

**AGENDA:** October 13, 2009

**4.8**

**CATEGORY:** Consent

**DEPT.:** Public Works

**TITLE:** Stevens Creek Trail Overcrossing and  
Permanente Creek Trail Overcrossing/  
Undercrossing—Approve Aesthetic  
Design Concepts

### **RECOMMENDATION**

Approve design concepts and authorize staff to complete design of the Stevens Creek Trail Overcrossing at Highway 85 and the Permanente Creek Trail Overcrossing at Highway 101 and Undercrossing at Old Middlefield Way.

### **FISCAL IMPACT**

Stevens Creek Trail, El Camino Real to Dale/Heatherstone—Design Phase, Project 07-35, has a design budget of \$1,300,000 from various funding sources. Stevens Creek Trail, Sleeper Avenue to Dale/Heatherstone—Construction Phase, Project 10-42, has a budget of \$5 million from various funding sources.

Permanente Creek Trail, Highway 101 to Old Middlefield Way—Design Phase, Project 05-42, is funded with \$1,180,000 from the Shoreline Community Fund. Permanente Creek Trail, Highway 101 to Old Middlefield Way—Construction Phase, Project 06-33, is funded with \$8,250,000 from the Shoreline Community Fund.

The budgets are expected to be sufficient to construct both projects when incorporating the recommended design features.

### **BACKGROUND AND ANALYSIS**

The purpose of this report is to provide the City Council with an overview of the design elements of two upcoming trail projects. Both designs have been reviewed by adjacent neighborhoods.

The basic design of both bridges begins with a standard concrete Caltrans pedestrian bridge. Beginning with this design helps expedite Caltrans structural and permitting reviews. Design features are then added to improve the appearance and make the structure unique. Maintenance and life-cycle costs are also considered so surfaces can be repainted if tagged by vandals. Areas that are not easily accessible, such as the outside of the structure over the freeway, are left bare concrete to save the cost of repainting. The features proposed for each bridge and the Old Middlefield Way undercrossing are described below and represented in attached renderings.

### **Stevens Creek Trail from Sleeper Avenue to Dale/Heatherstone**

The Stevens Creek Trail bridge over Highway 85 is designed to include the colors and materials common to other structures along the trail. Proposed treatments include:

- Vinyl-clad safety fencing enclosed in painted rectangular steel frames similar to the trail bridges over Central Expressway and Moffett Boulevard. This fencing is in lieu of standard galvanized chain link (see Attachment 3).
- The concrete barrier below the fence will have an inset pattern similar to the barrier wall over the pedestrian tunnel under El Camino Real. Five concrete pilasters on each side of the bridge will break up the long expanse of fencing. The pilasters will have bluestone insets similar to the stone used at the Sleeper Avenue bridge and elsewhere along the trail. The inside surface of the barrier wall and pilasters will be painted (see Attachment 3).
- The outside of the structure will be unpainted concrete with an inset pattern similar to the inside of the wall.
- The bridge support in the Highway 85 median will have an inset arch design similar to the supports on the Evelyn Avenue/Central Expressway overcrossing.

These design elements significantly improve the appearance of the bridge compared to a standard Caltrans structure. The estimated cost of these elements is \$300,000, which is approximately 8 percent of the estimated \$4 million construction cost.

On August 27, 2009, staff conducted a public meeting to provide a project update and review the project renderings. The renderings were well received by the 12 residents who attended the meeting. Questions and comments from attendees are summarized in Attachment 6.

### **Permanente Creek Trail from Highway 101 to Old Middlefield Way**

The Permanente Creek project includes an overcrossing of Highway 101 and an undercrossing of Old Middlefield Way. Proposed treatments for this project include:

#### **Overcrossing**

- Vinyl-clad safety fencing along the elevated structure framed with painted steel members (see Attachments 8 and 9).
- The concrete barrier below the fence will have a wave-like inset pattern and precast resin medallions. The medallions are relatively inexpensive and can be replaced if damaged.

The medallions will depict the plants, animals and natural features of the Permanente Creek corridor (see Attachment 9).

- Concrete pilasters will be constructed where the safety fencing transitions from 6' high to 8' high. The inside surface of the barrier wall and pilasters will be painted (see Attachment 9).
- The outside of the structure will be unpainted concrete with an inset pattern similar to the inside of the wall.

### Tunnel

- Colored concrete and pavers are proposed at the Old Middlefield Way entrance to the tunnel (see Attachment 10).
- A glass-block skylight behind the sidewalk on both sides of Old Middlefield Way will provide light into the tunnel (see Attachment 10).
- Tunnel walls and railings will be painted to match the overcrossing (see Attachment 11).
- Inset lettering over the tunnel entrance and an inset pattern along the tunnel wall will break up the large expanses of concrete (see Attachment 12).
- Precast resin medallions similar to the bridge are proposed along the tunnel walls and at both entries (see Attachment 13).

The estimated additional cost of all of these aesthetic features is \$227,000, which is approximately 3 percent of the estimated construction cost of \$7,200,000.

Staff held a public meeting on September 1, 2009 to provide a project update and review the renderings with the surrounding neighborhood, and held a similar meeting with the Bicycle/Pedestrian Advisory Committee (B/PAC) on September 30, 2009. The renderings were well received by the 18 attendees at the public meeting and by the B/PAC. Questions and comments from both meetings are summarized in Attachment 14.

With Council approval of these concepts, design will be completed in early 2010.

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**PUBLIC NOTICING**—Agenda posting.

