

**FIRST AMENDMENT TO CONSULTANT SERVICES AGREEMENT BETWEEN
CITY OF SUNNYVALE AND WMH CORPORATION FOR
BERNARDO AVENUE UNDERCROSSING
PRELIMINARY DESIGN AND ENVIRONMENTAL REVIEW**

This First Amendment to Consultant Services Agreement, dated _____, is by and between the CITY OF SUNNYVALE, a municipal corporation ("CITY"), and WMH CORPORATION a California corporation. ("CONSULTANT").

WHEREAS, on July 24, 2017, CITY and CONSULTANT entered into a Consultant Services Agreement whereby CONSULTANT would provide professional services necessary for preliminary design, preparation of environmental review documents, and related services for a project known as Bernardo Undercrossing Preliminary Design and Environmental Review Project; and

WHEREAS, the parties now agree that a First Amendment to said Agreement is advisable;

NOW, THEREFORE, THE PARTIES ENTER INTO THIS FIRST AMENDMENT TO CONSULTANT SERVICES AGREEMENT:

1. Services by CONSULTANT

[Replace the first sentence with the following]:

CONSULTANT shall provide services in accordance with Exhibit "A-1" entitled "Scope of Work – with Amendment 1."

2. Time for Performance

[Replace the second sentence with the following]:

CONSULTANT shall deliver the agreed upon services to CITY as specified in Exhibit "A-1".

4. Payment of Fees and Expenses for Core Services and Additional Alternative

[Replace the first paragraph this section with the following]:

Payments shall be made to CONSULTANT on a monthly basis as set forth in the attached Exhibit "B-1" entitled "Compensation Schedule with Amendment 1." All compensation will be based on monthly billings as provided in Exhibit "B-1." Compensation will not be due until said detailed billing is submitted to CITY within a reasonable time before payment is expected to allow for normal CITY processing. An estimate of the percent of total completion associated with the various categories of the services shall be furnished by CONSULTANT with said billing. When applicable, copies of pertinent financial records will be included with the submission of billing(s) for all direct reimbursables. Compensation shall not exceed the amounts set forth in Exhibit "B-1" for each phase, and shall include base services as identified in Exhibit "A" in an amount not-to-exceed Five Hundred Sixty Nine Thousand Seven Hundred Thirty Seven and No/Dollars (\$569,737.00), for the duration of the contract; optional services in an amount not-to-exceed Sixteen Thousand Eight Hundred Forty and No/Dollars (\$16,840.00) for the duration of the contract; and Amendment 1 services as identified in Exhibit "A-1" in an amount not-to-exceed Four Hundred Sixty Five Thousand One Hundred Forty Four Dollars (\$465,144) for the duration of the contract. In no event

shall the total amount of compensation payable under this agreement exceed the sum of One Million Fifty One Thousand Seven Hundred Twenty One Dollar (\$1,051,721) unless upon written modification of this Agreement. All invoices, including detailed backup, shall be sent to City of Sunnyvale, attention Accounts Payable, P.O. Box 3707, Sunnyvale, CA 94088-3707.

All other terms and conditions remain unchanged.

IN WITNESS WHEREOF, the parties have executed this Agreement.

ATTEST:

CITY OF SUNNYVALE ("CITY")

By _____
City Clerk

By _____
City Manager

APPROVED AS TO FORM:

WMH CORPORATION ("CONSULTANT")

By _____
City Attorney

By _____

Name / Title

By _____

Name / Title

EXHIBIT "A-1"
Scope of Work
with Amendment No. 1 for
Bernardo Undercrossing Preliminary Design and Environmental Review

Background

The Bernardo Undercrossing Project will provide a pedestrian and bicycle crossing beneath the Caltrain railroad tracks and the adjacent Central Expressway along Bernardo Avenue. The tunnel would provide a safe and attractive non-motorized transportation crossing approximately half a mile north of the more challenging at-grade crossing of the Caltrain line at Mary Avenue.



FIGURE 1: STUDY AREA

This connection would fill a critical gap in both the local and regional bicycle networks by providing safe and convenient access between Sunnyvale neighborhoods and employment destinations to the north. It would also help to connect east-west routes along Middlefield Road in Mountain View and California Avenue in Sunnyvale. By enhancing pedestrian and bicycle connectivity, the Bernardo Undercrossing Project contributes to achievement of General Plan policies from the cities of Sunnyvale and Mountain View related to reducing traffic congestion, enhancing transportation safety, providing alternatives to driving, and increasing the bicycle and pedestrian mode share.⁴

The City of Sunnyvale has undertaken a cursory assessment of bicycle undercrossing facilities in Santa Clara County and has identified potential design criteria ("VIVID") associated with successful facilities:

- *Visibility:* avoid blind corners and hidden spaces with no eyes on the street
- *Inclusion:* ensure ADA accessibility and sufficient width for pedestrians and bicyclists
- *Vistas:* provide intrinsic wayfinding and orient entrances to wider networks and land uses

¹ <https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=23980>; LT-4.8d, LT-4.9a, LT-4.3c, LT-5.1e, LT-4.9b, LT-4.13e, LT-5.1g, LT-5.5a, LT-5.5d, LT-5.5e, LT-5.9City of Mountain View General Plan Policies LUD-8.1, LUD-8-2, LUD-8.3, LUD-8.4, LUD-9.3, LUD-17.3, LUD-19.3, MOB-1.3, MOB-3.1, MOB-3.2, MOB-3.3, MOB-4.1, MOB-4.2, MOB-6.1, MOB-6.2, MOB-9.2, MOB-9.3, MOB-10.3, MOB-11.3, POS-6.1, POS-6.2, <http://www.mountainview.gov/civicax/filebank/blobdload.aspx?blobid=10702>

- *Identity: design the undercrossing as a public space and gateway element*
- *Directness: avoid out-of-direction travel within the undercrossing and along approaches*

In reflection of changes in understanding of good pedestrian and bicycle design as well as standards and conditions along the Caltrain corridor, the City of Sunnyvale would be interested in reconsidering the undercrossing design relative to the 2004 Feasibility Study. The undercrossing design should meet current Caltrain standards and maximize the potential success of the project in attracting non-motorized transportation users, enhancing area vitality, and contributing to placemaking.

