), including methods for design calculations, establishing appropriate levels of design development for intermediate submittals, identification of required plan checks, design checklists, and methods of project documentation.

Our QC/QA Manager will implement and maintain these quality control procedures during the preparation of plans and documents throughout design.

**TASK 1 DELIVERABLE(S):**

- Monthly progress reports and invoices
- Monthly CPM schedule updates
- Project Team Meeting Attendance w/ agendas and minutes (up to 8 meetings)
- QC/QA Checklist

**Task 2. DESIGN DATA GATHERING**

**Task 2.1. Topographic Surveys and Base Mapping**

Mark Thomas will conduct topographic surveys of the 23 locations in 14 general areas encompassing approximately 900 LF of guard rail requested by Nevada County and shown in the "Guardrail Table (6-15-20) kmz "Photo Summary" pdf and "Guardrail Location" kmz files transmitted via email June 15, 2020. The County is conducting right of way research without the aid of Mark Thomas and will provide all access necessary for completion of the project.

Due to low volume nature of roads, we assume there will be no traffic control plans required. Survey crew will set advance signage and use a dedicated traffic spotter for safety.

Surveys will be based upon assumed coordinates and elevations and will not be tied to state plane coordinate system. For each area, Mark Thomas will set at least three (3) durable, intervisible control points.

The area to be surveyed with in each location will include the length of guardrails listed, plus 25 feet beyond each end of the guardrail. It will extend from the ETW to either 20 feet beyond the top of slope, or the toe of slope, whichever is closer to the guard rail. No access to private property is assumed. Within each location, surveys will establish the edge of travel way, edge of pavement, top of rail, top of slope, toe of slope, walls, trees, sign posts, trees, stream bank edges and flow lines (if accessible), culvert sizes, and other visible features.

Mark Thomas will compile an electronic base map which will include a DTM and planimetric features of the project area. Mark Thomas will run break lines as appropriate; include elevation spot shots and other relevant features from the Topographic Survey to aid in design. Each of the 14 areas will be in a separate drawing.

Survey Assumptions:

- No traffic control or traffic control plans will be necessary
- County will provide all access and permits as necessary

**Task 2.2. Site Visits**

Mark Thomas will conduct site visits and take photographic inventory of existing conditions to reference during the design process and make observations related to existing obstructions and identify potential conflicts with existing utilities and privately-owned improvements within the public right-of-way. A photo log for each project location will be prepared and submitted to the County on CD.

**Task 2.3. Structural Guardrail Field Assessment**

Mark Thomas' Structural Engineers will conduct field observation of the existing condition at six (6) locations of culverts and/or bridges. We will evaluate the feasibility of guard railing safety upgrades at these sites and provide recommendations for next steps and possible improvements to existing structures that would be needed to perform guardrail upgrades.

Mark Thomas will prepare a memorandum to document existing conditions and recommendations for structure upgrades. Design of structure railings or upgrades to existing railings is not included in this scope of services.

**TASK 2 DELIVERABLE(S):**

- 14 electronic base maps in AutoCAD Civil 3D (2015 or newer) for use in plan preparation
- Control Point Listing
- Photo Log of Existing Sites
- Structural Guardrail Field Assessment Memo

**Task 3. PREPARE PLANS, SPECIFICATIONS AND ESTIMATES**

The anticipated design services included in this scope of work are based on the County's current budget of approximately \$1.0 Million of Highway Safety Improvement Program (HSIP) funds, which are allocated for making necessary repairs to damaged guardrails,

enhancements and replacements to existing guardrail installations. Our scope of work encompasses civil design to prepare approved plans, specifications, and estimates (PS&E) for use by the County in bidding constructing the improvements. Design support services during bidding and construction can be completed as additional services to be completed for additional fees to be negotiated prior to the start of work.

Mark Thomas will prepare PS&E for the guardrails identified for enhancement or replacement as identified in the County’s safety audit table. PS&E submittals will be prepared at the 30%, 60%, 90%, and 100% (Final) levels of completion. The intent of intermediate submittals is to define the project for review by the County, and to allow for major comments prior to investment of significant design effort in design details. The 100% (Final) submittal will be provided as a final plan check opportunity by the County to ensure prior comments have been addressed prior to bidding. Addressing new design comments provided by the County after the 100% (Final) design package has been submitted would be provided as an additional service with additional fee to be negotiated prior to the start of design revisions.

The approach listed below will best address the scope of improvements listed in our understanding of the project and will be built upon during the preparation of intermediate design submittals by adding plan information and detail sheets until a complete, buildable and biddable package is reached.

Below is an estimated count of plan sheets:

Sheet Name	Number of Sheets	Drawing Scale
Title Sheet	1	Not to scale
Standard Abbreviations/General Notes	1	Not to scale
Guardrail Layout Plans	12	20
Construction Details	4	Not to scale
Water Pollution Control Details	2	20
<b>Total Sheets</b>	<b>20</b>	

**Task 3.1. 30% Plans and Estimate**

Mark Thomas will prepare a set of preliminary guardrail improvement plans and estimates at 30% design that includes the following:

- 24”x36” sheets laid out in 4 quadrants (or six sections if that fits)
- Black and white plan views showing road centerline, old and new guardrail, and hub/PK nail locations (no aerial imaging or tree locations needed)

The 30% Plans and Estimate will be submitted to the County for review and comment.

