

## Mountain View Transit Center Master Plan Kimley-Horn Scope of Services

### Phase 1 – Evaluation of Conceptual Grade-Separation Options

#### Task 1.1 – Review Documentation

The Kimley-Horn team will review the City’s General Plan Update, the Shoreline Regional Park Community Transportation Study, the Shoreline Boulevard Corridor Transportation Study, the North Bayshore Precise Plan, the Bicycle Transportation Plan Update draft, documentation for the Mountain View Transportation Management Association, and the Downtown Mountain View and Evelyn Avenue Corridor Precise Plans. We will also assemble design criteria including:

- City of Mountain View Street Design Standards
- Santa Clara County Expressway Design Standards (cross-sections, design speed, geometrics)
- Caltrain / UPRR / CPUC Design Criteria (especially bridge types, horizontal & lateral clearances etc.)
- California High-Speed Rail Requirements

#### *Task 1.1 Deliverables:*

- *Synopsis of key requirements from prior studies*
- *Synopsis of key design criteria horizontal and vertical alignment criteria*

#### Task 1.2 – Community Outreach and Meetings

The following meetings are included as part of the approach to this project:

- City Staff – Kimley-Horn will participate in a Project Kick-off Meeting with City Staff. We propose to convene monthly “Project Development Team” (PDT) meetings with involved City Staff. The PDT meetings will include project progress and schedule reviews, technical coordination, and strategic discussion regarding active tasks. Kimley-Horn will develop a standing Agenda which will be populated with current relevant topics. In addition to City Staff and Consultant Team members, third parties may be invited if appropriate.
- Transportation Agency Meetings – Up to two initial meetings with the key transportation agencies involved in this process. Up to three additional joint agency coordination meetings spaced throughout the remaining schedule involving a subset of the interested parties.
- Downtown Stakeholders – Up to three meetings with key representatives, board members, or executive management of key stakeholder groups, which may include the Downtown Committee, the Central Business Association/Business Improvement District, and nearby neighborhood groups/associations.
- City Bicycle/Pedestrian Advisory Committee – Up to two meetings
- Community / Neighborhood Meetings – Up to three Community/Neighborhood meetings during the study; one each at the early stages of development of Grade Separation and Transit Center alternatives and a final meeting to take comment on the recommended Master Plan. Kimley-Horn will prepare materials for these meetings and assist the City in presenting the content. Kimley-Horn will assist in providing materials for notification of the meetings, but the City will be responsible for the distribution of mailers or e-blast communications and the identification and reservation of the meeting location.

Kimley-Horn will prepare a meeting summary following each meeting that includes photos of the meeting and summarizes community feedback.

- City Council Meetings – Kimley-Horn will attend up to four City Council meetings.

Kimley-Horn will develop and host a project website that will be linked from the City website. The website will include project materials created in other tasks, dates and locations of upcoming meetings, and an opportunity to provide feedback. The website will be hosted for up to two years.

Kimley-Horn will support the City in the use of the Open City Hall forum for the purpose of this project. Support may include text and materials to post on the forum and documentation and review of responses received. The City will be responsible for the technical operation and maintenance of the forum.

#### *Task 1.2 Deliverables:*

- *Meeting Agendas*
- *Meeting Notes*
- *Project Website Postings*
- *Outreach Collateral*
- *Meeting PowerPoint Presentations*

#### Task 1.3 – Identify Conceptual Grade-Separation Alternatives

The Kimley-Horn team will develop four conceptual alternatives for modifying the Castro Street grade-crossing at the Caltrain tracks. The four alternatives for evaluation will be determined through preliminary design evaluation, coordination with City staff and key stakeholders, and input from key decision makers. Preliminary design concepts will be developed to an approximate 5% level of design and will be conveyed with a layout plan showing principal roadway and track features, profile study of roadway and/or rail alignment if modified, and key cross sections. The Kimley-Horn team will research major utility conflicts such as may affect the viability of below-grade solutions and/or placement of vertical supports. Field survey is not included in this scope. Static renderings and illustrative graphics will be prepared for each of the alternatives to help depict circulation and visual impacts for each alternative. Up to two renderings will be prepared per concept.

The grade separation alternatives, in the form of the layout plan, profile, and cross-sections will be submitted to the City for one round of review and comment prior to evaluation and preparation of renderings. One round of City review and revision is included for the renderings.

#### *Task 1.3 Deliverables:*

*Preliminary plan view layout, profiles (if modified), and cross-sections for up to four conceptual alternatives. Up to two renderings per concept. Circulation graphics for each alternative. One round of revisions to each of the materials.*

#### Task 1.4 – Evaluate Grade-Separation Alternatives

##### Evaluation Criteria

Kimley-Horn will develop a white paper discussing the evaluation criteria and metrics for City review and comment. Candidate evaluation criteria will include:

- Direct Land Use Impact to Downtown Businesses
- Potential Visual Impacts
- Access and Circulation Impact to Downtown
- Access and Circulation Impact to Transit Center
- Phasing / Constructability
- Qualitative Assessment of Construction Impacts
- Traffic Level of Service (LOS) at Key Locations
- Operational Effects to Rail

The white paper will be submitted for one round of City review and comment.