Description

The City of Sunnyvale (City), the City of Mountain View, Santa Clara County Roads and Airports, Caltrain and the VTA have met to discuss the proposed study and its limits. All Staff from all agencies agree that continuing the undercrossing to the north across the Central Expressway would create-is seeking development of a safer, more attractive, and efficient project that can be supported by all users design, as well as environmental review of t The Bernardo Undercrossing Project. The project scope includes the environmental review and conceptual design of the undercrossings, itself as well as making recommended improvements to the approach conditions utilizing complete streets design within at least approximately a 400-foot radius of the undercrossing entrances.

In light of the available budget and likely environmental clearance requirements, the level of design (City would like to achieve 30% design level) and environmental clearance (initial study and appropriate environmental clearance) is specified below. This scope amendment is intended to incorporate the additional tasks, activities, and durations that are anticipated for the extension of the study across the Central Expressway. It is assumed that the additional scope increase will be combined with the current project and managed by the City Project Manager, who is employed by the City of Sunnyvale and will work closely with other agency stakeholders.

The following elements are included as part of this scope of work:

Task 1: Project initiation and Management

Project management includes project kickoff, regular update meetings, frequent communications with the City Project Manager, hosting of a file sharing site or ftp site for the project duration, validation of key results, and quality control of all work products. Regular update meetings will include up to three in-person meetings with staff from various Divisions within the Cities of Sunnyvale and Mountain View.

For Task 1, the scope for Amendment No. 1 does not require any additional sub-tasks. However, the level of effort to complete each sub-task is increased by the added complexity of the coordination and the assumed three month addition to the schedule required to reach consensus on the preferred alternative discussed in Task 5.

PROJECT KICKOFF

As an early activity, the WMH Team will prepare for (utilizing existing data and available mapping), facilitate, attend and document a working session kick-off meeting with the City and other stakeholders to define the overall project study limits and agree upon the project purpose and need. At this time, the WMH Team will provide the City with a data request with suggested dates for delivery of each data request item.

CLIENT COMMUNICATION AND COORDINATION

In conjunction with the City Project Manager, the WMH Team will prepare for, schedule, and conduct 3 meetings in-person with staff from various Divisions within the [City-cities of Sunnyvale and Mountain View](#) to address and resolve specific project issues and promote consensus building between the various entities. Additionally, technical briefings with City Project Manager will be conducted bi-weekly (24 meetings) via informal phone conferences and/ or in person to provide regular updates on project progress. [Amendment No.1 adds three meetings in-person with stakeholders and six bi-weekly technical briefings.](#)

FILE SHARING

WMH will establish and maintain an external project ftp site for document sharing with the WMH Team, [the City Project Manager](#), and approved stakeholders. Documentation collected, developed, and received during project development will be stored on the ftp site using the WMH project filing system. [Amendment No.1 changes the project FTP site discussed above to a commercially hosted Microsoft One Drive site.](#)

SCOPE, SCHEDULE, AND BUDGET CONTROLS

WMH will work closely with the City Project Manager to ensure that each of the project's goals, objectives and critical issues are clearly identified and consistent with the documented scope. Any potential project changes will be reported to the City [Project Manager](#), including impacts to scope, schedule and cost, and any changes to the agreed will not be made without [City approval from the City Project Manager](#).

WMH will develop and maintain a critical path method (CPM) schedule, listing all major activities and their durations, utilizing *MS Project* software and submit for City of Sunnyvale's concurrence. Tasks will be linked logically and will be sufficiently detailed to allow them to be monitored by physical percent complete. Completion of tasks and submittal of deliverables are developed to occur in a logical sequence and controlled by the base schedule. Necessary resources will be assigned and team members will be made aware of task durations and submittal dates in advance of a specific task being initiated. Reviewers will be made aware when submittals are scheduled so their time can be allotted for reviews. The CPM schedule will be updated on a monthly basis for discussion with the City Project Manager. [The additional three month duration, design alternative development and increased coordination for Amendment No.1 increases the CPM's level of complexity and add three monthly updates.](#)

Project budget control will be accomplished by utilizing the WMH cost accounting system which has been customized to allow for the weekly transfer of spent cost directly into WMH's web-based project manager reporting system. This allows for the ability to obtain detailed reports on the financial status of the project on a weekly basis. Budget control reporting to the City Project Manager will be implemented through the invoicing process to provide current cost information and progress on deliverables and services performed. Detailed progress reports are included to relay information on project expenditures. Invoices and progress reports will be submitted on a monthly basis. [The additional three months for Amendment No.1 adds three monthly invoices and progress reports.](#)

QUALITY CONTROL

WMH will develop a Project Quality Control Plan (PQCP) to assure the procedures are applied on all aspects of project work and deliverables. The PQCP establishes a process for checking, correcting, and back-checking design calculations, plan sheets, quantity take-offs, estimates, specifications, and reports. The PQCP will include appropriate "check lists" that assure product quality and the validation of key results.

TASK 1 - DELIVERABLES

- Project Kick-off Exhibits (3 Large Plots)
- Data Request Log
- Meeting Agendas and Summaries

- Project [FTP-One Drive](#) Site
- CPM Schedule
- Monthly Invoices and Progress Reports
- [Project Quality Control Plan](#)

Task 2: Document Review & Existing Conditions Analysis

Existing conditions analysis includes analysis of multimodal transportation conditions, context, and utilities within the study area, as well as review of all relevant policies and requirements associated with the project including the General Plan and VTA Countywide Bicycle Plan. As part of this effort, multimodal traffic counts will be conducted at a number of intersections including Central Expressway/Bernardo Avenue.

In addition, the existing conditions analysis includes non-motorized transportation counts and a brief user satisfaction survey at other pedestrian/bicycle undercrossings in Santa Clara County.

For Task 2, the scope for Amendment No. 1 does not require any additional sub-tasks. However, the level of effort to complete each sub-task is increased by the added study area and physical crossing of the Central Expressway.

EXISTING CONDITIONS REVIEW

The WMH Team will obtain Sunnyvale, Caltrain, Mountain View, and County Access Encroachment Permits to conduct site investigations, take photographic records, and verify topographic mapping features.