**Task 3.2. 60% PS&E**

The 60% Plans will be the first “plan sheet” submittal made to the County for review. The 60% plan set will include all of the sheets shown above. The plans are at the level ready for a detailed quality control check and ready for the utility companies to begin relocation design (“B Plans”). It is assumed that utility relocation plans will be provided by the utility companies.

Mark Thomas will prepare technical specifications and bid form in the County's standard format. It is assumed the County will provide the boilerplate contract and general provisions. The basis of the technical specifications will be the 2018 Caltrans Standard Specifications or as required by the County.

An itemized estimate of construction costs will be prepared using recent bid summaries for similar projects in the vicinity of Nevada County. Prices will be adjusted using engineering judgement that reflects the project location and the quantity of each item.

The 60% PS&E will be submitted to the County for review and comment.

**Task 3.3. 90% PS&E**

Upon receipt of a single set of non-conflicting comments from the County, Mark Thomas will prepare a Comment Response Matrix listing the comment, source, and proposed resolution. Prior to starting further revisions to the designs, Mark Thomas will arrange a meeting with County staff to review the comments received, discuss any questions and confirm the resolutions.

Once the comment resolutions are agreed upon, Mark Thomas will update the PS&E to the 90% design level. The 90% PS&E will be provided to the County for review and comment.

**Task 3.4. 100% (Final) PS&E**

Upon receipt of a single set of non-conflicting comments from the County, Mark Thomas will prepare a Comment Response Matrix listing the comment, source, and proposed resolution. If necessary, Mark Thomas will arrange a meeting with County staff to review the comments received, discuss any questions and confirm the resolutions.

Once the comment resolutions are agreed upon, Mark Thomas will update the PS&E to the 100% (Final) design level. The 100% (Final) PS&E will be of sufficient detail for the County to use in bidding and constructing the project improvements. The 100% (Final) plans and specifications will be signed and sealed by a professional civil engineer in responsible charge of the work.

The 100% (Final) PS&E will be submitted to the County in hardcopy and electronic format. Signed plans will be provided in PDF format. AutoCAD files for the drawings will be provided if requested. Specifications will be provided electronically in MS Word format.

**Task 3.5. Utility Coordination and Mapping**

Based on the 60% plans, Manual Mark Thomas will send base maps with any known utility base information shown ("A" Plans) to utility providers with a brief explanation of the project. System mapping/facility confirmation will be requested so revised project utility mapping can be generated for the project site. Mark Thomas will prepare utility conflict maps ("B" Plans) and coordinate relocation designs with the affect owners, and will prepare "C - Notice to Owner" letters notifying the utilities of the pending construction.

Should any relocations of private utility facilities be required, it is assumed that these designs will be provided by the private utility company.

Recent changes to the Caltrans Project Development Procedures Manual (Ch. 17, Section 2 - Utility Policies) require positive location information for underground high priority utilities if the

project involves excavations greater than 6" deep beyond the existing roadbed limits or digging beyond the limits of the existing pavement structural section within the roadbed. Recent communications with Caltrans Local Assistance has indicated these procedures will be applied to all Local Assistance projects. This project is expected to involve reconstruction and replacement of existing guardrails, which is an exempted activity from the Caltrans Utility Policy. As such, additional measures to positively locate and verify the depth of existing underground utilities, including potholing and ground penetrating radar are not proposed for this project.

#### **TASK 3 DELIVERABLE(S):**

- 30% Plans and Estimates (2-24"x36" plan sets)
- PS&E (60%, 90%, 100% (Final)) (2-24"x36" plan sets)
- Final Plans (1 - 24"x36" Hardcopy and AutoCAD format)
- Final Specifications (Hardcopy and MS Word format)
- Final Estimate (Hardcopy and MS Excel format)
- Utility "A, B & C Letters" and Coordination Matrix
- All deliverables to be submitted electronically in pdf format

### **Task 4. ENVIRONMENTAL SERVICES**

As a subconsultant to Mark Thomas, LSA will provide environmental review services for the project. LSA will perform a constraints level review of the 23 guardrail locations considering biological resources, cultural resources, and hazardous materials, as described below.

#### **Task 4.1. Biological Resources**

LSA biologists will conduct a desktop review of the 23 guardrails locations by reviewing each location using Google Earth aerials and Street View to identify potential biological resources constraints (e.g., jurisdictional waters). LSA will also import the Google Earth KMZ file of the guardrail locations into ArcGIS and review locations against the California Natural Diversity Database (CNDDDB) layer to determine if any CNDDDB records are located adjacent to a guardrail location.

Following this review, LSA will prepare a matrix indicating which of the guardrail locations do not have any biological resources constraints (based on the desktop review) and which of the guardrail locations would require additional study to identify and assess potential biological resources constraints.

LSA will also prepare a brief memo explaining the criterion used to evaluate the guardrail locations. The memo will also identify the guardrail locations that do not have any biological resources constraints and could be replaced without causing significant impacts (assuming implementation of standard avoidance/minimization measures and no additional impacts from access, staging, etc.). LSA will submit the draft memo for review in electronic format. We have budgeted 2 hours to respond to comments generated during the review of the draft memo.

