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South Linden Avenue & Scott Street Grade Separation Planning Study

Community Meeting No. 1

August 16, 2018

City of South San Francisco, California · City of San Bruno · Caltrain · San Mateo County Transportation Authority · apex Strategies · AECOM

Agenda

- Welcome & Introduction
- Project Background & Purpose
- Project Overview
- Q & A
- Stations
- Next Steps

Meet the City Representatives

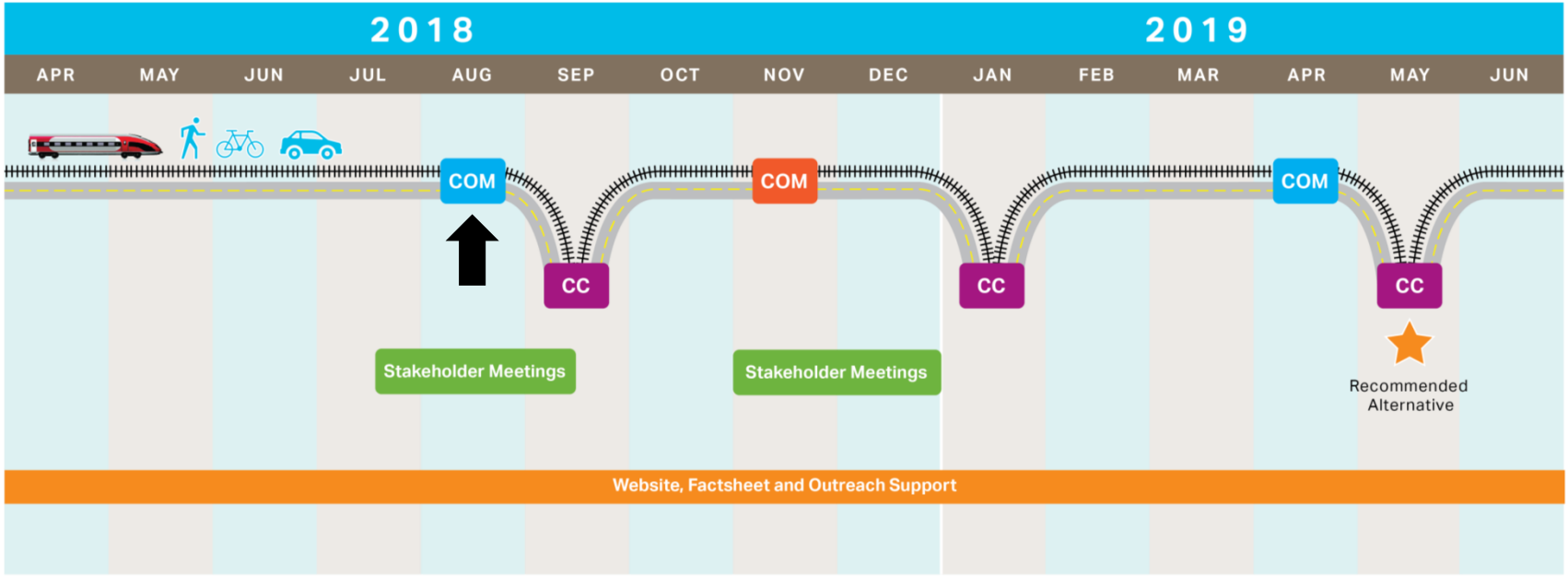
- **City of South San Francisco**
  - Richard Cho
  - Department of Public Works
  - engineering@ssf.net
  - (650) 829-6652

- **City of San Bruno**
  - Michael Kato
  - Department of Public Works
  - ps@sanbruno.ca.gov
  - (650) 616-7065

South Linden Avenue – City of South San Francisco

Scott Street – City of San Bruno

Community Engagement Schedule



COM — Combined City Community Meeting (2, with South San Francisco **and** San Bruno)

CC — City Council Meeting (3 each per city)

COM — Single City Community Meeting (1 each per city)

Recommended Alternative—Advance to Environmental Clearance

Today's Meeting

Goals for Tonight's Meeting

- Educate the public about the project
- Identify existing project features and constraints
- Answer questions
- Obtain your input about the alternatives

What is an “at-grade crossing”?

A location where a roadway crosses the railroad tracks at the same level (elevation).

Linden Avenue

Scott Street

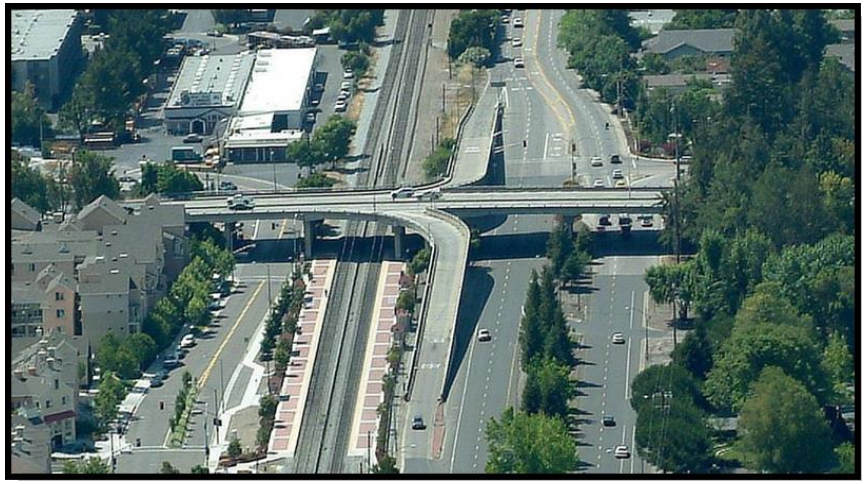
Video at South Linden Avenue

Click box below for video

What is a “grade separation”?