The WMH Team will obtain and review available data and create an electronic project basemap for use in the Preliminary Design Development Task below. Information may be obtained from Sunnyvale, Caltrain, Mountain View, County, other government agencies or organizations, or private utility owners. Data to be reviewed includes:

- As-built plans
- Details of planned development projects affecting the project area
- Previous report(s) or documents related to the study area and adjacent projects
- Right-of-way/ Easement records
- Traffic and Accident Data
- Existing Utility information
- Aerial photos and digitized topography from 2015 Caltrain planimetric mapping
- Survey control data

POLICY/ DOCUMENT REVIEW

The WMH Team will perform a review of all relevant policies and requirements associated with the project including the General Plan, 2017 Land Use and Transportation Element (LUTE), and VTA Countywide Bicycle Plan.

PRELIMINARY DESIGN SURVEYS (TASK 2A)

RSE will review the 2015 Caltrain planimetric (aerial photography and topographic mapping) mapping for accuracy and completeness, and supplement with limited topographical field survey data needed to complete conceptual design of the project. Preliminary design surveys are anticipated to locate key details (e.g. drainage facilities, positive utility markout locations, sign structures, and rail features). [Amendment No.1 requires additional surveys for the increased study area and physical crossing of the Central Expressway.](#)

UTILITY AND RIGHT-OF-WAY REQUIREMENTS

WMH will assist the City of Sunnyvale in requesting existing utility information from utility owners within the project vicinity. Utilizing existing GIS data and hardcopy owner mapping, WMH will prepare basemaps of the existing utility facilities. WMH will perform field reviews to validate and adjust the utility facility mapping based on the actual field conditions. [Amendment No.1 requires additional utility notifications and mapping for the increased study area and physical crossing of the Central Expressway.](#)

WMH and RSE will review existing R/W maps and tax assessor data to identify affected and/or adjacent properties. Based on the available City data from both the City of Sunnyvale and the City of Mountain View, WMH will prepare a conceptual R/W cost. [Amendment No.1 requires additional data gathering and mapping for the increased study area, and formal determination of the "County" Parcel ownership and City Limit Line location.](#)

POSITIVE UTILITY LOCATING (TASK 2B)

Once the utility facility basemaps are validated, WMH will prepare a positive location plan that will be verified with the City Project Manager. Based on this plan, the field work, comprised of electronic locating (Ground Penetrating Radar (GPR) and tracing up to six feet in depth), will be conducted. (Note: Potholing and detailed field surveys to positively locate utilities will be performed in PS&E phase.) [Amendment No.1 requires additional utility field work and mapping for the increased study area and physical crossing of the Central Expressway.](#)

MULTI-MODAL TRAFFIC COUNTS

Parisi will conduct weekday 2-hour peak counts at Bernardo/Evelyn and Bernardo/Central Expressway. Parisi will also compile data into a level-of-service analysis for both locations in order to support the identification of feasible alternatives and define the primary design elements for further study. [Amendment No.1 requires additional data gathering for the increased study area and physical crossing of the Central Expressway.](#)

NON-MOTORIZED COUNTS/ USER SATISFACTION SURVEYS

Parisi will conduct non-motorized transportation counts, travel time assessments, and a brief user satisfaction survey at six similar pedestrian/bicycle undercrossings in Santa Clara County. Locations may include other railway undercrossings such as Homer Avenue undercrossing in Palo Alto, and roadway undercrossings such as the Stevens Creek Trail undercrossing at El Camino Real.

EXISTING CONDITIONS ANALYSIS

Parisi will utilize policy/ document review findings, multi-modal traffic counts taken at the project site, and the non-motorized transportation counts and user satisfaction surveys discussed above to perform an existing conditions analysis and document their findings in a memorandum. [Amendment No.1 requires additional traffic analysis for the increased study area and physical crossing of the Central Expressway.](#)

TASK 2 - DELIVERABLES

- Utility Basemapping
- Conceptual R/W Cost
- Existing Conditions Analysis Memorandum
- Preliminary Design Surveys (Task 2A)
- Positive Utility Locating (Task 2B)

Task 3: Community Engagement

Community engagement will occur throughout the course of the project. Specific engagement strategies will occur during existing conditions review, alternatives development, and

preferred design selection stages. Engagement processes will encourage participation by a diverse spectrum of the community including minority and low-income communities that may be affected by the project and may include innovative strategies such as attendance at existing community events and pop-up workshops. Community engagement will include at least three workshops (or rounds of pop-up workshops) plus an informational session with Sunnyvale BPAC.

For Task 3, the scope for Amendment No. 1 does not require any additional sub-tasks. However, the level of effort to complete each sub-task is increased by the added study area and the addition of the City of Mountain View and Santa Clara County Roads and Airports as key team members.

PUBLIC OUTREACH PLAN

In conjunction with the City Project Manager, the WMH Team will develop a Public Outreach Plan that outlines project goals, messages, tools and techniques, project protocols, an anticipated schedule for activities, and contact information. The addition of the two key team members for Amendment No.1 increases the Public Outreach Plan's level of complexity and requires additional meetings.

PUBLIC OUTREACH MEETINGS AND PUBLIC HEARINGS

For formal Public Outreach Meetings, which are assumed to be held at City facilities and presented by the City Project Manager, the WMH team will assist the City Project Manager in creating the agenda and format, prepare presentation and meeting materials, facilitate the meeting, and write a summary (summarizing attendance, questions, and public input received at the workshop or via e-mail). For informal Public Meetings, City Project Manager will utilize previously prepared materials to discuss the project with the public, the WMH Team will assist with documentation of the events. Activities related to public outreach meetings and public hearings are as follows:

Round 1: Initial Input

- Prepare for, facilitate, attend and document (WMH, APEX, and Parisi) a formal Public Outreach Meeting (combined Sunnyvale and Mountain View) shortly after Project Kick-off to discuss the project purpose/need and receive public input on issues/ concerns within the project area.
- Support the City Project Manager, by providing display materials, for her plotting and use in attending up to 4 informal Public Events (farmers markets, etc.) to receive public input on the proposed project and any issues/ concerns within the area.

Round 2: Preferred Design

- Prepare for, facilitate, attend and document (WMH, and APEX) up to 4four informal Community Stakeholder (business community groups, home owners associations, etc.) Workshops to receive public input on the project alternatives and any issues/ concerns within the area.
- Prepare for, facilitate, attend and document (WMH, APEX, DPA) up to threea formal Public Information Meetings (combined Sunnyvale and Mountain View, County, and VTA), such as a combined BPAC and City Council study session, as part of the Environmental Circulation Process to receive public input on the project alternatives and the environmental document.