#### **Task 4.2. Cultural Resources**

An LSA archaeologist who meets the Secretary of Interior's Professional Qualifications Standards will review each of the 23 guardrails locations using Google Earth Street View and as-built plans (if available, to be provided by the County) in order to identify any areas of

cut/fill. LSA will conduct a records search of the California Historical Resources Information System at the North Central Information Center for those areas determined not to be in cut/fill. LSA will also review the Caltrans Historic Bridge Inventory to identify guardrails associated with any historic bridges.

LSA will prepare two lists based on the review. The first list will consist of those locations in cut/fill that will be assumed to have a low potential for archaeological sites and that are not associated with historic bridges. The second list will consist of those locations that have a moderate to high potential for archaeological sites and/or are associated with historic bridges.

An LSA Cultural Resources Manager who meets the Secretary of Interior's Professional Qualifications Standards for Archeology and Architectural History will prepare a memo describing the methods and results of the study. The memo will include a statement that the project provisionally has "No Potential to Affect" built environment cultural resources and archaeological resources in those locations that are not associated with historic bridges and have low archaeological sensitivity (assuming implementation of standard avoidance/minimization measures and no additional impacts from access, staging, etc.). LSA will submit the draft memo for review in electronic format.

#### **Task 4.3. Hazardous Materials**

As a subconsultant to Mark Thomas, Crawford & Associates, Inc. (CAInc) will implement the tasks listed below to prepare a Hazardous Technical Memorandum for the project.

Based on the County's initial review of locations, we understand 23 guard rail segments have been identified for future hazardous materials assessment. In general, the guardrails are metal or wood and attached to either lumber or metal support members. Some of the guardrails contain reflective materials and some are painted.

CAInc will implement the following scope of work to collect soil samples for aerially deposited lead (ADL) and prepare a limited Initial Site Assessment (ISA) report for the project. The ISA will generally follow the guidelines in ASTM E 1527, but will not be a full environmental site assessment (will not be "All Appropriate Inquiry" compliant), but will evaluate appropriate sources and be presented in a format that is less expensive, appropriate for the project, and acceptable to Caltrans (e.g. the records search will be limited to free databases maintained by the State, but will not include a search of all available Federal, State and local databases; will not include historical review of aerial photographs and topographic maps; and will not include interviews with property owners or regulatory personnel).

#### Records Review

CAInc will reviewed publicly available free databases maintained by the State of California (including GeoTracker, Envirostor, and Mines Online) to ascertain if the project sites or nearby properties are identified in any of the databases. Databases will be searched using a minimum search radius of 1/8-mile (660 feet). CAInc will review published geologic mapping to evaluate if rocks potentially containing naturally occurring asbestos have been identified in the immediate vicinity of the project sites. CAInc will review recent and current available aerial photographs available on Google Earth or Google Maps.

#### Site Review

CAInc personnel will visit each site to collect a soil sample to evaluate ADL. If the guard rail system is painted, we will collect one sample of the paint to evaluate if the paint contains lead



at concentrations above the hazardous threshold. We will also observe uses of adjacent properties, note presence of treated wood in the guard rail system, and note the presence and condition of paint on the guard rail system.

#### Aerially Deposited Lead (ADL) Sampling

CAInc will visit each of the 23 guard rail sections to collect a soil sample for evaluation of ADL. Samples will be collected from the shoulder adjacent to the middle of the guard rail section. Each sample will consist of a single bulk sample of soil from ground surface to 2.5 feet bgs (or refusal), collected using a hand auger. Each bulk sample will be analyzed for total lead content. Samples with total lead content  $\geq 50$  mg/kg will be further analyzed for soluble lead (WET method). The results of the ADL sampling effort will be presented and discussed in the ISA. For budgeting purposes, we assume 5 samples will require WET analysis. In addition, we assume that traffic control will consist only of "Shoulder Work Ahead" signs and cones, and that an encroachment permit can be obtained from the County at no fee.

#### Paint Sampling

If a guard rail system is observed to be painted, CAInc will attempt to collect a sample of the paint to assess if lead is present at concentrations above the hazardous waste limit. A full-thickness scraping of the paint will be collected to include any previous paint applications. Samples with total lead content  $\geq 50$  mg/kg will be further analyzed for soluble lead (WET method). The results of the paint sampling effort will be presented and discussed in the ISA. For budgeting purposes, we have assumed that 30% of the guard rail systems (7 locations) will be painted, requiring analysis for total lead content; we further assume that 2 samples will require WET analysis.

#### Reporting

CAInc will prepare a single ISA that summarizes the results of the records review (including RECs or HRECs identified as part of our evaluation), observations from the site visit, and the results of the ADL and paint sampling effort. The report will classify project sites into two categories: those sites that the records review, field observations, and chemical analytical data indicate do not appear to have hazmat constraints, and those sites that do have hazmat constraints or require additional effort to constrain their hazmat condition.

