

CH2M HILL TASK ORDER FOR CITY OF SUN VALLEY

Task 2013 Sun Valley Intersection Evaluation

Project Description: Conduct selected intersection evaluations throughout the City. Task is broken into parts so that particular intersections can be selected for review and evaluation. The evaluation will include review of stopping sight distance, potential vehicle-pedestrian (this includes all non-motorized users) conflicts, unique intersection features (either positive or negative regarding safety), illumination, and recommendations for improvements. Evaluations will be based on current standards and guidelines at the time of this contract, such as AASHTO, MUTCD, and the Illuminating Engineering Society. This task order provides an option for a brief presentation and discussion with the Comprehensive plan committee to facilitate their development of goals and objectives for intersections, if so desired.

CH2M HILL, Inc. (CH2M HILL) and the City of Sun Valley have agreed that CH2M HILL will perform the following services, which are part of the Standard Agreement for Professional Services dated December 19, 2001. The services covered by this Task Order will be performed in accordance with the provisions set forth in the Standard Agreement for Professional Services together with any attachments or schedules.

Period of Performance: **Start:** February 11, 2013
Final Completion: June 30, 2013. This date will depend on how many items in this task order are selected for completion and can be negotiated. CH2M HILL's ability to meet this timeframe is contingent upon City staff's ability to secure mapping in a timely manner as requested.

Scope of Services: Subtasks involved include the following:

- 1. Juniper-Elkhorn Intersection Evaluation.** This location includes a trail crossing near the intersection that the City recently illuminated to improve visibility of pedestrians and cyclists at night. The purpose of the study is to address neighborhood complaints concerning light trespassing into their homes from the luminaire. The City of Sun Valley is also interested in recommendations for improving safety for pedestrians and vehicles at this intersection. See Attachment 1 for detailed scope for Subtask 1.
- 2. Elkhorn Road-Multi-Use Path Intersection Evaluations.** This subtask includes similar evaluation as described in Subtask 1 for the

*Sun Valley
Pavement Condition
Assessment*

following intersections:

City Hall (Dollar Rd)
Village Way North
Village Way South
Morningstar Rd East
Morningstar Rd West
Sunrise Dr
Lane Ranch Rd

See Attachment 2 for detailed scope for Subtask 2.

3. **Site Visit and Preliminary Investigation of Intersections.** Conduct a brief site visit to collect photos of all remaining intersections and to conduct a preliminary level evaluation of each remaining intersection. Based on the site visit, we will develop a prioritized list of intersections that the City may wish to consider for review. There may be some intersections that we recommend do not need any further review. See Attachment 3 for detailed information on Subtask 3.
4. **Other Minor Intersections within City.** Other minor intersections within the City are included in this Subtask 4. A similar evaluation to Subtask 2 will be conducted for minor intersections. Intersections with pathway crossings will have a slightly higher level of effort than those without pathway crossings. See Attachment 4 for detailed scope for Subtask 4.
5. **Presentation and Facilitation of Intersection Discussion with Comp Plan Team.** This effort will include a brief 20 – 30 minute presentation on standard intersection guidelines and safety requirements, followed by a facilitated discussion on how these guidelines could be implemented citywide. Discussion would involve potential goal and objective development. See Attachment 5 for detailed information on Subtask 5.

Assumptions:

- Existing TOPO / Aerial Photo – MicroStation or AutoCAD drawing (.dgn or .dwg) or Aerial photo (.sid) to scale with contours of the intersections is available
- Existing Luminaire specifications (type of light fixture, pole, height, location of pole, shielding type, lumens, etc), if applicable, can be provided, including specific location of light
- Last 5 years of crash data for each intersection, if applicable. Crash data will need to include date and time, type of crash (including any pedestrian related), severity, and any near misses if available.
- City to provide most recent directional Average Daily Traffic (ADT) volumes on the intersecting streets
- Pedestrian Counts (if available)

- No cost estimate for recommendations will be prepared as part of this scope
- Site visit and conference call needs per subtask:
 - Subtask 1 – Site visit will be incorporated into visit conducted for Pavement Condition Assessment. Up to three conference calls are included with this subtask. Photos will be taken at the time of the site visit.
 - Subtask 2 – We assume a one-day site visit to collect photos and conduct a brief visual survey of each intersection is necessary. We also assume two conference calls for each subtask will be required.
 - Subtask 3 – We assume a one-day site visit for 2 staff members for photo collection. This effort could be combined with Subtask 2 if both subtasks are selected at the same time. This would provide some cost savings.
 - Subtask 4 – If Subtask 3 is not conducted, then a one-day site visit to collect photos and to visually review the intersections will be required.
 - Subtask 5 – This subtask will require a one-day site visit and two conference call (one to kick off the subtask and one to review the Powerpoint prior to presentation).