Prepared by:



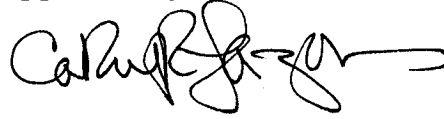
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RK-SRR/8/CAM  
908-10-13-09M-E-1^

Approved by:



Cathy R. Lazarus  
Public Works Director



Kevin C. Duggan  
City Manager

- Attachments: 1-5. Stevens Creek Trail Renderings  
6. Stevens Creek Trail Public Input, Questions and Answers  
7-13. Permanente Creek Trail Renderings  
14. Permanente Creek Trail Public Input, Questions and Answers

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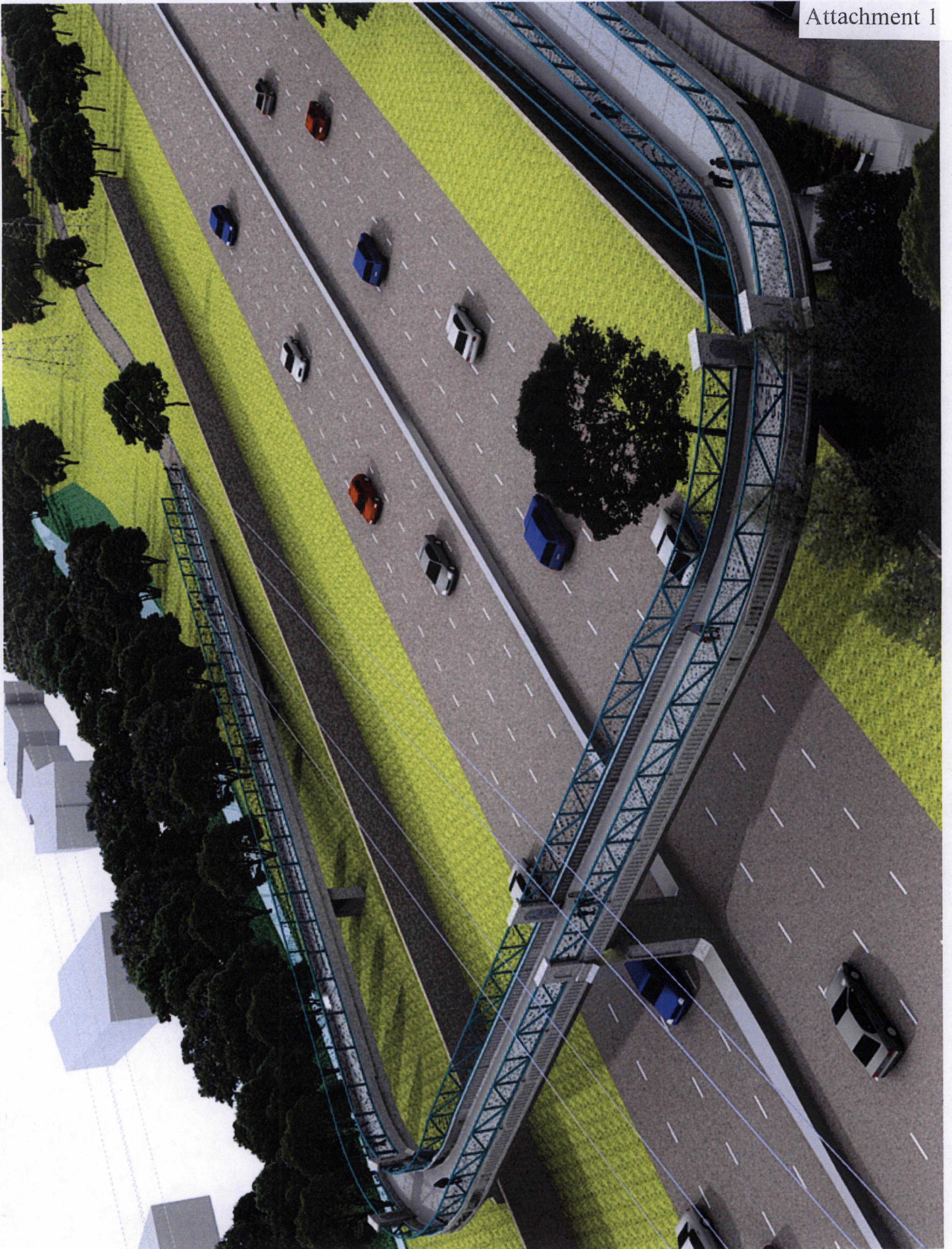
DE, SCE—Rose, PM—Kim, POSM—Hurlburt, F/c