Round 3: Adoption

- Prepare for, facilitate, attend and document (WMH and Parisi) up to twoa City Council sessions (Sunnyvale and Mountain View) to request adoption of the environmental document and approve the project. Materials for the Council session will be prepared in advance for use in an earlier presentation by City staff to BPAC.

TASK 3 - DELIVERABLES

- Public Outreach Plan
- Presentation and Meeting Materials
- Outreach Meeting Summaries

Task 4: Multi-Agency Stakeholder Engagement

At least three rounds of multiagency stakeholder engagement (up to six meetings) will also occur throughout the course of this project. This engagement will ensure that agency concerns are reflected in the design and critical requirements are met. Relevant agencies include the California Public Utilities Commission (PUC), Santa Clara County Roads & Airports, Caltrain / Joint Powers Board (JPB), and City of Mountain View Public Works Department.

STAKEHOLDER MEETINGS

The WMH team will assist the City Project Manager in creating the agenda and format, prepare presentation and meeting materials, facilitate the meeting, and write a summary (summarizing attendance, questions, and input received) for up to six multi-agency (three meetings included in base scope and three meetings Optional Service 4A) stakeholder engagement meetings over the course of three rounds in order to ensure that agency concerns are reflected in the design and critical requirements are met. The first round would be done as part of the project kick-off phase, the second would be done as part of the planning process, and the third would be utilized as a design check-in prior to circulating the environmental document. Relevant agencies could include the California Public Utilities Commission (PUC), Santa Clara County Roads & Airports, Caltrain/ Joint Powers Board (JPB), and the City of Mountain View Public Works Department.

TASK 4 - DELIVERABLES

- Presentation and Meeting Materials
- Meeting Agendas and Summaries

Task 5: Design Criteria

Design criteria will be outlined for the project. These criteria include engineering standards, urban design criteria, and code regulations from agencies with jurisdiction over Bernardo Avenue Undercrossing as well as potential future agencies with jurisdiction in the area (such as California High Speed Rail Authority). Urban design criteria may include key attributes outlined by stakeholders and potential users.

For Task 5, the scope for Amendment No. 1 does not require any additional sub-tasks. However, the level of effort to complete the sub-task is increased by the added study area and the addition of the City of Mountain View and Santa Clara County Roads and Airports as key team members who will be potential Owner and Operators of portions of the extended facility.

DESIGN CRITERIA OUTLINE

WMH will outline the proposed design criteria for the project based on Public Outreach, Document Review, and Existing Conditions findings, engineering standards, Caltrain design requirements, future agency requirements (such as California High Speed Rail Authority), urban design criteria, code regulations, and key attributes required of the design in order to adhere to stakeholder and potential user needs. Hyperlinks and/or ftp access to the documents will be provided for the team's use. It should be noted that this is a living document that will be updated periodically throughout the course of the project studies. Amendment No.1 requires significant additional effort for defining owner/operator requirements for the Central Expressway undercrossing, gateway and approach improvements included in the increased study area.

TASK 5 - DELIVERABLES

- Design Criteria Outline

Task 6: Preliminary Design Development

Preliminary design for the Bernardo Undercrossing Project will be developed by drawing upon community and stakeholder engagement, professional expertise in relation to bicycle and complete streets design, current best practice with respect to bicycle undercrossings, and design options or requirements outlined in the California MUTCD, California Highway Design Manual, City standards, NACTO Urban Bikeway Design Guide (2010), NACTO Urban Street Design Guide (2013), Caltrans Main Street California (2012), and ITE Designing Walkable Urban Thoroughfares: A Context Sensitive Approach (2010).

Up to three preliminary alternatives will be developed. Alternative will reflect recent developments in bicycle planning and lessons from other pedestrian/bicycle undercrossing projects. The preliminary alternatives will include necessary street design changes along approaches to the undercrossing. One alternative will be chosen for design refinement during Conceptual Design, and further detailed during the 30% Design process.

For Task 6, the scope for Amendment No. 1 does not require any additional sub-tasks. However, the level of effort to complete each sub-task is increased by the added study area and physical crossing of the Central Expressway.

PRELIMINARY ALTERNATIVES

The WMH Team will prepare up to three Preliminary Alternatives, each of which will be presented as a single rollout display on aerial background and include the following:

- Horizontal/ vertical geometrics and ~~two~~three typical cross sections.
- ~~Opportunities for potential landscaping/ hardscaping (Railroad Undercrossing) as shaded areas.~~
- ~~Opportunities for potential landscaping/ hardscaping (Central Expressway), including conceptual themes and colors for a Mountain View Gateway Portal.~~
- ~~Opportunities for a potential destination feature (park, picnic area, etc.) in the parcel between the railroad and expressway.~~
- Potential R/W and Utility Impacts.
- Complete streets improvements within a 400-foot radius of the undercrossing entrances.
- ~~Structural concept and Railroad Construction Methodology.~~
- Structural concept and Expressway Construction Methodology.
- Order of magnitude cost.

Up to two structural concepts for the railroad crossing, with associated railroad staging, will be developed in conjunction with Caltrain through the stakeholder coordination included as part of Task 4 above. It should be noted that not all structural alternatives are anticipated to work with all of the preliminary alternative geometrics that will be investigated. Additionally, Amendment No.1 will develop up to two structural concepts of the Central Expressway undercrossing, with associated roadway staging.

The WMH Team will evaluate the Preliminary Alternatives, with input from the City Project Manager, and select a Preferred Alternative for further refinement during Conceptual Design. This evaluation will be documented as part of the Final Report discussed below in Task 9. Amendment No.1 requires additional effort for the analysis of the increased scope of the Preliminary Alternatives.

ALTERNATIVES ANALYSIS MEMORANDUM (OPTIONAL SERVICE 6B)

The WMH Team will prepare for, facilitate, and attend a formal Alternatives Analysis Workshop with the City and other stakeholders deemed appropriate by the City Project Manager to formally rate/ score the preliminary alternatives based upon developed weighted criteria (cost, construction risk, utility impacts, etc.) to provide detailed justification for the setting aside of preliminary alternatives. Amendment No.1 requires additional effort for the formal analysis and documentation of the increased scope of the Preliminary Alternatives.