A bridge that allows the public to travel under (or over) the railroad.

Jefferson Avenue
Redwood City



San Antonio Road
Mountain View

Lesson Learned from San Bruno Ave Grade Separation

- Early coordination with utility companies
- Open communication with residents and stakeholders
- Timeliness and responsiveness to inquiries during construction
- Community meetings in advance of major milestones

Why is the Project Needed?

- Improve Traffic Circulation/Mobility
  - Reduce traffic delays caused by gate down times
  - Improve traffic flow across railroad crossing

- Increase Public Safety (vehicular, bicycle, and pedestrian)
  - Eliminates pedestrian, bicyclist and motor vehicle conflicts with the railroad… this eliminates the potential for accidents
  - Improve pedestrian and bicycle access

Safer Facility + Less Congestion = *Higher Quality of Life*

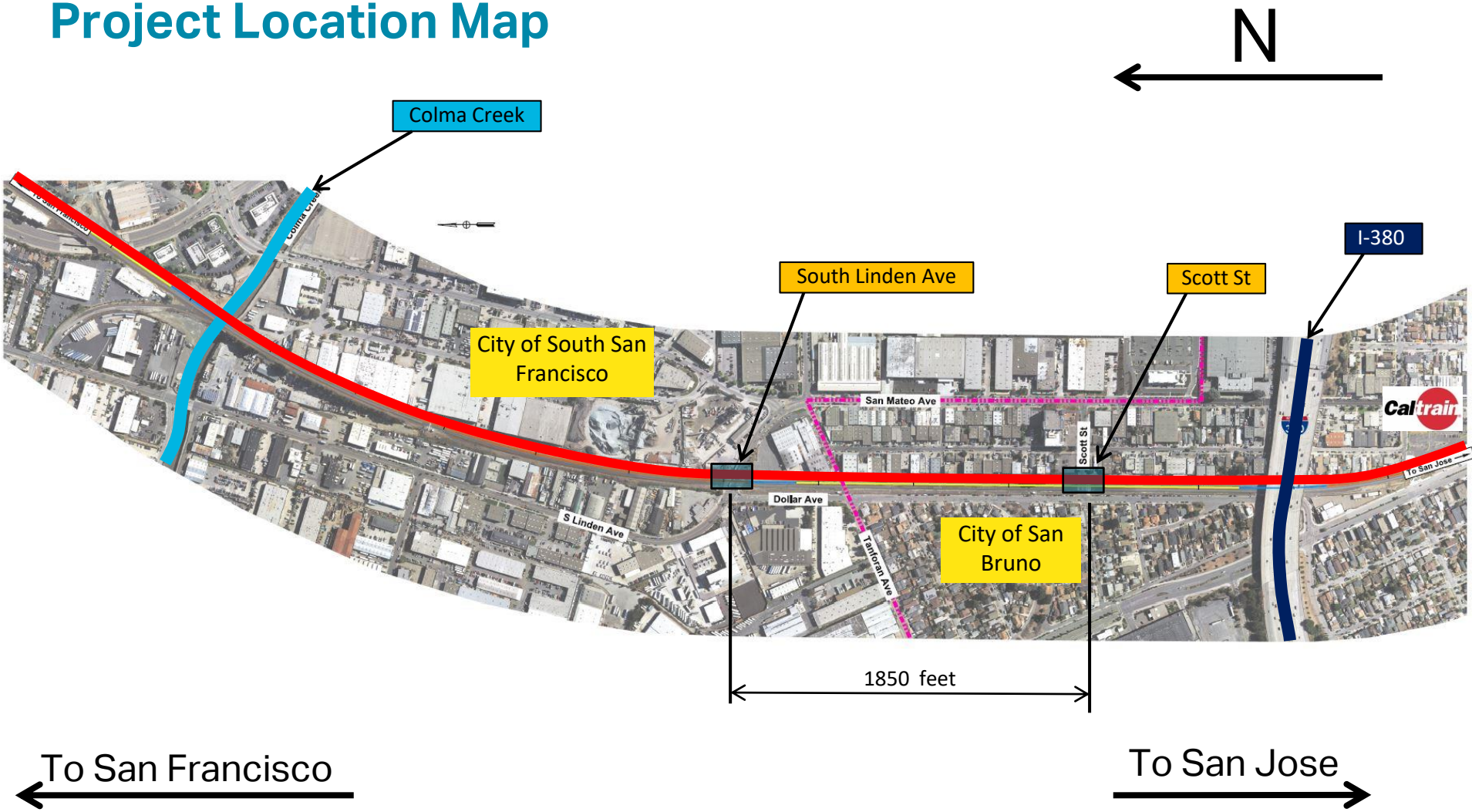
Weekday Train Traffic

Total Number of Trains (per Weekday)