## Attachment 1- 5

### Stevens Creek Trail Renderings





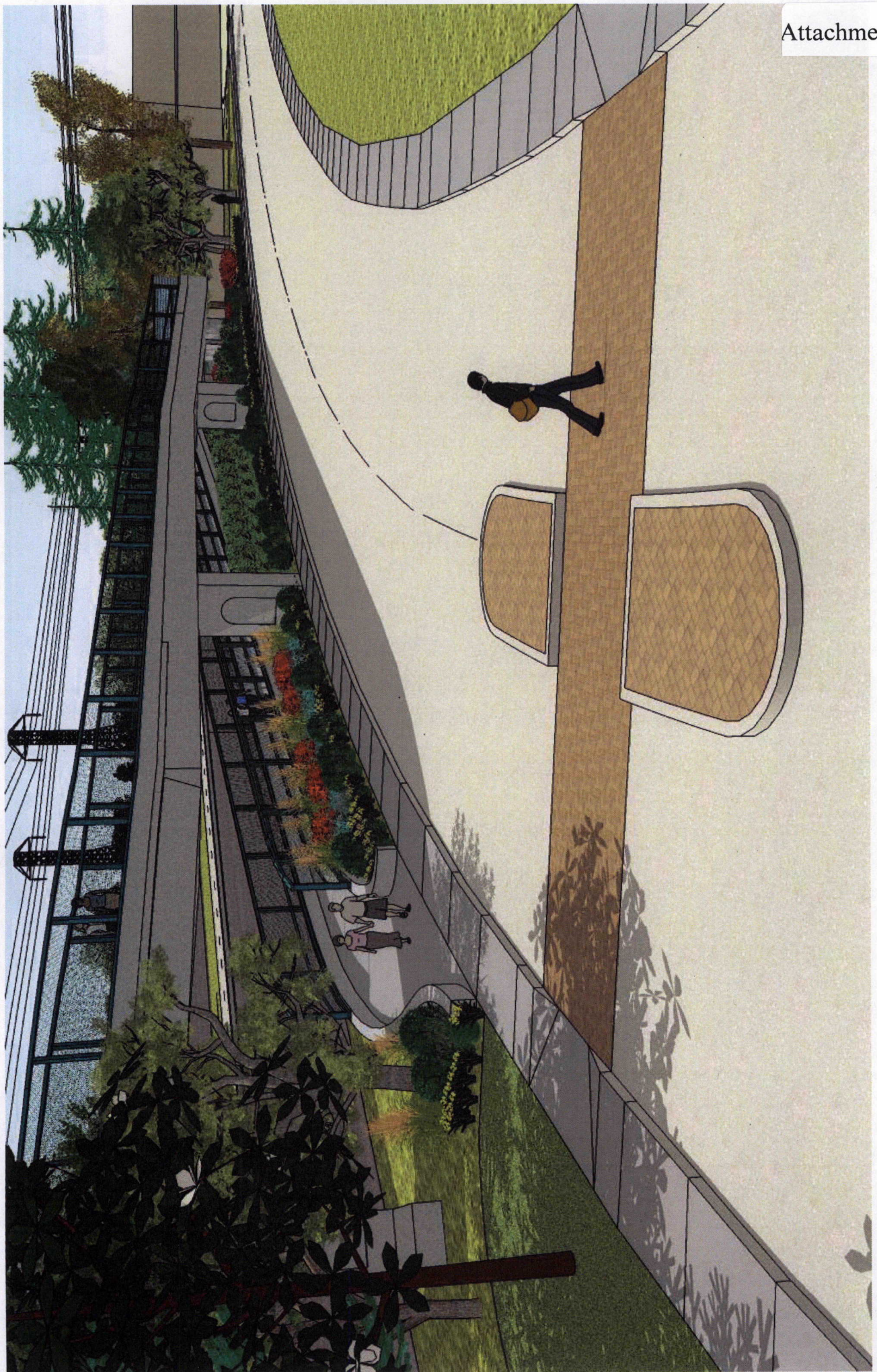




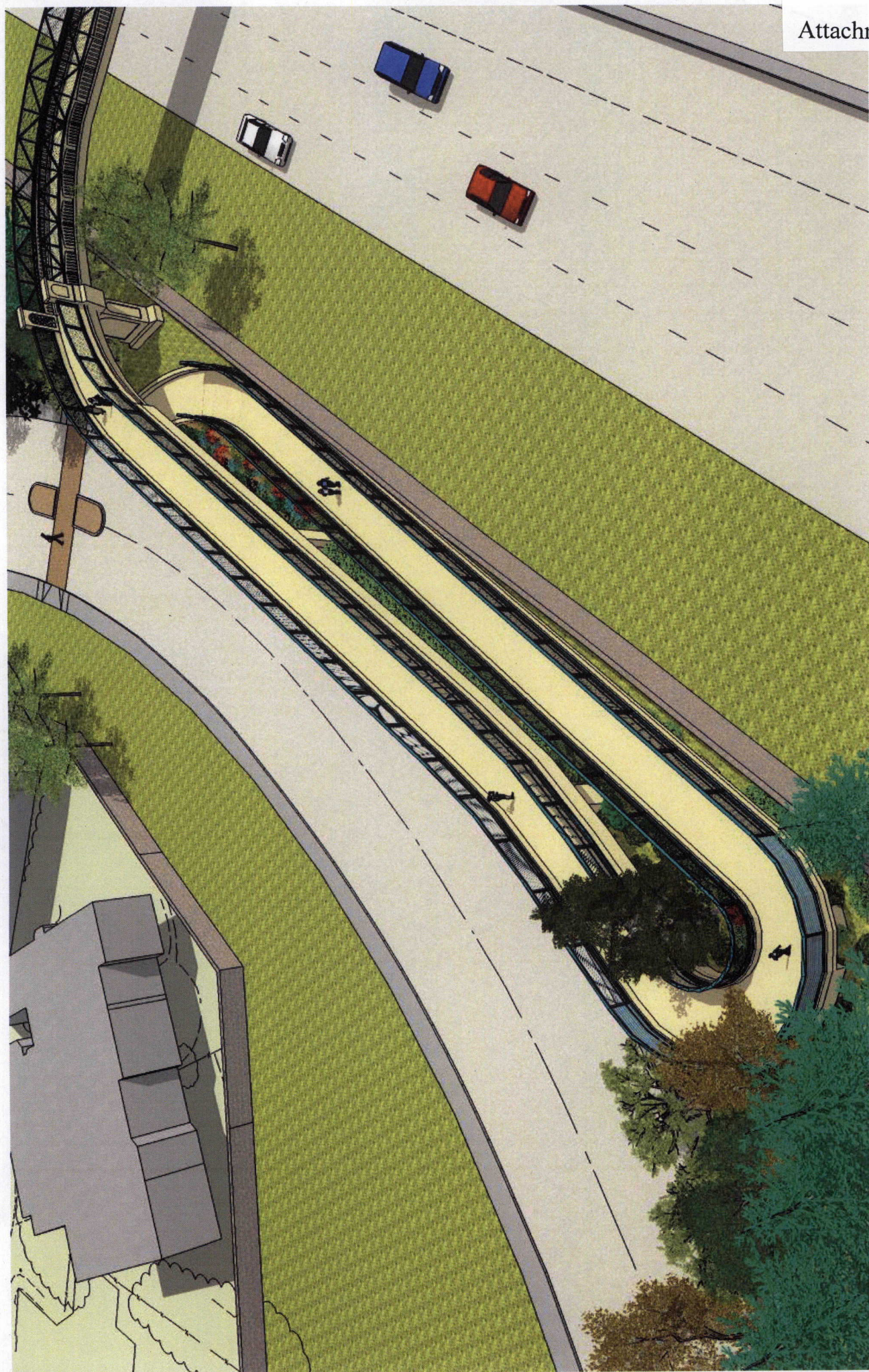














**STEVENS CREEK TRAIL—SLEEPER AVENUE TO  
DALE AVENUE/HEATHERSTONE WAY  
INPUT, QUESTIONS AND ANSWERS FROM  
AUGUST 27, 2009 COMMUNITY MEETING**

- Question: Can the City incorporate a lighted crosswalk or other traffic-calming measures at the new Dale Avenue/ Heatherstone Way pedestrian crossing?

Answer: This street does not meet the City's criteria for a lighted crosswalk. The project will include other pedestrian safety and traffic-calming improvements such as a pedestrian refuge median, advance warning signs and flashing lights, and a high-visibility crosswalk.

- Question: Will the surface of the pedestrian overcrossing be concrete or wood?

Answer: Concrete.

- Question: When will the trail extend further south from Dale Avenue/ Heatherstone Way to Mountain View High School?

Answer: The final segment from Dale Avenue/Heatherstone Way to Mountain View High School is unfunded.

- Question: Has Caltrans reviewed the proposed pedestrian bridge design?