CONCEPTUAL DESIGN

The WMH Team will refine the preferred alternative chosen from the Preliminary Alternative Assessment and develop it further through conceptual design. [Amendment No.1 requires additional effort for the conceptual design due to the increased scope included in the preferred alternative.](#)

This Conceptual Design will be documented as a single rollout display on aerial background and include the following:

- Refined Horizontal/ vertical geometrics and two typical cross sections.
- Refined potential landscaping/ hardscaping locations and types.
- Conceptual lighting and types.
- Preliminary signal modifications and traffic impacts.
- Architectural renderings, surface treatment options, and planting pallets.
- Refined potential R/W and Utility Impacts.
- Refined complete streets improvements.
- Refined Structural Alternative and Railroad Construction Methodology.
- Conceptual structural plan and sections for tunnel and walls.
- Refined order of magnitude Cost.
- Construction duration.
- Potential Environmental Impacts.
- Maintenance requirements and jurisdiction definitions.
- Service connection locations.

The geometrics of the existing facilities and proposed alternative would also be checked for nonstandard features and refinements would be investigated to assess if any nonstandard features can be eliminated. Required mandatory and advisory design exceptions would be identified and coordinated with the City [of Sunnyvale, City of Mountain View, and Caltrain and County Roads & Airports](#), and documented as part of the Final Report discussed below in Task 9. [Amendment No.1 requires additional effort for the increased study area and physical crossing of the Central Expressway as well as defining owner/ operator standards.](#)

[Additionally, the Conceptual Design will be phased to allow staggered construction of the Railroad Undercrossing, followed by the Central Expressway Undercrossing. Each of these construction phases will be documented on their own rollout display.](#)

PRELIMINARY GEOTECHNICAL REPORT (PGR)

Parikh will prepare a geotechnical report of the project area that includes a preliminary design level study of existing site conditions and documents preliminary recommendations for pavement structural section, cut and fill slopes, and structure design. The site study shall provide general information based on readily available data from nearby projects and public records. [Amendment No.1 requires a relatively significant additional effort for the increased study area and physical crossing of the Central Expressway due to the extended distance from the railroad and its readily available data.](#)

The report will discuss potential geotechnical/ geologic impacts and mitigations including but not limited to: soils, geology, seismic impacts, erosion, groundwater conditions, etc. for the proposed structures. Potential mitigation measures will also be provided as part of the foundation discussions.

LOCATION HYDRAULIC STUDY

Federal review of transportation projects within the 100-year floodplain is subject to Executive Order 11990 that requires consideration of alternatives and assessment of the project's impacts to the beneficial values of the floodplain. Wreco will conduct a Location Hydraulic Study and prepare a report to identify the significance of the project impacts to the floodplains and make general recommendations on possible mitigation measures. The characteristics associated with the watershed, local hydrologic conditions, etc. shall be documented for the study. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) shall be used as the

basis of determining the impact of the proposed roadway improvements on the floodplain. [Amendment No.1 requires additional effort for the increased study area and physical crossing of the Central Expressway.](#)

PRELIMINARY CONSTRUCTION SCHEDULE

WMH will prepare a Preliminary Construction Schedule for City review utilizing background history and knowledge of construction durations and techniques, the Caltrain work windows, and coordinated roadway, structures, and utility construction activities. [Amendment No.1 requires additional effort for the increased study area and physical crossing of the Central Expressway.](#)

PRELIMINARY CONSTRUCTION STAGING AND DETOURS

WMH will prepare a stage construction concept outlining the stage construction and traffic handling requirements to verify that the project is constructible, that traffic impacts are minimized, and public safety is not compromised. Roadway and undercrossing improvements shall be coordinated with existing facilities to assess whether detours are needed to construct the improvements. [Amendment No.1 requires additional effort for the increased study area and physical crossing of the Central Expressway.](#)

CONCEPTUAL C.3 STUDY

WMH will conduct a Conceptual C.3 study based on local agency standards and in conformance with the San Francisco Bay Regional Water Quality Control Board Stormwater Permit guidelines. The study will summarize the project impacts to water quality, general minimization measures, hydrologic/hydraulic analyses for sizing the stormwater quality facilities, and recommended best management practices (BMPs). [Amendment No.1 requires additional effort for the increased study area and physical crossing of the Central Expressway.](#)

30% PLANS

The WMH Team will prepare preliminary plans, per the table below, for the refined Conceptual Alternative discussed above, based on City of [Sunnyvale](#), [City of Mountain View](#), Caltrain, stakeholder, and local input from Public meetings. [Amendment No.1 requires additional effort for the increased study area and physical crossing of the Central Expressway.](#)

Sheet ID	Sheet Name	Phase 1 Railroad Undercrossing Preferred Alternative	Phase 2 Central Undercrossing
-	Title Sheet	1	1
X	Typical Cross Sections	2	2
L	Layouts	1	1
P	Profiles	2 ⁺	1
C	Aesthetic Details (Walls and Hardscape)	6 ²	2
D	Drainage Plan	1	1
U	Utility Plan	1	1
SC/ TH	Stage Construction/ Traffic Handling Plans	4	4
PD	Pavement Delineation Plan	1	1
S	Sign Plan	2 ⁺	2
R	Retaining Wall Plans	4	2
IP	Irrigation Plans	2 ⁺	1
PP	Planting Plans	1	1

E	Electrical (Signals)	2	<u>1</u>
E	Electrical (Lighting Plans)	1	<u>1</u>
ST	Structure Plan and Typical Section	1	<u>1</u>
Total		<u>3225</u>	<u>23</u>

STUCTURAL TYPE SELECTION PACKAGE (TASK 6A)

WMH and BCA will refine the structure plans for ~~the one preferred~~ railroad undercrossing, prepare preliminary structural calculations and update cost estimates in support of the Bridge Type Selection Report in accordance with railroad requirements for underpass structures. One draft version of a Type Selection Report for City ~~of Sunnyvale, City of Mountain View, and Caltrain, and County~~ review and comment will be prepared. Review comments will be addressed and final drafts prepared for approval.

WMH and BCA will refine the structure plans for the preferred alternative expressway undercrossing, prepare preliminary structural calculations and update cost estimates in support of the Bridge Type Selection Report in accordance with Santa Clara County Roads and Airports requirements for underpass structures. One draft version of a Type Selection Report for City and County review and comment will be prepared. Review comments will be addressed and final drafts prepared for approval.