#### **Task 4.4. Environmental Summary**

LSA will prepare a master matrix that includes the findings for biological resources, cultural resources, and hazardous materials. LSA will also prepare a summary memo that identifies the guardrail locations that do not have any biological resources, cultural resources, or hazardous materials constraints and could be replaced without causing significant impacts (assuming implementation of standard avoidance/minimization measures and no additional impacts from access, staging, etc.). The memo will support National Environmental Policy Act (NEPA) clearance of the guardrail replacement using a Categorical Exclusion, Category 23 CFR 771.117(c)(8) – Installation of fencing, signs, pavement markers, small passenger shelters, traffic signals, and railroad warning devices when no substantial land acquisition or traffic disruption will occur. We have budgeted 2 hours to respond to comments generated during the review of the constraints matrix and draft environmental summary memo.

#### **Task 4.5. Preliminary Environmental Study (PES)**

LSA will prepare a Preliminary Environmental Study (PES) form as required under Caltrans Local Assistance Procedures Manual (Environmental Procedures), for federally funded



projects. The PES includes a checklist that establishes the basis for any needed technical studies, and will be used to identify the likely environmental clearance. Attachments will include a detailed project description, project and site plan maps, biological records search, floodplain maps, hazardous materials geotracker, and visual resources checklist. The PES is also used to identify environmental permits, coordination, consultations, etc. that would be needed for the project. Additionally, LSA will also attend a field meeting with County and Caltrans staff to review the PES.

Based on the funding for this project, it is anticipated that the constraints analysis will be used to refine the project to move forward into PA&ED with the components that can be completed without additional environmental technical studies.

#### **TASK 4 DELIVERABLE(S):**

- Draft and Final Biological Resources Constraints Memo
- Draft and Final Cultural Resources Constraints Memo
- Draft and Final ISA Memo
- Draft and Final Environmental Constraints Matrix
- Draft and Final Environmental Summary Memo
- Preliminary Environmental Study (PES) Form
- Attendance at Field Kick-off Meeting
- All deliverables to be submitted electronically in pdf format

#### **Project Assumptions**

This scope of services is based on the following assumptions:

- County will be responsible for coordination with Caltrans Local Assistance preparing and submitting all documents associated with the Request for Authorization for Construction.
- No Project Initiation Document (PID) or Project Report will be required.
- The project will be advertised, awarded, and administered by the County and the County will coordinate reproductions of the bid package.
- This scope does not include an RE file.
- This scope does not include assistance or preparation of a maintenance agreement between the County and any other agency.
- No utility as-builts or locating service will be obtained by Mark Thomas.
- Mark Thomas will identify survey monuments on the plans if any are encountered during the topographic survey. Mark Thomas will not be responsible for preserving and perpetuating survey monuments.
- Invert elevations for wet utilities will not be obtained by Mark Thomas.
- The County will lead the effort and will provide rights of entry to private property. The County will obtain and provide encroachment permits as necessary for work within public right of way.
- Detailed right of way delineation will not be done within the project limits, approximate right of way and property lines will be developed using Assessors Parcel Maps and GIS Mapping to be provided by the County.
- A Record of Survey is not included in this scope of work.