Answer: Yes, the design is currently under Caltrans review.

- Input: My son will use the overcrossing to get to school and my family is looking forward to its completion.

- Question: Did the City consider covering the top of the overcrossing to prevent trash from being thrown off the side?

Answer: Caltrans does not require a cover and all of the most recently constructed pedestrian overcrossings along Highways 101, 237 and 85 do not have a cover.

- Question: How will the trail extend further south after Dale Avenue/ Heatherstone Way when there is an apartment complex next door?

Answer: Based on the approved alignment, the project will require the acquisition of a trail easement between the parking lot and sound wall; however, this segment is unfunded.

- Question: What can I do to help get the trail completed to the city limits?

Answer: Your support is appreciated and noted.

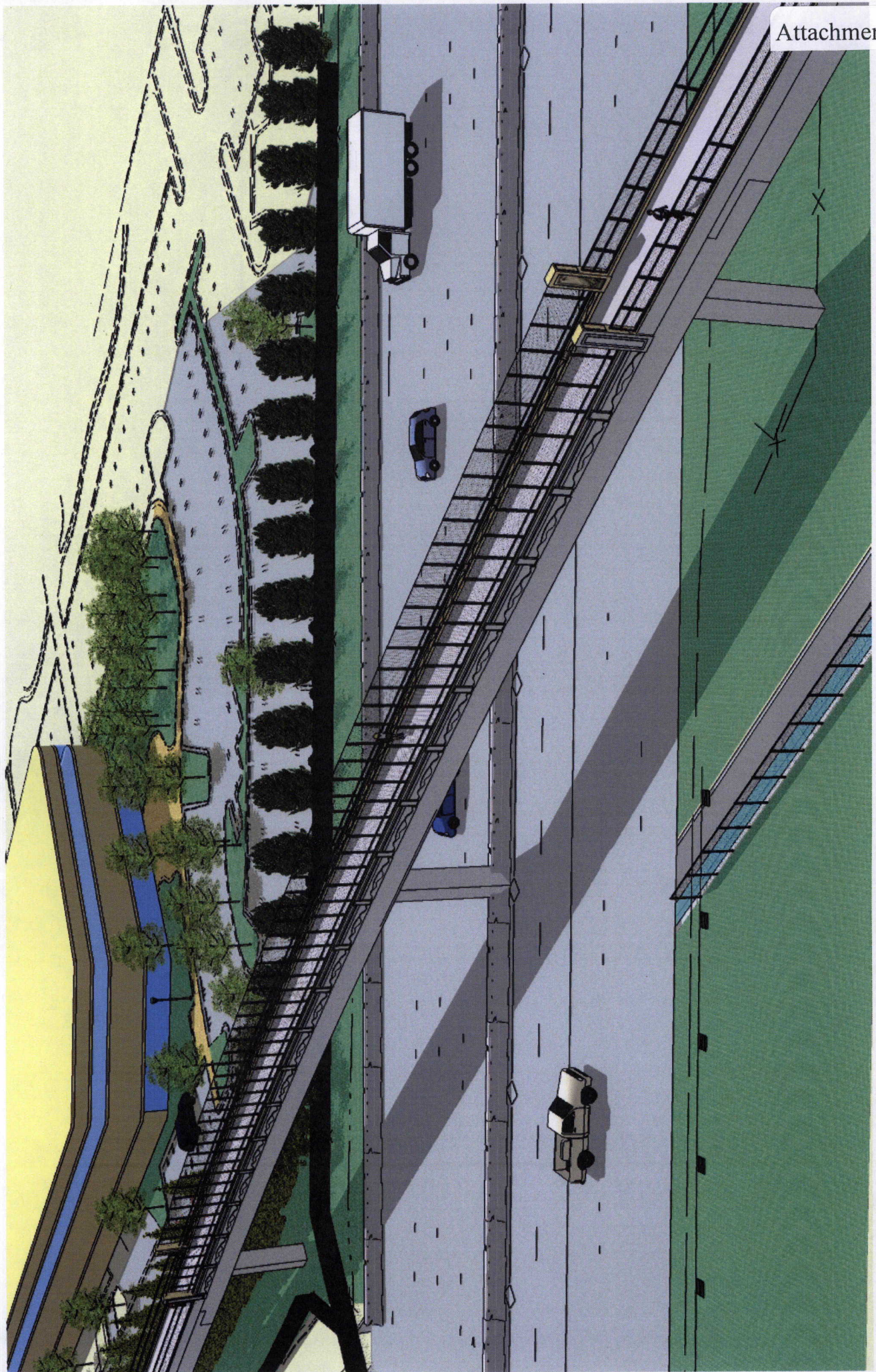
- Input: A member of the Friends of Stevens Creek Trail mentioned that the Cities of Mountain View, Sunnyvale, Los Altos and Cupertino are jointly evaluating alignments to ultimately connect Stevens Creek Trail between Mountain View and Cupertino.