Compensation: Estimated Cost Based on Current Per Diem Rates:

Subtask 1 - \$3,478

Subtask 2 - \$13,588

Subtask 3 - \$2,790

Subtask 4* - \$10,558

Subtask 5 - \$4,574

*The basis of compensation for Subtask 4 is a minimum of 5 intersection evaluations. There are approximately 30 intersections in the City (not including the Elkhorn intersections accounted for in Subtasks 1 and 2). As an example, if the City desired to have all remaining intersections evaluated, multiple the cost above by 6.

Other Terms N/A

This Task Order sets forth the total compensation for performing the work described herein. All terms, covenants, and conditions of the above-referenced Standard Agreement for Professional Services dated December 19, 2001 remain in full force and effect except if duly modified by this Task Order.

APPROVAL

Selected Subtasks include (initial all that apply):

(City/CH initials here)

Subtask 1 - \$3,478 _____

Subtask 2 - \$13,588 _____

Subtask 3 - \$2,790 _____

Subtask 4 - \$_____ * _____ *based on
of intersections selected (multiples of 5, or
approximately)

Subtask 5 - \$4,574 _____

City of Sun Valley Idaho

CH2M HILL, Inc.

By: _____

Signature

Neil Handyside, PE
Vice President

By: _____

Signature

Dewayne Briscoe
Mayor

Date: _____ 2013

Date: _____ 2013

Attachment 1

JUNIPER & ELKHORN ROAD INTERSECTION ANALYSIS

Study Description

The City of Sun Valley is requesting an engineering study be completed at the intersection of Elkhorn Road and Juniper Road in Sun Valley, ID. This location includes a multi-use pathway crossing near the intersection that the City recently illuminated to improve visibility of pathway users at night. For purposes of this scope, pathway users will include all types of users, but may be called simply pedestrians, or pathway users: cyclists (assuming young to professional), pedestrians (walkers to runners, young to old), roller-bladers, roller-skiers, etc. The purpose of the study is to address concerns about safety at the intersections and neighborhood complaints concerning light trespassing into their homes from the luminaire. The City of Sun Valley is also interested in recommendations for improving safety for pedestrians and vehicles at this intersection.

Engineering Study

The engineering study at the Elkhorn Road and Juniper Road Intersection will include the following three elements:

1. Existing illumination review
2. Intersection sight distance calculations
3. Options for improving intersection and pathway user safety

The study will complete an illumination analysis of the existing luminaire based on the Illuminating Engineering Society (IES) guidelines in order to provide recommendation(s) to reduce/eliminate light filtering into nearby homes. Intersection sight distances will be calculated and compared against the AASHTO recommended guidelines for both streets and pathways. Sight distance improvements will be recommended, as needed. Options for safety improvements, regarding pedestrian-vehicle conflict, will be reviewed and discussed with the City.

Products and Deliverables

A memorandum will be prepared summarizing the findings of the three elements of the engineering study. Recommendations and mitigation measures will be discussed based on the results of this study. A concept layout will be provided in MicroStation drawing format for the selected improvement based on client input.

Information Needs and Assumptions

As provided in the Task Order, and as included below:

- A site visit will be incorporated into the visit conducted for Pavement Condition Assessment; photos will be taken at this time
- We will hold up to three conference calls with the City
- No cost estimate for recommended improvements will be prepared

Schedule

Feb. 11 – kick off

Week of Feb. 11 and 18th - Preliminary analysis

Feb 26th – Preliminary Review

March 5 – Final Deliverable

Attachment 2

ELKHORN ROAD-MULTI-USE PATH INTERSECTION ANALYSIS

Study Description

This subtask will focus on all intersections of Elkhorn Road that include crossings of the multi-use path. For purposes of this scope, pathway users will include all types of users, but may be called simply pedestrians, or pathway users: cyclists (assuming young to professional), pedestrians (walkers to runners, young to old), roller-bladers, roller-skiers, etc. The purpose of the study is to evaluate intersection safety, including elements such as stopping sight distance along the path and the intersecting streets, available light, potential impediments to safety unique to the intersection, and to provide recommendations for improvements.