TASK 6 - DELIVERABLES

- Preliminary Design Alternatives (3 single rollout displays)
- Alternatives Analysis Memorandum (Optional Service 6B)
- Conceptual Design (1 single rollout display)
- Preliminary Geotechnical Report
- Location Hydraulic Study
- Conceptual C.3
- Preliminary Construction Schedule
- Preliminary Construction Staging and Detours
- 30% Plans (~~25-47~~ – 50 Scale Plans)
- Structural Type Selection Packages (Task 6A)

Task 7: Estimation of Costs and Impacts

The preliminary design will be accompanied by an estimation of conceptual construction costs for the preferred alternatives selected in Task 6.

Planning level project impacts will also be assessed. These impacts include automobile level of service (LOS) and travel time impacts under existing and build out conditions, bicycle travel time impacts, impacts on vehicle miles traveled, network completion, and/or other relevant criteria.

Utility impacts and other considerations will also be outlined as part of this task. Other considerations may include maintenance needs, drainage, and environmental concerns. Additionally, right-of-way, permits and agency requirements will be outlined in relation to the proposed design alternatives.

For Task 7, the scope for Amendment No. 1 does not require any additional sub-tasks. However, the level of effort to complete each sub-task is increased by the added study area and physical crossing of the Central Expressway.

PRELIMINARY COST ESTIMATE

The WMH Team will prepare a preliminary cost estimate for the refined Conceptual Alternative discussed above, including construction, right of way, and utility relocation costs in order to establish funding boundaries for the project. Costs will be based on available mapping and design data and individual cost items will be quantified. The preliminary cost estimate will be prepared using the Caltrans' Standard format for Project Planning Cost Estimate (11-page format). [Amendment No.1 requires additional effort for the increased study area and physical crossing of the Central Expressway.](#)

PROJECT IMPACT ASSESSMENT

The WMH Team will prepare a planning level Project Impact Assessment including analysis of impacts to automobile level of service (LOS) and travel time impacts under existing and build out conditions, bicycle travel time impacts, impacts on vehicle miles travelled, and network completion. Additional recommendations are likely to come out of this analysis for potential implementation by the City of Mountain View (northerly bicycle improvements), County Roads (complete street improvements), and VTA (updates to bus routes and stops). The Project Impact Assessment will be in the form of a Design Memorandum. [Amendment No.1 requires additional effort for the increased study area and physical crossing of the Central Expressway.](#)

TASK 7 - DELIVERABLES

- Preliminary Cost Estimates
- Project Impact Assessment

Task 8: Environmental Clearance

Environmental review documentation will include preparation of an Initial Study (IS) and Negative Declaration (Neg Dec), Mitigated Neg Dec, or Environmental Impact Report (EIR) as appropriate to achieve CEQA clearance for the project. Environmental clearance also includes incorporation of city comments to administrative drafts, and necessary notifications, preparation and presentation at public hearings, and document revision based on public comments.

The WMH Team will indicate expected requirements and level of effort for environmental clearance. Phase 1 completion assumes preparation of an initial study and Neg Dec. Phase 2 may include preparation of an EIR and associated activities if needed.

[For Task 8, the scope for Amendment No. 1 does not require any additional sub-tasks. However, the level of effort to complete each sub-task is slightly increased by the addition of the Central Expressway undercrossing to the study area for each technical report listed below.](#)

NEPA COMPLIANCE

DPA will prepare a draft of the Preliminary Environmental Study (PES) form, followed by a Caltrans Field Review. The PES Form will be used by Caltrans to determine the environmental studies required for the project. Because the Field Review has not yet been completed, the following Scope of Work describes the studies that DPA believes could ultimately be required by Caltrans, based on our recent experience. Should any of the studies not be required, this scope will be narrowed. Based on DPA's understanding and experience from similar projects, 1) the project will qualify for a Categorical Exclusion (CE) under NEPA, and 2) a number of technical studies will be required to be prepared. The reports prepared for the NEPA document will be used for the preparation of the CEQA document to the extent possible. This scope includes one cycle of revisions to each report. The studies to be completed by DPA or its subconsultants are described below. The studies to be prepared by other team members are described elsewhere.

- Cultural Resources Reports (Archaeological/Historical Consultants): Area of Potential Effect (APE) maps will be prepared, encompassing all work areas. A Historic Properties Survey Report (HPSR) and an Archaeological Survey Report (ASR), including archival research, a Native American consultation, and an archaeological survey, will be completed. It is assumed that a Historic Resources Evaluation Report (HRER) will not be required for this project and therefore a HRER is not included in this scope.
- Biological Technical Memo (H.T. Harvey & Associates): The project site does not contain wetlands or other waters, but the developed and landscaped areas could provide habitat for bats and birds. A survey and biological technical memorandum report will be prepared to analyze anticipated regulatory requirements, potential impacts of the project on biological resources, and any necessary mitigation measures.
- Construction Noise Memo (Illingworth & Rodkin): Noise and vibration impacts resulting from the project will be assessed with respect to the State and Federal noise and vibration guidelines. The project will result in temporary construction noise. If potentially significant noise impacts are identified, mitigation measures will be determined.
- Initial Site Assessment (Cornerstone Engineering): The purpose of the Initial Site Assessment (ISA) is to evaluate the presence or likely presence of hazardous substances or petroleum products on the site under conditions that indicate a substantial material threat of release into the ground and/or groundwater. Preparation of the ISA will include regulatory agency data and site history reviews, site hydrogeology summary, and site reconnaissance.
- Air Quality Conformity Memo: Caltrans requires that the City provide evidence that the Metropolitan Transportation Commission (MTC)'s Air Quality Conformance Task Force has determined that the project is not a "Project of Air Quality Concern." DPA will undertake the coordination necessary for this process and will draft the memo.
- Construction Traffic Memo: See Task 2 above.
- Equipment Staging Memo: DPA will prepare a memo describing the location(s) where equipment and materials will be staged during the construction phase of the project. The location(s) for staging will be provided to DPA by the design team or the City.
- Location Hydraulic Study: See Task 6 above.
- Visual Impact Memo: DPA will prepare a brief memo that describes the anticipated visual effects of the proposed undercrossing. It is assumed that no photosimulations will be required by Caltrans.
- Right-of-Way/Community Memo: DPA will prepare a short memo that describes the right-of-way impacts of the undercrossing. The memo will also describe any impacts to the community, but such impacts (if any) are anticipated to be minimal given the nature of the project.
- Water Quality Memo: DPA will prepare a memo that describes the surface water and groundwater resources within the project area including any existing impairments. Any potential project impacts, and associated mitigation measures, will be described.
- Environmental Compliance Report: DPA will complete a report discussing the project's anticipated impacts on the resources listed above, fulfilling the requirements for NEPA compliance.