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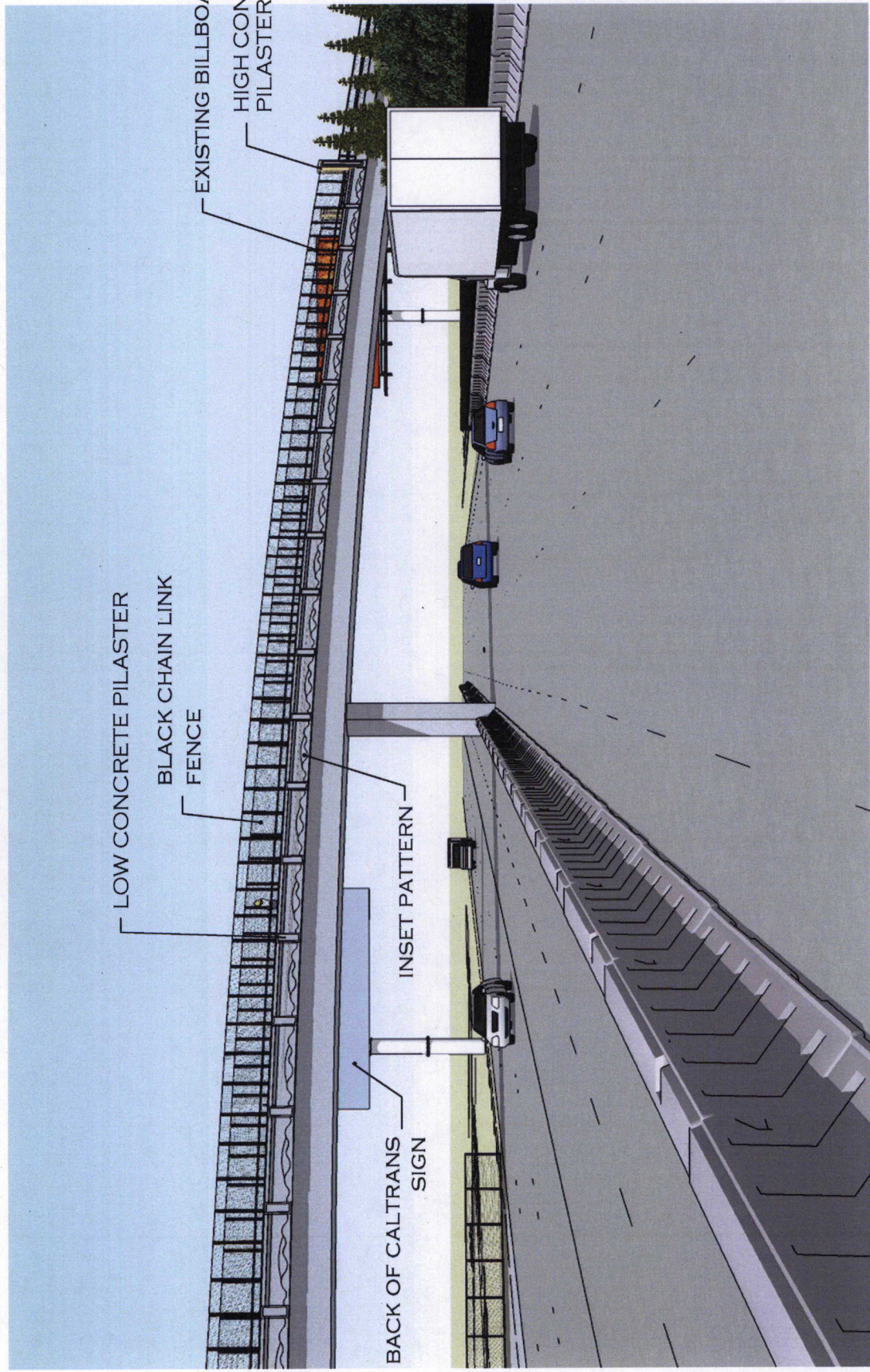
## Attachment 7 - 13

