

EXHIBIT A

**CITY OF ST. HELENA PUBLIC WORKS PROJECT
WORK ORDER NO. 18-001-GHD6**

PROJECT NAME & NO.: Professional Engineering Services for Traffic Calming/Safety Enhancements on Highway 29 and Pratt Avenue Vicinity Project
CITY PROJECT MANAGER: Erica Ahmann Smithies, PE
CONSULTANT PROJECT MANAGER: Matt Wargula, PE, TE

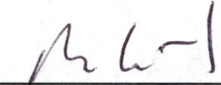
SCOPE OF SERVICE:
See Consultant's Scope of Services and Fee Schedule attached as Exhibit B-1 & B-2.

START DATE: 1/02/18 COMPLETION DATE: 8/31/18

NOT-TO-EXCEED AMOUNT FOR THIS PROJECT: **\$22,067**

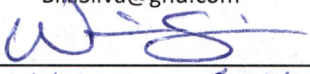
TERMS AND CONDITIONS: This Project Work Order is issued and entered into as of the last date written below in accordance with the terms and conditions set forth in the "Master Professional Services Agreement with GHD, dated May 19, 2016, which is hereby incorporated and made part of this Project Work Order. In the event of a discrepancy or conflict between the terms and conditions of the Project work Order and the Master Agreement, the Master Agreement shall govern.

CITY OF ST. HELENA

By: 
Mark Prestwich
City Manager

Date: 1/9/2018

Consultant: Bill Silva, P.E., **GHD**
2235 Mercury Way, Suite 150 Santa Rosa, CA 95407-5472 USA
707-523-1010
Bill.Silva@ghd.com

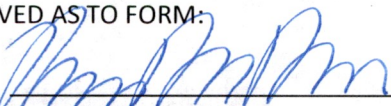
By: 
Name: WILLIAM SILVA
Title: PRINCIPAL

Date: 1/3/18

By: _____
Name: _____
Title: _____

Date: _____

APPROVED AS TO FORM:

By: 
Name: Thomas B. Brown
Title: City Attorney

Attachments: Exhibit B-1 - Consultant's scope of services
Exhibit B-2 - Compensation & Fee Schedule

EXHIBIT B-1: CONSULTANT'S SCOPE OF WORK**Task 1 – Project Management and Coordination**

Additional work includes project administration and quality control as stated in the following sub-sections:

Task 1.1 Internal Coordination and Administration

- Budget and schedule tracking
- Provide project and contract oversight
- Project invoicing

Task 1.2 QA/QC

- Provide internal QA/QC at project milestones and in support of final design.

Task 1.3 Project Meetings

- Attend one (1) on-site kick-off meeting to visit the site and discuss issues such as project concepts, preliminary engineering, design approach, and overall project review. The Project Manager will attend this meeting.
- Attend one (1) project review meeting via online WebEx teleconference with the City following the scoped draft preliminary engineering technical memorandum. The Project Manager will attend this meeting.

Deliverables: Preparation of meeting agendas, notes, and as-needed progress reports.

Task 2 – Traffic Data Collection

To evaluate Warrant 1 – Eight-Hour Vehicular Volume, Warrant 2 – Four-Hour Vehicular Volume, Warrant 3 – Peak Hour Volume and Warrant 4 - Pedestrian Volume, GHD's subconsultant, Counts Unlimited will collect the following traffic data at or near the intersection of Highway 29 and Pratt Avenue. We have included time to obtain an encroachment permit from Caltrans to conduct the data collection under Task 5.

- Collect weekday intersection turning movement count AM and PM peak hour
- Collect weekday pedestrian and bicycle counts between hours of 7:00 AM and 7:00 PM at the intersection of Highway 29 and Pratt Avenue
- Collect weekday 48 hour volume and vehicle classification count on Highway 29 near Pratt Avenue.
- Collect weekday 48 hour volume and vehicle classification count on Pratt Avenue.

GHD will prepare a public records request to obtain the current Engineering and Traffic Survey (ET&S) for segment(s) of Highway 29 near Pratt Avenue and any other traffic data information that Caltrans may provide and will obtain crash records from SWITRS for the last 3 years (2016 to 2014) for supporting information.

The City may be able to capture speed data on Highway 29 with portable speed feedback sign trailer. If needed, as an optional task, GHD will collect radar speed surveys on Highway 29 (northbound and southbound) near the intersection of Pratt Avenue in support of the installation of radar feedback signs for traffic calming.