#### Circulation Assessment

Kimley-Horn will conduct a preliminary circulation assessment of the grade-separation alternatives. The circulation assessment will consider effects on traffic, bicycle, and pedestrian circulation. The City of Mountain View will assist in obtaining baseline, with grade-separation, and with Castro Street closure VTA travel demand model plots for baseline and horizon year conditions. A select link plot will be obtained for Castro Street at the tracks in the baseline and horizon year scenarios. The model outputs will be obtained at no cost to Kimley-Horn.

Kimley Horn will prepare a base VISSIM microsimulation model to reflect existing conditions. This model will incorporate autos, bicycles, pedestrians, and transit activity. The study area will include:

- Castro Street from California Street to Central Avenue
- Shoreline Boulevard from California Street to the Central Expressway Ramps
- Bryant Street between Evelyn Avenue and California Street
- Hope Street between Evelyn Avenue and California Street
- View Street between Evelyn Avenue and California Street
- Bush Street between Evelyn Avenue and California Street
- Central Expressway between Shoreline Boulevard ramps and Easy Street
- Evelyn Avenue between Franklin Street and SR-85 ramps
- Villa Street between Shoreline Boulevard and Calderon Avenue
- Dana Street between Shoreline Boulevard and Moorpark Way
- California Street between Shoreline Boulevard and Bush Street

Not all intersections within the study area will be included in the model. In order to develop the VISSIM microsimulation model, Kimley-Horn will collect traffic data from available sources. For locations without readily available recent count data, new turning movement counts will be conducted for a six-hour duration on a single weekday at up to 16 intersections. Seven-day vehicle classification counts will be performed at one location on each of Shoreline Boulevard, Moffett Boulevard, Castro Street, and Central Expressway. The VISSIM model will be calibrated based on field observations of queues and delays and a comparison against observed traffic volumes. The VISSIM model will be prepared for the AM and PM peak periods for existing and one future year baseline volume scenario.

The VTA model will be utilized to estimate redistribution of trips on the local network with each of the grade separation alternatives. These volumes will be calibrated and entered into the VISSIM model to determine traffic

conditions with each of the analysis scenarios. Intersection delay and queuing will be obtained from the VISSIM model. One video simulation will be prepared for each grade separation alternative for the public outreach process to depict the configuration and operation of the grade separation alternatives.

#### Cost Estimates

Kimley-Horn will prepare rough order of magnitude cost estimates for each of the four conceptual alternatives. The cost estimates will be based on unit costs from recent bids and an estimate of quantities consistent with the very preliminary nature of the concepts.

Based on the evaluation criteria, Kimley-Horn will perform an evaluation of each of the four grade separation alternatives. A matrix will be prepared comparing the alternatives. One round of review and revision is included on the evaluation matrix. Input received during the evaluation will be used to formalize the selection of a preferred option.

#### *Task 1.4 Deliverables:*

- *White paper documenting Evaluation Criteria and Description of Proposed Metrics*
- *Evaluation Matrix Conveying Evaluation Results*

#### Task 1.5 – Recommend Preferred Grade-Separation Alternative

Based upon input received during the evaluation process, the Kimley-Horn team will refine the preferred alternative by incorporating comments which may affect key design features and will finalize the evaluation summary. The preferred alternative may represent desirable features from several of the initial alternatives. Plan view layout, cross-sections, and profiles prepared in Task 1.3 will be updated. Renderings and illustrative graphics will be updated. Rough order of magnitude cost estimates will be updated.

#### *Task 1.5 Deliverables:*

- *Refined Grade-Separation Concept Drawings and Cost Estimate*

#### Task 1.6 – Prepare Final Summary Report

Kimley-Horn will prepare a Summary Report that will transmit the preferred grade separation concept using a narrative description and supporting graphics and renderings. The report will also document the alternatives analysis including the options considered, evaluation criteria, and rationale for selection of the preferred concept. The Draft Summary Report will be submitted for City review and comment. One round of consolidated, non-conflicting comments will be utilized to revise the Draft Summary Report and prepare a Final Summary Report.