### Permanente Creek Trail Over/Undercrossing Renderings









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**VIEW OF OVERCROSSING  
FROM HIGHWAY 101**

SEPTEMBER 1, 2009





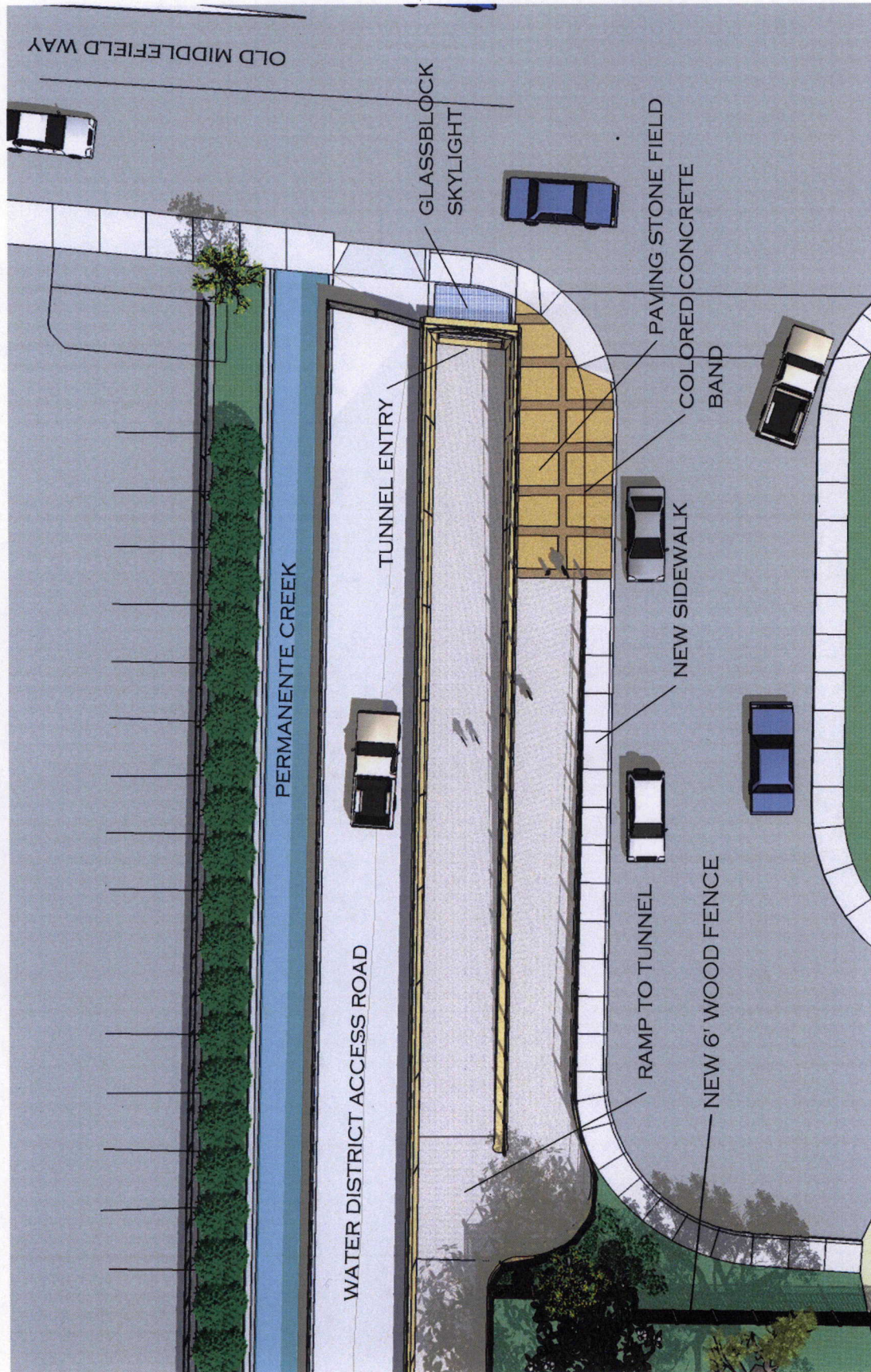
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## VIEW FROM OVERCROSSING