Task 3 – Pedestrian Safety Enhancements Study at Highway 12/Pratt Ave**3.1 Warrant Analysis**

In this task, GHD will evaluate CA MUTCD traffic signal Warrants 1, 2, 3 and 4. Based on outcome of the warrants, GHD will discuss findings with the City for use in develop/refinement of two (2) project alternatives in the subsequent task.

3.2 Develop and Refine Project Alternatives

Based on outcome of the warrants, GHD will discuss findings with the City for use in develop/refinement of two (2) project alternatives, including potential treatments, options for pedestrian activated signal systems and create figures displaying the conceptual design of each alternative. Potential signal system components include:

- High Visibility Crosswalk Markings and Signage
- Rectangular Rapid Flashing Beacons

Other enhancements will be evaluated, such as curb extensions (bulb-outs), lighting and general accessibility requirements, such as curb ramp improvements.

3.3 Recommend Project

The results of the warrant analysis and development of project alternatives will be summarized with the conceptual designs in a draft Technical Memorandum for the City's review. The draft tech memo will describe the components of each alternative, discuss pros and cons, and include an opinion of probable cost for each alternative. Each alternative will be evaluated based on the following qualitative and quantitative criteria:

- Pedestrian safety and visibility to oncoming vehicular traffic
- Estimated capital cost

Following the City's review of the draft Technical Memorandum, GHD will finalize the Technical Memorandum including the recommendations for the preferred project alternative. The Final Alternatives Technical Memorandum will be stamped and signed by a Traffic Engineer registered in the State of California.

Deliverables:

- Two (2) copies of Draft Alternatives Technical Memorandum
- Two (2) copies of Final Alternatives Technical Memorandum
- One set of electronic documents for each submittal delivered electronically

Task 4 – Design

GHD will provide short narrative providing engineering evaluation/support for radar feedback signs based on results of the ad hoc radar speed surveys, City-furnished resident/citizen requests for installation of the radar feedback signs, City-furnished communication and support from the Police Department confirming the location is where speeding is observed on a regular basis and crash data. GHD is assuming that all of the above information supports the need as established by the City.

GHD will prepare plans for City-furnish and City-installation of solar radar feedback signs (2 each). The plans will utilize a suitable orthographic aerial basemap and APN parcel lines to indicated approximate right-of-way (topographic survey or boundary survey not anticipated). Plans will be prepared utilizing GHD CAD standards in Autodesk C3D 2016. Interim and final submittals will be prepared for City review as outlined below under "deliverables." Comments and recommendations provided by the City will be

incorporated into the subsequent design submittal. Written responses to City comments will also be provided.

Deliverables:

- Two (2) full size (22" x 34" bond) sets of 90% plans, SSPs for Caltrans (if required) and opinion of probable construction cost for Caltrans Encroachment Permit.
- Two (2) full size (22" x 34" bond) sets of 100% (final stamped) plans, SSPs for Caltrans (if required) and opinion of probable construction cost for Caltrans Encroachment Permit.
- One set of electronic documents for each submittal delivered electronically.

Task 5 – Caltrans Encroachment Permit

- GHD will prepare the Caltrans Encroachment Permit application for City submittal and follow through with Caltrans, including providing the City with 6-copies of plans and SSPs.
- GHD will respond to Caltrans comments, if necessary (up to two review cycles).

Deliverables:

- Caltrans Encroachment Permit Application – project and Caltrans Encroachment Permit Application – traffic data collection.
- One set of electronic documents for each submittal delivered electronically.

Schedule

Activity/Task	Date
Notice to Proceed/Kick-off Meeting	January 8, 2017
Task 2: Traffic Data Collection (radar spot speed only) / gather background data (resident requests, Collision history, speed ticketing from police, etc.)	February 19, 2018
Task 4: Design (narrative engineering evaluation/support, plans prep and cost estimate) – 90% Submittal	March 5, 2018
City Review (2 weeks)	March 19, 2018
Task 4: Design (narrative engineering evaluation/support, plans prep and cost estimate) – 100% (final) Submittal	April 6, 2018
Task 5: Caltrans Encroachment Permit – project (estimate)	May 4, 2018
City Install Radar Feedback Signs	May – June 2018
Task 2: Traffic Data Collection (TMC, peds, bikes, ADT)	April 2018
Task 3: Pedestrian Safety Enhancements Study (draft)	May 25, 2018
City Review (2 weeks)	June 8, 2018
Task 3: Pedestrian Safety Enhancements Study (final)	June 22, 2018

General Assumptions and Exclusions

- The City will provide information for the City-furnished radar speed feedback signs, if they are to be implemented with the project. It is assumed that these signs are solar powered. Installation would be based on manufacturer’s installation instructions.
- The City will provide resident/citizen feedback to include in needs assessment with Caltrans

Encroachment Permit for the project.