#### *Task 1.6 Deliverable:*

- *Phase 1 Draft Summary Report*
- *Phase 1 Final Summary Report*

## Phase 2 – Development of Transit Center Master Plan

### Task 2.1 – Develop Conceptual Transit Center Alternatives

Kimley-Horn will meet with City staff and transit operators (Caltrain, VTA fixed-route bus and LRT operations, Mountain View TMA, and High-Speed Rail Authority) to gain an understanding of current operating conditions, inter-modal relationships and future requirements for Transit Center functionality and operations (meeting included in Task 1.2). We will request ridership and passenger information from Caltrain and VTA. Following this meeting, we will prepare an analysis of the existing transit operating environment and utilization. This analysis will include an examination of bus routing and frequency, passenger transfer patterns between and within modes, vehicle/bicycle parking utilization, mode of access for each service, and bay/platform utilization. The analysis will be based in part on field observations of the transit center on a typical weekday. The operational analysis will be summarized in a technical memorandum and distributed for review.

We will also prepare a needs assessment in coordination with the operators to plan for near-term and long-term service enhancements. Our team will solicit input from Santa Clara County, VTA, Caltrain, shuttle operators, Mountain View TMA, and CHSRA regarding program requirements and ridership projections which will affect Transit Center activity levels and parking requirements. The assessment will identify platform sizing, bay quantity and sizing, and vehicle and bicycle parking needs. The needs assessment and land use requirements will be summarized in a technical memorandum and distributed for review.

One round of review and revision is included for the needs assessment.

Based on the transfer analysis and needs assessment, our team will develop up to three alternatives for the Transit Center Master Plan. The alternatives will be developed to a 5% design level, indicating the sizing, spatial orientation, and access configuration of the facilities. Graphics and illustrations would be prepared to depict the Transit Center alternatives, including proposed circulation and access.

#### *Task 2.1 Deliverables:*

- *Technical memorandum on the operational analysis of Transit Center utilization*
- *Technical memorandum on the land use requirements at the Transit Center (e.g., platform and bus/shuttle loading stall requirements, parking, etc.)*
- *Illustrative site plans and illustrations up to three configuration alternatives*

### Task 2.2 – Evaluate Alternatives

A white paper will be prepared on evaluation criteria and metrics for the transit center. These metrics may include circulation, capacity, efficiency, cost, integration with downtown land uses, and flexibility to meet future needs. The white paper will be submitted for one round of review and comment.

Changes to local circulation included in each of the transit center alternatives will be evaluated for their effects on downtown circulation. Transit routing efficiency and intersection operations will be evaluated for each alternative.

An evaluation matrix will be prepared that compared the alternatives using the evaluation criteria developed earlier in this task. The matrix will be submitted for City review and comment. One round of revision is assumed for the matrix.

This task will be accomplished in parallel with the Land Use and Development Evaluation to allow for a consistent and comprehensive result.

*Task 2.2 Deliverables:*

- *White paper on evaluation criteria and metrics*
- *Draft evaluation matrix*

Task 2.3 – Land Use and Development Evaluation

The Kimley-Horn team will evaluate potential development and parking opportunities within the transit center site. The work will include an assessment of the land use, urban design, and feasibility pros and cons of development options, compatibility with Transit Center improvements, and consistency with the permitted and provisional uses of the Downtown and Evelyn Avenue Corridor Precise Plans. The Kimley-Horn team will prepare mixed-use/parking structure concepts that explore incorporating retail, support commercial, office, and/or residential land uses as appropriate, given the City’s vision for Downtown and the Evelyn Corridor. Up to three options featuring annotated plan diagrams and 3D sketches illustrating recommended building form(s) and frontage and streetscape improvements will be prepared. The development concepts will reflect mixed-use/parking structure concepts used at other transit centers and/or comparable developments. A land use and development memorandum will be prepared describing the basic elements of the options, the development comparables, urban design and development considerations, and the recommended development approach based on staff and community review and critique. The memorandum will be submitted for City review and comment. One revision to the memorandum is included.

*Task 2.3 Deliverables:*

- *Draft land use and development evaluation memorandum with illustrative concept plans*

Task 2.4 – Recommend Preferred Transit Center Master Plan

The Kimley-Horn team will prepare a draft preferred Master Plan supported by the evaluation summary. The recommended concept will include the preferred elements of the alternatives developed in Task 2.1. The Master Plan will include updated illustrations and renderings of the recommended concept and a description of its elements. The Plan will address phasing options and showing a rough order of magnitude opinion of probable construction cost by phase.

*Task 2.4 Deliverables:*

- *Draft Transit Center Master Plan*

Task 2.5 – Prepare Final Master Plan Concept Plan

Our team will incorporate one round of consolidated and non-conflicting comments and recommendations from the City and will refine the Preferred Transit Center Master Plan.

*Task 2.5 Deliverables:*

- *Refined Transit Center Master Plan*

Task 2.6 – Prepare Final Project Report

The Kimley-Horn team will compile a Draft Project Report covering both phases of the project. Kimley-Horn will address one round of non-conflicting comments on the Draft Project Report to prepare the Final Project Report. Kimley-Horn will provide the Draft and Final reports electronically along with up to five (5) bound hard copies.

*Task 2.6 Deliverables:*

- *Draft Project Report*
- *Final Project Report*