SEPTEMBER 1, 2009





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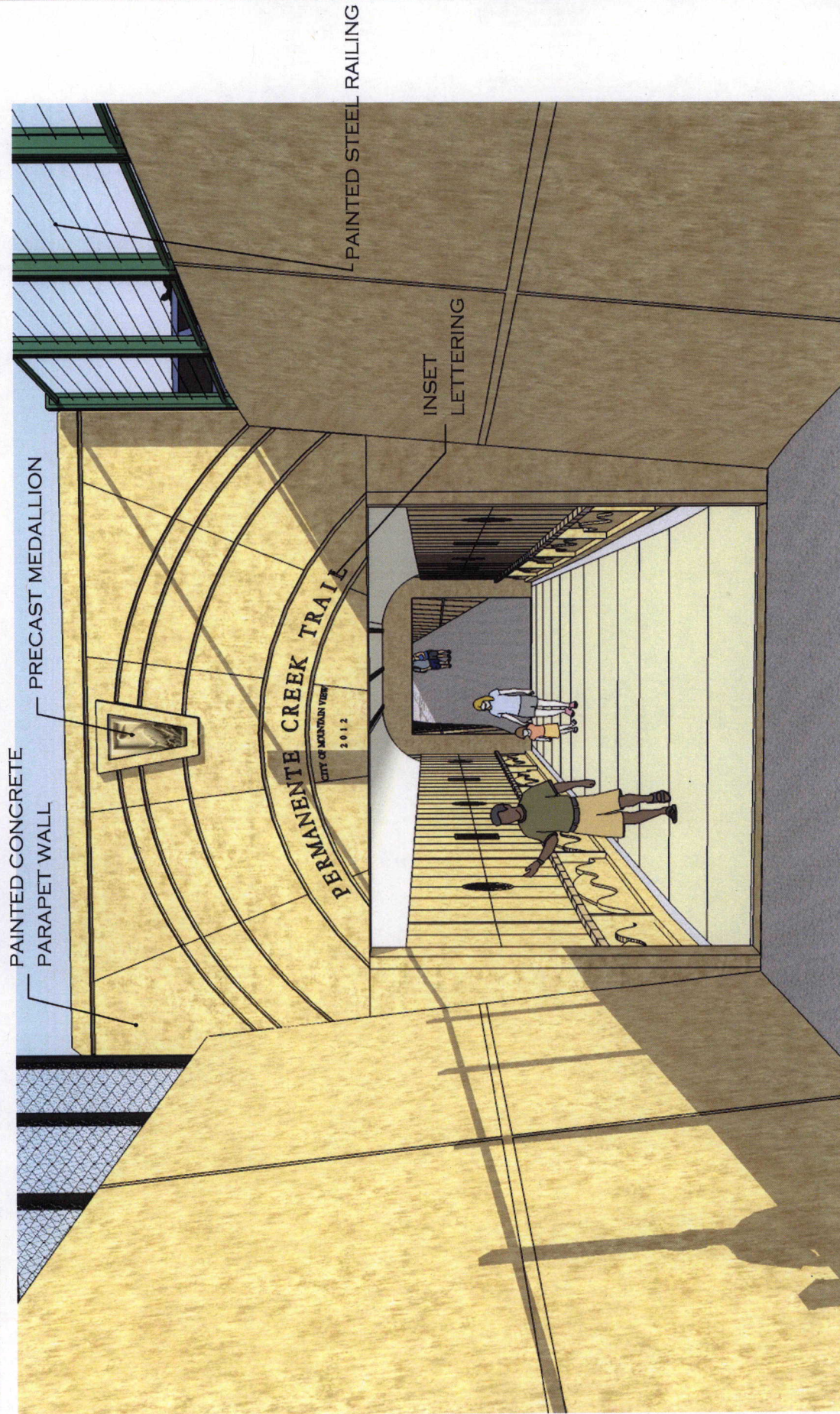
## NEIGHBORHOOD ACCESS POINT

SEPTEMBER 1, 2009









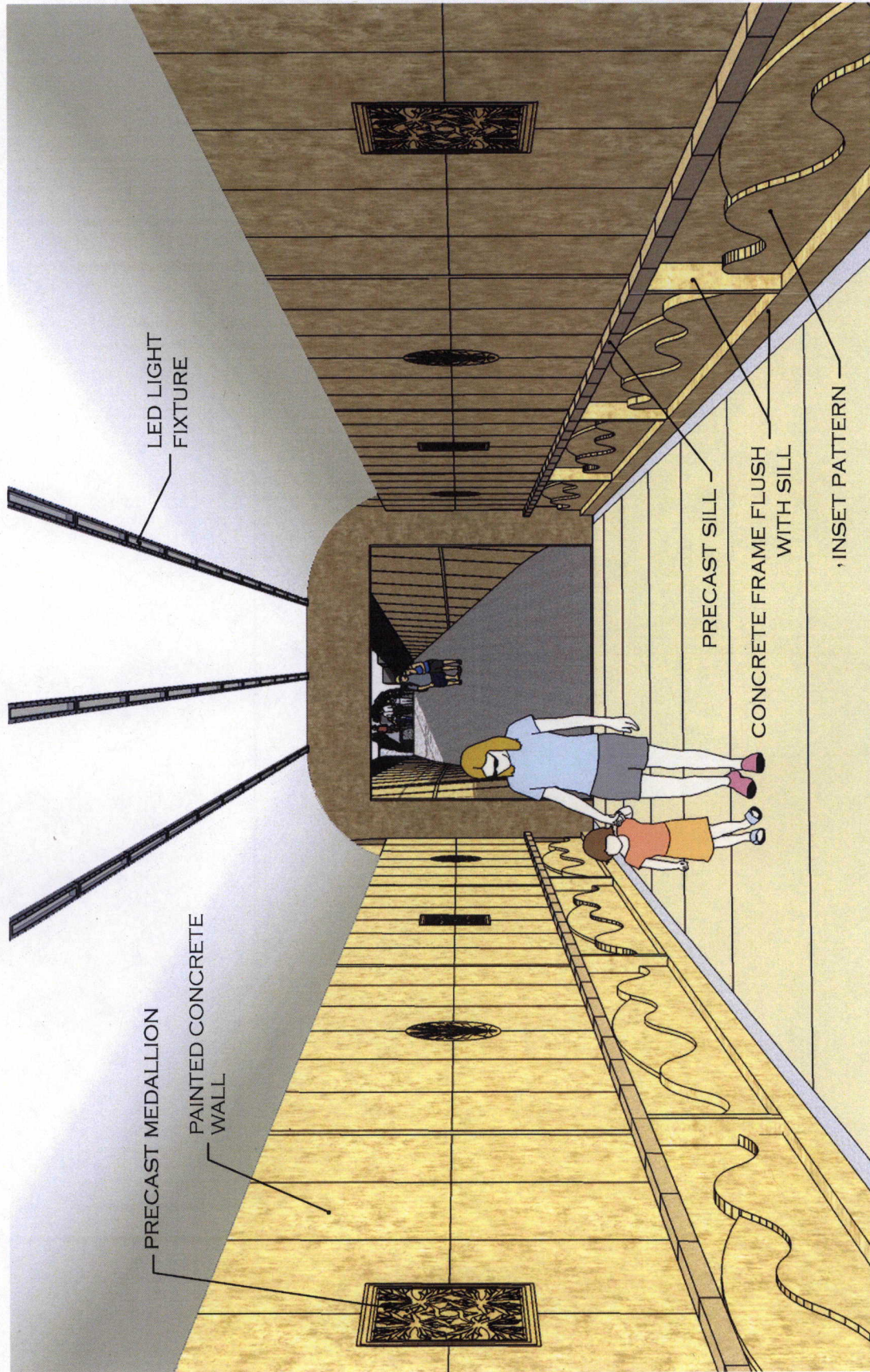
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## TUNNEL ENTRANCE