- The City will provide Police Department feedback that supports the installation of the radar speed feedback signs, including confirmation of speeding in location on regular basis. Data such as speed ticketing information is assumed to be provided.
- This scope assumes preparation of up to two (2) Caltrans Encroachment Permit applications for the project and up to two (2) resubmittals. One encroachment permit will be needed for the traffic data collection and another will be needed for the radar feedback signs installation.
- Preparation of conformed construction documents is not required.
- GHD is preparing construction documents (plans only) for installation of radar speed feedback signs only. Other potential improvements identified with the study portion of the work would be designed and/or have construction documents prepared under separate contract or task amendment.
- Development of specifications for the work is not required.
- Development of specifications for handling and disposing of hazardous materials during construction is excluded.
- A topographic or boundary survey is not included and is not part of this scope of work.
- Accessibility improvements, such as curb extension, curb ramps, or sidewalk improvements may need topographic survey to complete the design. If it is determined that these improvements are part of the project scope, GHD would negotiate with the City for a contract amendment.

EXHIBIT B-2 – COMPENSATION

The contract is established as a time and materials fee of as established by the attached fee schedule. The maximum for this work shall not exceed \$22,067. The consultant's fee will be based upon the individual task order request and the associated hourly rates of individuals available to execute the work and reimbursables as provided in the attached "Project Fee Estimating Sheet". The hourly rate will be dependent on the staff completing the assignment, and communicated with the City. If the review effort increases beyond the scoped effort, the consultant will notify the City prior to exceed the expected project budget.

EXHIBIT B-2 - PROJECT FEE ESTIMATING SHEET

Project Name: Traffic Calming/Safety Enhancements on Highway 29 and Pratt Avenue Vicinity Project

Client: City of St. Helena

Prepared by: M. Wargula

Date: October 25, 2017

Reviewed by: B. Silva

Job Number: 11146310

Task / Item	LABOR CATEGORY > RATE >	LABOR COSTS						TOTAL HOURS	FEE COMPUTATION			
		BS	MW	JS	NT	EM	EO		'OTHER DIRECT COSTS	Sub-Consultants	TOTAL FEE	
		Proj. Dir. / QA/QC \$260 /Hr	Proj. Mgr. Sr. Eng. \$185 /Hr	Project Engineer \$175 /Hr	Staff Engineer \$130 /Hr	CAD / Graphics \$120 /Hr	PA \$110 /Hr					
Task 1 - Project Management and Coordination												
1.1 Internal Coordination and Administration			2					2	4	\$24		\$614
1.2 QA/QC		2							2	\$12		\$532
1.3 Project Meetings			8						8	\$48		\$1,528
	SUBTOTAL TASK 1	2	10	0	0	0	0	2	14	\$84	\$0	\$2,674
Task 2 - Traffic Data Collection												
2.1 Traffic Data Collection			1					1	2	\$12	\$1,700	\$2,007
	SUBTOTAL TASK 2	0	1	0	0	0	0	1	2	\$12	\$1,700	\$2,007
Task 3 - Pedestrian Safety Enhancements Study at Highway 12/Pratt Ave.												
3.1 Warrant Analysis			2	10					12	\$72		\$2,192
3.2 Develop and Refine Project Alternatives			4	10	8	8			30	\$180		\$4,670
3.3 Recommend Project			2	10					12	\$72		\$2,192
	SUBTOTAL TASK 3	0	8	30	8	8	0	0	54	\$324	\$0	\$9,054
Task 4 - Design												
4.1 Design			8	12	8	16			44	\$264		\$6,804
	SUBTOTAL TASK 4	0	8	12	8	16	0	0	44	\$264	\$0	\$6,804
Task 5 - Caltrans Encroachment Permit												
5.1 Caltrans Encroachment Permit Application - Project			4						4	\$24		\$764
5.2 Caltrans Encroachment Permit Application - Traffic Data Collection			4						4	\$24		\$764
									0	\$0		\$0
	SUBTOTAL TASK 5	0	8	0	0	0	0	0	8	\$48	\$0	\$1,528
PROJECT TOTALS		2	35	42	16	24	3	122		\$732	\$1,700	\$22,067

*OTHER DIRECT COSTS include telephone, mileage, printing, photocopies and other miscellaneous direct expenses.