**PROJECT SCHEDULE**  
for  
**NEVADA COUNTY GUARDRAIL SAFETY AUDIT PROJECT**

ID	Task Name	Duration	Start	Finish	Predecessors	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	<b>NEVADA COUNTY GUARDRAIL SAFETY AUDIT</b>	<b>148.5 day</b>	<b>Tue 11/17/20</b>	<b>Fri 6/11/21</b>										
2	Award of Consultant Contract	0 days	Tue 11/17/20	Tue 11/17/20			11/17							
3	NTP and Kick-off Meeting	0 days	Fri 12/4/20	Fri 12/4/20	2FS+2.7 wks			12/4						
4	<b>GUARDRAIL SAFETY AUDIT</b>	<b>30 days</b>	<b>Fri 12/4/20</b>	<b>Fri 1/15/21</b>										
5	Conduct Surveys and Base Mapping	6 wks	Fri 12/4/20	Fri 1/15/21	3									
6	Site Visits and Structures Assessment Memo	6 wks	Fri 12/4/20	Fri 1/15/21	3									
7	<b>ENVIRONMENTAL SERVICES</b>	<b>130 days</b>	<b>Fri 12/4/20</b>	<b>Fri 6/4/21</b>										
8	Biological Resources Constraints Memo	6 wks	Fri 12/4/20	Fri 1/15/21	3									
9	Cultural Resources Constraints Memo	6 wks	Fri 12/4/20	Fri 1/15/21	3									
10	Initial Site Assessment Memo	12 wks	Fri 12/4/20	Fri 2/26/21	3									
11	Prepare Environmental Constraints Matrix and Summary	3 wks	Fri 2/26/21	Fri 3/19/21	10									
12	County Review and Revisions	3 wks	Fri 3/19/21	Fri 4/9/21	11									
13	Prepare Preliminary Environmental Study (PES)	3 wks	Fri 4/9/21	Fri 4/30/21	12									
14	Caltrans Review and Field Meeting	4 wks	Fri 4/30/21	Fri 5/28/21	13									
15	Caltrans PES Approval	0 days	Fri 6/4/21	Fri 6/4/21	14FS+1 wk								6/4	
16	<b>FINAL DESIGN</b>	<b>135 days</b>	<b>Fri 12/4/20</b>	<b>Fri 6/11/21</b>										
17	<b>30% Plans and Estimate</b>	<b>30 days</b>	<b>Fri 1/15/21</b>	<b>Fri 2/26/21</b>										
18	Civil Design	3 wks	Fri 1/15/21	Fri 2/5/21	5									
19	Quantity Takeoffs/Cost Estimates	1 wk	Fri 2/5/21	Fri 2/12/21	18									
20	30% Submittal	0 days	Fri 2/12/21	Fri 2/12/21	19									
21	County Review	2 wks	Fri 2/12/21	Fri 2/26/21	20									
22	<b>60% PS&amp;E</b>	<b>30 days</b>	<b>Fri 2/26/21</b>	<b>Fri 4/9/21</b>										
23	PDT Meeting	0 days	Fri 2/26/21	Fri 2/26/21	21									
24	Civil Design	3 wks	Fri 2/26/21	Fri 3/19/21	23									
25	Quantity Takeoffs/Cost Estimates	1 wk	Fri 3/19/21	Fri 3/26/21	24									
26	Specifications	1 wk	Fri 3/19/21	Fri 3/26/21	24									
27	60% PS&E Submittal	0 days	Fri 3/26/21	Fri 3/26/21	26									
28	County Review	2 wks	Fri 3/26/21	Fri 4/9/21	27									
29	<b>90% PS&amp;E</b>	<b>30 days</b>	<b>Fri 4/16/21</b>	<b>Fri 5/28/21</b>										
30	PDT Meeting	0 days	Fri 4/16/21	Fri 4/16/21	28FS+1 wk, 21F									
31	Respond to Comments/Update Plans	3 wks	Fri 4/16/21	Fri 5/7/21	30									
32	Quantity Takeoffs/Cost Estimates	1 wk	Fri 5/7/21	Fri 5/14/21	31									
33	Specifications	1 wk	Fri 5/7/21	Fri 5/14/21	31									
34	90% PS&E Submittal	0 days	Fri 5/14/21	Fri 5/14/21	33									
35	County Review	2 wks	Fri 5/14/21	Fri 5/28/21	34									
36	<b>100% (Final) PS&amp;E Submittal</b>	<b>10 days</b>	<b>Fri 5/28/21</b>	<b>Fri 6/11/21</b>										
37	PDT Meeting	0 days	Fri 5/28/21	Fri 5/28/21	35									
38	Respond to Comments/Update Plans	2 wks	Fri 5/28/21	Fri 6/11/21	37									
39	100% (Final) PS&E Submittal	0 days	Fri 6/11/21	Fri 6/11/21	38									
40	<b>UTILITY RELOCATION COORDINATION</b>	<b>135 days</b>	<b>Fri 12/4/20</b>	<b>Fri 6/11/21</b>										
41	Send Utility Data Gathering (A Letters)	1 wk	Fri 12/4/20	Fri 12/11/20	3									
42	Collect Mapping from Utilities	3 wks	Fri 12/11/20	Fri 1/1/21	41									
43	Utility Mapping	3 wks	Fri 1/1/21	Fri 1/22/21	42									
44	Send Conflict Mapping to Utilities (B Letter)	2 wks	Fri 3/26/21	Fri 4/9/21	27,43									
45	Utility Review and Coordination for Relocations	8 wks	Fri 4/9/21	Fri 6/4/21	44									
46	Send Relocation Notice to Owner (C Letter)	1 wk	Fri 6/4/21	Fri 6/11/21	45,34									


EXHIBIT "B"

SCHEDULE OF CHARGES AND PAYMENTS

Contractor approves this page

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**COST PROPOSAL FOR PROJECT SCOPE: Nevada-Guardrail Safety Audit Project**