SEPTEMBER 1, 2009





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## INTERIOR OF TUNNEL

SEPTEMBER 1, 2009

**PERMANENTE CREEK TRAIL PROJECT—INPUT, QUESTIONS AND ANSWERS  
FROM  
SEPTEMBER 1, 2009 COMMUNITY MEETING AND  
SEPTEMBER 30, 2009  
BICYCLE/PEDESTRIAN ADVISORY COMMITTEE (B/PAC) MEETING**

September 1, 2009 Community Meeting

- Question: How will the project withstand vandalism? How frequently will the City clean graffiti from the tunnel?

Answer: The project materials and features will be durable and paintable. Even the medallions will be paintable. The lights will be industrial-grade and vandal-resistant. The trail will be patrolled by City ranger staff when open.

- Question: Who will decide on the medallion design?

Answer: The medallions will be designed by the project landscape architect with City approval. The intent is to show animals and plants from the Permanente Creek riparian corridor.

- Question: What is the sidewalk width? Are there bike lanes to this facility?

Answer: Telford Avenue will have a 5' sidewalk on the trail side and 4' on the residential side. There are no bike lanes leading to this facility. Old Middlefield Way was analyzed and will not accommodate bike lanes without removing parking for industrial and commercial businesses.

- Question: A representative from the U.S. Army asked how construction will affect driveway access to the Army Reserve Center on Old Middlefield Way?

Answer: The driveway will remain open and allow for current turning movements during construction.

- Question: Has the City considered extending the trail to Rock Street?

Answer: The City has considered this as a future project.

- Question: Will the City conduct a study to route the trail under Charleston Road?

Answer: Yes. The City Council has approved a CIP to perform such a study.



- Question: How will the tunnel drainage system operate?

Answer: The tunnel will be designed to drain to a sump that will then pump the water into the local street drainage pipe and then flow to the creek.

- Question: Has the City studied the user characteristics for tunnels? Certain people are not comfortable using tunnels. An at-grade intersection may be more widely used and cheaper.

Answer: Liz Wylie, Mountain View Police representative, noted that while sometimes tunnels are perceived as unsafe, the facts are that there is little or no correlation between increased crime and tunnels in the Mountain View area.

- Question: Will there be a bike maze on both sides of the overcrossing? Do the bike mazes allow for trailers?

Answer: There will be bike mazes on both sides. The design team will look into the feasibility of accommodating trailers.

#### September 30, 2009 Bicycle/Pedestrian Advisory Committee (B/PAC) Meeting

- Question: Is a connection from Colony Street included in the project? If not, can it be added?

Answer: A connection from Colony Street was evaluated in a prior study but is not part of this project.

- Question: How will the drainage be handled from water falling on the impervious structures?

Answer: The drainage will be diverted from the surface of the structure to an infiltration swale and to existing storm drains.

- Question: When will the Charleston Road grade separation be constructed?

Answer: The feasibility study is scheduled to begin this year. Design and construction of the project would be considered by Council after completion of the study.



- Question: Is right-of-way needed to extend the trail from Rock Street to Middlefield Road?

Answer: It would depend on the alignment of the trail. This would be determined in the early stages of a potential future project to extend the trail to Middlefield Road. The Santa Clara Valley Water District has right-of-way along the creek.

- Input: Has consideration been given to collect solar energy in the skylights? There is an existing technology that may be used for this purpose and I would be happy to provide you with information on it.

Response: The information is welcome.

- Question: Could Shoreline Community funds be used to fund future extensions of the trail?

Answer: There are specific requirements governing the use of Shoreline Community funds. Whether those funds could be used for future trail extensions would be determined on a case-by-case basis.

- Question: Will the centerline of the trail be striped?

Answer: Yes.

- Question: Will the medallions be painted during construction? If not, can the medallions be painted if tagged by graffiti?

Answer: No; however, the medallions can be painted if tagged.

- Question: Does the freeway-widening project impact the trail project?

Answer: The trail project has coordinated closely with the freeway-widening project so that there will be no conflicts between the two projects.

- Question: Will the overcrossing structure be lit?

Answer: City trails are open from dusk until dawn so the current City policy is to not light the overcrossing. However, the project will install conduit in the structure so that lighting could be easily installed if that policy were to change in the future.

- Question: Where does the trail go past Charleston Road?

Answer: The trail continues along Permanente Creek through Shoreline at Mountain View and connects to the Bay Trail.

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