Engineering Study

The engineering study at the intersection will include the following three main elements:

1. Existing illumination review
2. Intersection sight distance calculations
3. Options for improving intersection and pathway user safety

For any illumination currently existing at an intersection, the study will complete an illumination analysis of the existing luminaire based on the Illuminating Engineering Society (IES) guidelines to understand the distribution of light at the intersection. If no lighting exists, recommendation will be made on whether or not it is needed. Intersection sight distances will be calculated and compared against the AASHTO recommended guidelines for both streets and pathways. Sight distance improvements will be recommended, as needed. Options for safety improvements, regarding pedestrian-vehicle conflict, will be reviewed and prepared for the City.

Products and Deliverables

A memorandum will be prepared summarizing the findings of the three elements of the engineering study. Recommendations and mitigation measures will be discussed based on the results of this study. If sight distance or lighting improvements are recommended, a concept layout will be provided in MicroStation drawing format identifying general location and improvement layout.

Information Needs and Assumptions

As provided in the Task Order.

Schedule

To be negotiated.

Attachment 3

SITE VISIT& PRELIMINARY INVESTIGATION OF INTERSECTIONS

Study Description

This subtask will focus on a brief review of all remaining intersections. A team of two engineers will visit and photograph each intersection (not included in Subtasks 1 and 2). Following the on-site investigation, the team will prioritize the intersections. We anticipate that we will find that some intersections have sight issues, alignment or other features of concern; these will be prioritized for review. We also anticipate that the physical review will help us determine that some intersections easily meet all engineering guidelines and may not need any further review. This preliminary analysis will be provided with the prioritized list.

Products and Deliverables

A prioritized list of intersections indicating those recommended for further review and those not. Those intersections identified for further review will be shown in a priority list.

Information Needs and Assumptions

As provided in the Task Order.

Schedule

To be negotiated.

Attachment 4

OTHER MINOR INTERSECTION ANALYSIS WITHIN CITY

Study Description

This subtask will focus on selected (could be all) intersections in the City; these may or may not include crossings of the multi-use path. For purposes of this scope, pathway users will include all types of users, but may be called simply pedestrians, or pathway users: cyclists (assuming young to professional), pedestrians (walkers to runners, young to old), roller-bladers, roller-skiers, etc. The purpose of the study is to evaluate intersection safety, including elements such as stopping sight distance along the path (if there is on) and the intersecting streets, available light, potential impediments to safety unique to the intersection, and to provide recommendations for improvements.

Engineering Study

The engineering study at the intersection will include the following three main elements:

1. Existing illumination review
2. Intersection sight distance calculations
3. Options for improving intersection and pathway user (if applicable) safety

For any illumination currently existing at an intersection, the study will complete an illumination analysis of the existing luminaire based on the Illuminating Engineering Society (IES) guidelines to understand the distribution of light at the intersection. If no lighting exists, recommendation will be made on whether or not it is needed. Intersection sight distances will be calculated and compared against the AASHTO recommended guidelines for both streets and pathways (as applicable). Sight distance improvements will be recommended, as needed. Options for safety improvements, regarding pedestrian-vehicle conflict, will be reviewed and prepared for the City.

Products and Deliverables

A memorandum will be prepared summarizing the findings of the three elements of the engineering study. Recommendations and mitigation measures will be discussed based on the results of this study. If sight distance or lighting improvements are recommended, a concept layout will be provided in MicroStation drawing format identifying general location and improvement layout.

Information Needs and Assumptions

As provided in the Task Order.

Schedule

To be negotiated.

Attachment 5

PRESENTATION AND FACILITATION OF DISCUSSION WITH COMP PLAN TEAM

Presentation

This subtask will focus on providing a Powerpoint presentation for the Comprehensive Planning Committee describing standard intersection guidelines as provided by AASHTO, AASHTO pathway guidelines, the MUTCD, and lighting guidelines. The presentation will provide specific examples of Sun Valley intersection improvements and opportunities. We will discuss what safety means and how it might be defined for an intersection.

The presentation will be followed by a general discussion with the committee and brainstorming to develop goals and objectives that can be effective for the Comprehensive Plan update.

Products and Deliverables

A Powerpoint presentation and notes from the discussion and brainstorming session with the committee.

Information Needs and Assumptions

No specifics required.

Schedule

To be negotiated.