																Subs		TOTAL COST	
	Principal	Sr. Technical Lead	Project Manager	Sr. Project Engineer	Design Engineer II	Design Engineer I	Sr. Technician	Survey Division Manager	Sr. Project Surveyor	Lead Survey Technician	2 Person Field Crew	3 Person Field Crew	Project Accountant	Project Coordinator	Total Hours	Total MT Cost	LSA Non-DBE		Crawford Non-DBE
	\$384	\$224	\$173	\$156	\$120	\$98	\$117	\$277	\$160	\$137	\$278	\$368	\$103	\$91					
<b>1.0 PROJECT ADMINISTRATION</b>																			
1.1 Project Management	8		16										8	16	48	\$8,125	2,894	-	\$11,020
1.2 Project Team Meetings	8		16												24	\$5,845	2,543	-	\$8,388
1.4 Quality Control	2			20											22	\$3,883	-	-	\$3,883
<b>Subtotal Phase 1</b>	<b>18</b>	<b>0</b>	<b>32</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>16</b>	<b>94</b>	<b>\$17,854</b>	<b>\$5,438</b>	<b>\$0</b>	<b>\$23,291</b>
<b>2.0 DESIGN DATA GATHERING</b>																			
2.1 Topographic Surveys and Base Mapping			2			4		8	24	84	50	20		16	208	\$41,018	-	-	\$41,018
2.2 Site Visits			24		24										48	\$7,036	-	-	\$7,036
2.3 Structural Guardrail Field Assessment		16				8									24	\$4,368	-	-	\$4,368
<b>Subtotal Phase 2</b>	<b>0</b>	<b>16</b>	<b>26</b>	<b>0</b>	<b>24</b>	<b>12</b>	<b>0</b>	<b>8</b>	<b>24</b>	<b>84</b>	<b>50</b>	<b>20</b>	<b>0</b>	<b>16</b>	<b>280</b>	<b>\$52,422</b>	<b>\$0</b>	<b>\$0</b>	<b>\$52,422</b>
<b>3.0 PREPARE PLANS, SPECIFICATIONS &amp; ESTIMATES</b>																			
3.1 30% Plans and Estimate			4	24	16	80	40								164	\$18,870	-	-	\$18,870
3.2 60% PS&E			8	24	24	120	60								236	\$26,783	-	-	\$26,783
3.3 90% PS&E			8	16	24	140	60								248	\$27,497	-	-	\$27,497
3.4 100% (Final) PS&E			4	16	8	48	20								96	\$11,189	-	-	\$11,189
3.5 Utility Coordination & Mapping			4		24	40									68	\$7,493	-	-	\$7,493
<b>Subtotal Phase 3</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>80</b>	<b>96</b>	<b>428</b>	<b>180</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>812</b>	<b>\$91,832</b>	<b>\$0</b>	<b>\$0</b>	<b>\$91,832</b>
<b>4.0 ENVIRONMENTAL SERVICES</b>																			
4.1 Biological Resources															0	\$0	5,452	-	\$5,452
4.2 Cultural Resources															0	\$0	6,348	-	\$6,348
4.3 Hazardous Materials (ISA)															0	\$0	-	22,164	\$22,164
4.4 Environmental Summary															0	\$0	7,194	-	\$7,194
<b>Subtotal Phase 4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>\$24,431</b>	<b>\$22,164</b>	<b>\$41,158</b>
<b>TOTAL HOURS</b>	<b>18</b>	<b>16</b>	<b>86</b>	<b>100</b>	<b>120</b>	<b>440</b>	<b>180</b>	<b>8</b>	<b>24</b>	<b>84</b>	<b>50</b>	<b>20</b>	<b>8</b>	<b>32</b>	<b>1186</b>				
<b>OTHER DIRECT COSTS</b>																\$1,263	\$2,673	\$4,050	\$7,985
<b>TOTAL COST</b>	<b>\$6,917</b>	<b>\$3,584</b>	<b>\$14,893</b>	<b>\$15,574</b>	<b>\$14,400</b>	<b>\$43,120</b>	<b>\$21,060</b>	<b>\$2,216</b>	<b>\$3,840</b>	<b>\$11,508</b>	<b>\$13,900</b>	<b>\$7,360</b>	<b>\$824</b>	<b>\$2,912</b>		<b>\$163,371</b>	<b>\$27,104</b>	<b>\$26,214</b>	<b>\$216,689</b>

Note: Mark-ups are Not Allowed

 Prime Consultant Subconsultant 2nd Tier SubconsultantConsultant: **Mark Thomas & Company, Inc.**

Project No. \_\_\_\_\_ Contract No. \_\_\_\_\_

Date **9/16/2020****DIRECT LABOR**

Classification/Title	Name	Range	Hours	Actual Hourly Rate	Total
Principal	Zach Siviglia*	\$120 - \$150	18	\$ 138.00	\$ 2,484.00
Principal		\$120 - \$150		\$ 133.58	\$ -
Sr. Engineering Manager		\$99 - \$121		\$ 112.76	\$ -
Engineering Manager		\$89 - \$105		\$ 96.24	\$ -
Practice Area Leader		\$89 - \$105		\$ 96.24	\$ -
Sr. Project Manager		\$69 - \$89		\$ 80.44	\$ -
Sr. Technical Lead		\$69 - \$89	16	\$ 80.44	\$ 1,287.04
Project Manager		\$60 - \$71		\$ 66.07	\$ -
Project Manager	Dan Blomquist*	\$60 - \$71	86	\$ 62.19	\$ 5,348.34
Technical Lead		\$60 - \$71		\$ 66.07	\$ -
Sr. Project Engineer		\$51 - \$61		\$ 56.74	\$ -
Sr. Project Engineer	Jake Weir*	\$51 - \$61	100	\$ 55.93	\$ 5,593.00
Sr. Technical Engineer		\$51 - \$61		\$ 56.74	\$ -
Project Engineer		\$46 - \$55		\$ 49.55	\$ -
Design Engineer II		\$39 - \$48	120	\$ 43.09	\$ 5,170.80
Design Engineer I		\$30 - \$41	440	\$ 35.19	\$ 15,483.60
Sr. Technician		\$36 - \$47	180	\$ 42.01	\$ 7,561.80
Technician		\$24 - \$36		\$ 30.88	\$ -
Intern		\$15 - \$25		\$ 20.11	\$ -
Survey Division Manager		\$90 - \$105	8	\$ 99.47	\$ 795.76
Sr. Survey Manager		\$66 - \$80		\$ 75.05	\$ -
Survey Manager		\$57 - \$68		\$ 63.20	\$ -
Sr. Project Surveyor		\$54 - \$63	24	\$ 57.45	\$ 1,378.80
Project Surveyor		\$49 - \$58		\$ 52.43	\$ -
Sr. Surveyor		\$40 - \$52		\$ 47.04	\$ -
Surveyor		\$35 - \$43		\$ 38.06	\$ -
Lead Survey Technician		\$46 - \$55	84	\$ 49.20	\$ 4,132.80
Sr. Survey Technician		\$29 - \$47		\$ 39.14	\$ -
Survey Technician		\$25 - \$33		\$ 28.01	\$ -
Survey Intern		\$15 - \$25		\$ 20.47	\$ -
Single Chief*		\$47 - \$56		\$ 51.35	\$ -
Single Instrumentman*		\$43 - \$51		\$ 45.96	\$ -
Single Chainman*		\$41 - \$46		\$ 42.73	\$ -
Apprentice*		\$20 - \$45		\$ 33.75	\$ -
1 Person Field Crew*		\$47 - \$56		\$ 51.35	\$ -
2 Person Field Crew*		\$88 - \$107	50	\$ 99.83	\$ 4,991.50
3 Person Field Crew*		\$108 - \$150	20	\$ 132.15	\$ 2,643.00
Sr. LAUD Division Manager		\$80 - \$90		\$ 84.75	\$ -
LAUD Division Manager		\$72 - \$84		\$ 77.92	\$ -
Sr. LAUD Project Manager		\$61 - \$74		\$ 68.23	\$ -
LAUD Project Manager		\$57 - \$66		\$ 60.69	\$ -