CEQA COMPLIANCE

DPA will prepare an Initial Study/Mitigated Negative Declaration (IS/MND) in compliance with the California Environmental Quality Act (CEQA). The IS/MND will utilize the format required by the City of Sunnyvale at the time it is prepared. DPA will respond to comments received by the City Project Manager upon completion of the circulation of the Initial Study.

DPA will provide an electronic version of the Administrative Draft Initial Study (ADIS), as well as a draft Mitigation Monitoring and Reporting Program (MMRP), to City Staff for review and comment, as required by CEQA. Revisions will be made to the ADIS based on comments received. After the revisions to the document have been made, an electronic version of the "Screencheck" Initial Study

will be provided to City Staff for final review. After final revisions to the “Screencheck” have been made, up to 20 copies of the final Initial Study will be provided to the City [of Sunnyvale](#) for distribution [to agency stakeholders](#).

This scope of work includes providing a copy of the Initial Study in PDF format for posting on the City’s website. DPA will provide the required 15 CDs of the Initial Study for the Office of Planning and Research (State Clearinghouse) for the 30-day public review period. This scope of work also includes response to comments received on the Initial Study during the public review period from the public and/or various governmental agencies.

TASK 8 - DELIVERABLES

- NEPA Technical Studies and CE
- Draft IS/MND
- Final IS/MND

Task 9: Final Report

The Final Report will be provided in electronic and hard copy versions, and will contain sections on project goals, existing conditions, community engagement, stakeholder outreach, preliminary alternatives, and the preferred design.

For Task 9, the scope for Amendment No. 1 does not require any additional sub-tasks. However, the level of effort to complete the Final Report is increased by the added study area and physical crossing of the Central Expressway.

The WMH Team will prepare a Final Report for City review and comment. Included in the report will be discussions on project background, recommendations/next steps, preliminary alternatives analysis, and the preferred design. The 30% Plans and Preliminary Cost Estimates, as well as other supporting technical reports and data (existing conditions, community engagement, stakeholder outreach, preliminary geotechnical report, location hydraulic study, environmental documentation, etc.) will be attached and/or referenced. WMH will provide an electronic version and hard copy of the Administrative Draft to the City [Project Manager](#) for review and comment. Review comments will be addressed and a final version of the report will be prepared.

DESIGN BASIS MEMORANDUM (TASK 9A) CALTRAIN EXCEPTIONS

The WMH Team will prepare a Caltrain Design Basis Memorandum (DBM) summarizing the project description and its limits, technical criteria, design exceptions, etc. This DBM will be reviewed and approved by Caltrain Deputy Director of Engineering and shall include records of all requests for design exceptions, a thorough analysis for justifications and their subsequent rejection or approval by Caltrain Deputy Director of Engineering. The DBM is then used as a basis for the detailed design and design review for future project phases.

TASK 9 - DELIVERABLES

- Final Report
- Design Basis Memorandum (Task 9A)

Project Schedule and Deliverables

The WMH Team will prepare a detailed project schedule listing the consultant services identified in this detailed scope of services including the time required to complete each of the

specified tasks. The WMH Team will also outline key deliverables to be produced as part of this work.

Detailed description of this task can be found above in Task 1 – Project Initiation and Management.

Assumptions

- Existing topographic files (provided by Caltrain) will be made available for base mapping.
- Project Management and meetings based on assumed 12-month project schedule.
- The project shall utilize City of Sunnyvale Standards and be supplemented with Caltrans 2015 specifications and standard plans.
- Caltrans will not require any input and/or approval in the Final Report process.
- The NEPA and CEQA process will be limited to the evaluation of one build alternative.
- The project will not impact any threatened or endangered plant or animal species or habitat utilized by such species.
- Subsurface archaeological testing will not be required.
- Caltrans will not require a formal Natural Environment Study; a biological technical memo will suffice for this project.
- Caltrans will not require a formal Visual Impact Assessment; a brief visual memo will suffice for this project.
- All of the above-described technical reports to be prepared under NEPA will serve as the technical reports to be used for the IS/MND.
- The ~~City~~ cities of Sunnyvale and Mountain View will undertake mailings, prepare public/newspaper notices.
- The City of Sunnyvale will prepare and file the CEQA Notices of Completion and Determination.
- The City of Sunnyvale will pay the Notice of Determination filing fee to the County Clerk.