Landscape Architect		\$35 - \$57		\$ 47.04	\$ -
Landscape Designer		\$25 - \$45		\$ 35.91	\$ -
Landscape Intern		\$15 - \$25		\$ 20.11	\$ -
Sr. Funding Specialist		\$50 - \$63		\$ 57.45	\$ -
Funding Specialist		\$40 - \$52		\$ 46.68	\$ -
Sr. Project Accountant		\$40 - \$51		\$ 45.60	\$ -
Project Accountant		\$32 - \$42	8	\$ 36.99	\$ 295.91
Sr. Project Coordinator		\$36 - \$48		\$ 41.65	\$ -
Project Coordinator		\$28 - \$38	32	\$ 32.68	\$ 1,045.76
Sr. Project Assistant		\$28 - \$38		\$ 32.32	\$ -
Project Assistant		\$20 - \$29		\$ 24.78	\$ -
Sr. Technical Writer		\$29 - \$42		\$ 36.27	\$ -
Technical Writer		\$20 - \$30		\$ 25.14	\$ -
Sr. Graphic Manager		\$47 - \$55		\$ 49.91	\$ -
Sr. Graphic Designer		\$36 - \$48		\$ 43.09	\$ -
Graphic Designer		\$31 - \$40		\$ 34.83	\$ -

**LABOR COSTS**

a) Subtotal Direct Labor Costs	\$ 58,212.11
b) Anticipated Salary Increases (see page 2 for calculation)	\$ -
<b>c) TOTAL DIRECT LABOR COSTS [(a) + (b)]</b>	<b>\$ 58,212.11</b>

**INDIRECT COSTS**

d) Fringe Benefits (Rate: 74.09%)	e) Total Fringe Benefits [(c) x (d)]	\$ 43,129.35
f) Overhead & G&A (Rate: 70.19%)	g) Overhead [(c) x (f)]	\$ 40,859.08
h) General & Admin (Rate: )	i) Gen & Admin [(c) x (h)]	\$ -
	<b>j) TOTAL INDIRECT COSTS [(e) + (g) + (i)]</b>	<b>\$ 83,988.43</b>

**FIXED FEE**

<b>k) TOTAL FIXED FEE [(c) + (j)] x fixed fee:</b>	14%	\$ 19,908.08
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**l) CONSULTANT'S OTHER DIRECT COSTS (ODC) - ITEMIZE (Add additional pages if necessary)**

Description of Item	Quantity	Unit	Unit Cost	Total
Mileage	1904	Miles	\$0.575	\$ 1,094.80
Reproductions - Full Size	60	Sheets	\$ 1.00	\$ 60.00
Reproductions - Half Size	180	Sheets	\$ 0.35	\$ 63.00
Overnight Mail/Mail	3	Each	\$ 15.00	\$ 45.00

**l) TOTAL OTHER DIRECT COSTS \$ 1,262.80**

**m) SUBCONSULTANTS' COSTS (Add additional pages if necessary)**

<b>Subconsultant 1:</b> Crawford & Associates, Inc.	\$ 26,213.87
<b>Subconsultant 2:</b> LSA Associates	\$ 27,103.73

**m) TOTAL SUBCONSULTANTS' COSTS \$ 53,317.60**

**n) TOTAL OTHER DIRECT COSTS INCLUDING SUBCONSULTANTS [(l) + (m)] \$ 54,580.40**

**TOTAL COST [(c) + (j) + (k) + (n)] \$ 216,689.01**

**NOTES:**

- Key personnel must be marked with an asterisk (\*) and employees that are subject to prevailing wage requirements must be marked with two asterisks (\*\*). All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.
- The cost proposal format shall not be amended. Indirect cost rates shall be updated on an annual basis in accordance with the consultant's annual accounting period and established by a cognizant agency or accepted by Caltrans.
- Anticipated salary increases calculation (page 2) must accompany.

**CALCULATIONS FOR ANTICIPATED SALARY INCREASES**

Consultant Mark Thomas & Company

Project No. \_\_\_\_\_ Contract No. \_\_\_\_\_

Date 9/16/2020

**1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)**

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal	=	Avg Hourly Rate	5 Year Contract Duration
\$ 58,212.11	1168	=	\$ 49.84	Year 1 Avg Hourly Rate

**2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)**

	Avg Hourly Rate		Proposed Escalation			
Year 1	\$ 49.84	+	5%	=	\$ 52.33	Year 2 Avg Hourly Rate
Year 2	\$ 52.33	+	5%	=	\$ 54.95	Year 3 Avg Hourly Rate
Year 3	\$ 54.95	+	5%	=	\$ 57.70	Year 4 Avg Hourly Rate
Year 4	\$ 57.70	+	5%	=	\$ 60.58	Year 5 Avg Hourly Rate

**3. Calculate estimated hours per year (Multiply estimate % each year by total hours)**

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	100.00%	*	1168.0	=	1168.0	Estimated Hours Year 1
Year 2	0.00%	*	1168.0	=	0.0	Estimated Hours Year 2
Year 3	0.00%	*	1168.0	=	0.0	Estimated Hours Year 3
Year 4	0.00%	*	1168.0	=	0.0	Estimated Hours Year 4
Year 5	0.00%	*	1168.0	=	0.0	Estimated Hours Year 5
Total	100%		Total	=	1168.0	

**4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)**

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$ 49.84	*	1168	=	\$ 58,212.11	Estimated Hours Year 1
Year 2	\$ 52.33	*	0	=	\$ -	Estimated Hours Year 2
Year 3	\$ 54.95	*	0	=	\$ -	Estimated Hours Year 3
Year 4	\$ 57.70	*	0	=	\$ -	Estimated Hours Year 4
Year 5	\$ 54.12	*	0	=	\$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation				=	\$ 58,212.11	
Direct Labor Subtotal before Escalation				=	\$ 58,212.11	
Estimated total of Direct Labor Salary Increase				=	\$ -	Transfer to Page 1

**NOTES:**

1. This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
2. An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology).
3. This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
4. Calculations for anticipated salary escalation must be provided.

**Certification of Direct Costs:**

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. Title 23 United States Code Section 112 - Letting of Contracts
4. 48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures
5. 23 Code of Federal Regulations Part 172 - Procurement, Management and Administration of Engineering and Design Related Service
6. 48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)


All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Local governments are responsible for applying only cognizant agency or Caltrans accepted Indirect Cost Rate(s).

**Prime Consultant or Subconsultant Certifying:**

Name: Zach Siviglia

Title \*: Vice President

Signature: 

Date of Certification: 9/16/2020

Email: zsiviglia@markthomas.com

Phone number: (916) 381-9100

Address: 701 University Avenue, Suite 200, Sacramento, CA 95825

\* An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:



**EXHIBIT "C"**

**SCHEDULE OF CHANGES**

Amendments and additions to the Contract are hereby set-forth as follows:

For the entire contract, the word "Consultant" shall be substituted for "Contractor".

**11. Indemnity:**

With respect to its operations, other than the performance of professional services, Consultant agrees to indemnify, hold harmless and defend County, with counsel selected in reasonable consultation with County, the County Indemnitees, from and against any third party damages, liabilities, judgements, settlements, costs, claims, demands, actions, suits, losses, and expenses (including reasonable and necessary attorney's fees, legal costs and expenses recoverable under applicable law) arising out of the death or bodily injury to any person or destruction or damage to any property, to the extent caused by Consultant's negligent acts, errors or omissions or willful misconduct in the performance of services under this Agreement and anyone for whom Consultant is legally liable.

With respect to the performance of professional services, Consultant agrees to indemnify and hold harmless (but not defend) County, and its officers, officials, employees, and volunteers (collectively the "County Indemnitees"), from and against liability for damages to the extent caused by Consultant's, recklessness, negligent acts, errors or omissions, or willful misconduct in the performance of services under this Agreement, except such loss or damage caused by the negligence or willful misconduct of the County. Consultant has no obligation to pay for any of the County Indemnitees defense related cost prior to a final determination of liability, or to pay any amount that exceeds Consultant's finally determined percentage of liability based upon the comparative fault of Consultant, except as provided in Civil Code Section 2782.8(a) and (e).

Approved By:

\_\_\_\_\_  
County Counsel

Contractor approves this page

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\_\_\_\_\_

Signature: Heidi Hall  
Heidi Hall (Nov 23, 2020 16:36 PST)

Email: heidi.hall@co.nevada.ca.us

Signature: K.L. Elliott  
K.L. Elliott (Nov 23, 2020 14:54 PST)

Email: Kit.Elliott@co.nevada.ca.us