Tasks		WMH Corporation Labor												Subconsultants										Total
Task #	Task Description	Principal-In- Charge William Hada	Project Manager Sean Charles	Support Services Dave Dickinson	Civil Lead Stephen Haas	Senior Consultant	Senior Project Engineer	Project Engineer	Senior Staff Engineer	Staff Engineer	Administrative	Total Hours	Total Labor Costs	Public Outreach	Structures	Enviro Doc & Studies	Landscape/ Aesthetics	Traffic	Rail Coord. Surveys	Geotech	Water Quality	Electrical/ Signals	Total Fee	
														APEX	BCA	DPA	MMP	Parisi	RSE	Parikh	WRECO	Y&C		
		\$ 360	\$ 270	\$ 265	\$ 260	\$ 240	\$ 240	\$ 200	\$ 160	\$ 125	\$ 120	\$ 275	\$ 152	\$ 160	\$ 150	\$ 156	\$ 210	\$ 136	\$ 118	\$ 102				
1	Project Initiation and Management	8	48		4				8	24	40	132	\$ 25,960										\$ 25,960.00	
2	Document Review & Existing Conditions		4	4	12			16	32	60	4	132	\$ 21,560		12	30	12	164	72	16	12	22	\$ 76,524.00	
3	Community Engagement		22		12				16	32	8	90	\$ 16,580	100		20	16	48					\$ 57,168.00	
4	Multi-Agency Stakeholder Engagement		12		2				10	10	3	37	\$ 6,970		24	34	6	20	26				\$ 25,538.00	
5	Design Criteria		2		8	8	4	8	20		4	54	\$ 10,780		12		4	12	8	10			\$ 18,116.00	
6	Preliminary Design Development	2	8	4	24	8	32	12	84	140	10	324	\$ 54,320		346		100	120	36	60	106	104	\$ 179,468.00	
7	Estimation of Cost and Impacts		4	4	8	4		8	20	40	4	92	\$ 15,460				20	20				20	\$ 23,620.00	
8	Environmental Clearance	4	4	12	8	4			16	20	4	72	\$ 14,280			240		76					\$ 64,536.00	
9	Final Report	2	12	1	24	8	4	8	60	36	6	161	\$ 29,765					12					\$ 31,637.00	
Task Subtotal		16	116	25	102	32	40	52	266	362	83	1094	\$ 195,675	\$ 27,500	\$ 59,888	\$ 51,840	\$ 23,700	\$ 73,632	\$ 29,820	\$ 11,696	\$ 13,924	\$ 14,892	\$ 502,567.00	
Other Direct Costs																								
5% Markup on Subconsultants													\$ 15,340	\$ 1,380	\$ 2,990	\$ 2,590	\$ 1,190	\$ 3,680	\$ 1,490	\$ 580	\$ 700	\$ 740	\$ 15,340	
Travel													\$ 200			\$ 200		\$ 1,750	\$ 400	\$ 1,200	\$ 200	\$ 150	\$ 4,100	
Printing/ Postage													\$ 3,500		\$ 100	\$ 1,000					\$ 350		\$ 4,950	
Traffic Counts and User Surveys																		\$ 4,250					\$ 4,250	
Positive Utility Locating (Task 2B) - Contractor													\$ 10,000										\$ 10,000	
Project Filing (One Drive site) for 15 Months w/ 20 Users @ \$5/User													\$ 1,500										\$ 1,500	
Cultural Resources reports (Archaeological/Historical Consultants)																\$ 5,600							\$ 5,600	
Biological Memo (H.T. Harvey & Associates)																\$ 12,700							\$ 12,700	
Construction Noise Memo (Illingworth & Rodkin)																\$ 4,660							\$ 4,660	
Initial Site Assessment (Cornerstone Engineering)																\$ 4,070							\$ 4,070	
Total Other Direct Costs													\$ 30,540	\$ -	\$ 100	\$ 28,230	\$ -	\$ 6,000	\$ 400	\$ 1,200	\$ 550	\$ 150	\$ 67,170	
Total Including Other Direct Costs													\$ 226,215	\$ 27,500	\$ 59,988	\$ 80,070	\$ 23,700	\$ 79,632	\$ 30,220	\$ 12,896	\$ 14,474	\$ 15,042	\$ 569,737.00	
Optional Services Subtotal													\$ 10,670	\$ -	\$ 608	\$ 1,600	\$ 900	\$ 1,872	\$ 840	\$ -	\$ 50	\$ 300	\$ 16,840	
Total Including Optional Services													\$ 236,885	\$ 27,500	\$ 60,596	\$ 81,670	\$ 24,600	\$ 81,504	\$ 31,060	\$ 12,896	\$ 14,524	\$ 15,342	\$ 586,577.00	

Amendment No. 1																							
1.1	Project Initiation and Management - Amend No. 1	8	32		2				4	20	32	98	\$ 19,020										\$ 19,020.00
2.1	Document Review & Existing Conditions - Amend No. 1		4	2	12			12	24	60	4	118	\$ 18,950		12	20	12	140	100	24	12	8	\$ 74,110.00
3.1	Community Engagement - Amend No. 1		20		10				16	32	8	86	\$ 15,520	88		20	16	42					\$ 51,872.00
4.1	Multi-Agency Stakeholder Engagement - Amend No. 1											0	\$ -										\$ -
5.1	Design Criteria - Amend No. 1		2		8	8	4	8	20		4	54	\$ 10,780		12		16	12					\$ 16,876.00
6.1	Preliminary Design Development - Amend No. 1	2	8	4	24	8	40	20	88	160	10	364	\$ 60,980		346		250	160		80	80	40	\$ 200,432.00
7.1	Estimation of Cost and Impacts - Amend No. 1		2	2	8	4		8	16	32	2	74	\$ 12,510				40	30				8	\$ 24,006.00
8.1	Environmental Clearance - Amend No. 1		4	8	4	2			4	4	2	28	\$ 6,100			140		24					\$ 32,244.00
9.1	Final Report - Amend No. 1		8		12	4	2	4	32	16	4	82	\$ 15,120					4					\$ 15,744.00
Amendment No. 1 Task Subtotal		10	80	16	80	26	46	52	204	324	66	904	\$ 158,980	\$ 24,200	\$ 56,240	\$ 28,800	\$ 50,100	\$ 64,272	\$ 21,000	\$ 14,144	\$ 10,856	\$ 5,712	\$ 434,304.00
Amendment No. 1 Other Direct Costs																							
5% Markup on Subconsultants													\$ 13,770	\$ 1,210	\$ 2,810	\$ 1,440	\$ 2,510	\$ 3,210	\$ 1,050	\$ 710	\$ 540	\$ 290	\$ 13,770
Travel																			\$ 350				\$ 350
Printing/ Postage													\$ 1,500										\$ 1,500
Traffic Counts and User Surveys																		\$ 1,750					\$ 1,750
Positive Utility Locating (Task 2B) - Contractor													\$ 10,000										\$ 10,000
Cultural Resources reports (Archaeological/Historical Consultants)																\$ 400							\$ 400
Biological Memo (H.T. Harvey & Associates)																\$ 1,300							\$ 1,300
Construction Noise Memo (Illingworth & Rodkin)																\$ 840							\$ 840
Initial Site Assessment (Cornerstone Engineering)																\$ 930							\$ 930
Total Amendment No. 1 Other Direct Costs													\$ 25,270	\$ -	\$ -	\$ 3,470	\$ -	\$ 1,750	\$ 350	\$ -	\$ -	\$ -	\$ 30,840
Total Amendment No. 1 Including Optional Services													\$ 184,250	\$ 24,200	\$ 56,240	\$ 32,270	\$ 50,100	\$ 66,022	\$ 21,350	\$ 14,144	\$ 10,856	\$ 5,712	\$ 465,144.00