	Northbound (NB)	Southbound (SB)	Total
Caltrain (2018)	AM: 20 PM: 26 Total: 46	AM: 20 PM: 26 Total: 46	AM: 40 PM: 52 Total: 92
Caltrain (2022 Projection #)	57	57	114
High Speed Rail (2029 Projection +)	128 trains per day to/from San Francisco with an additional 24 trains starting at San Jose		
Union Pacific	3	3	6

2022 Projected Values based on Completion of the Peninsula Corridor Electrification Project (from FEIR, December 2014) (Prototypical Schedule)
+ 2029 Projected Values based on Blended Service and Completion of the High Speed Rail Project and 2014 CHSRA Business Plan

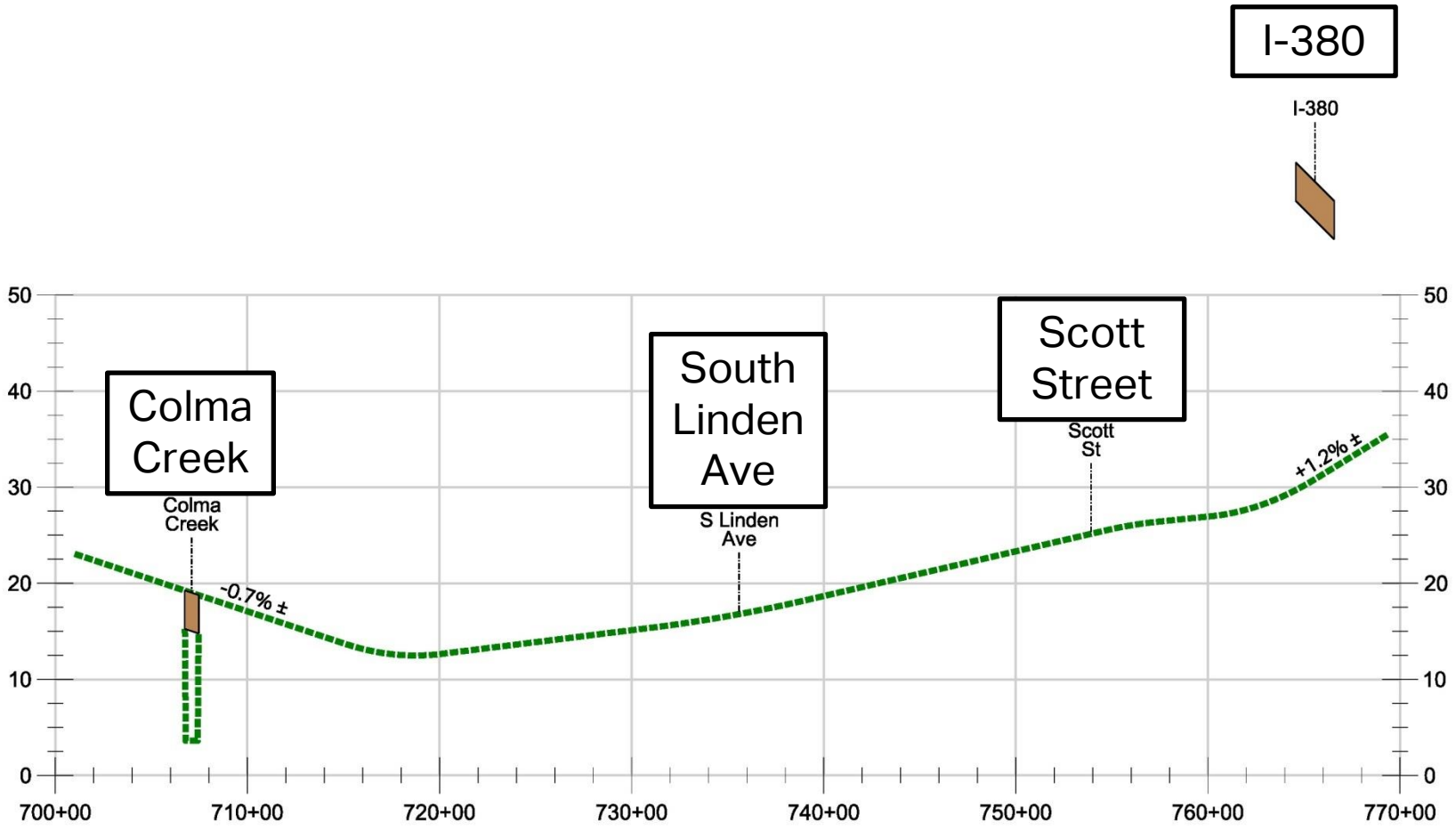
Project Location Map



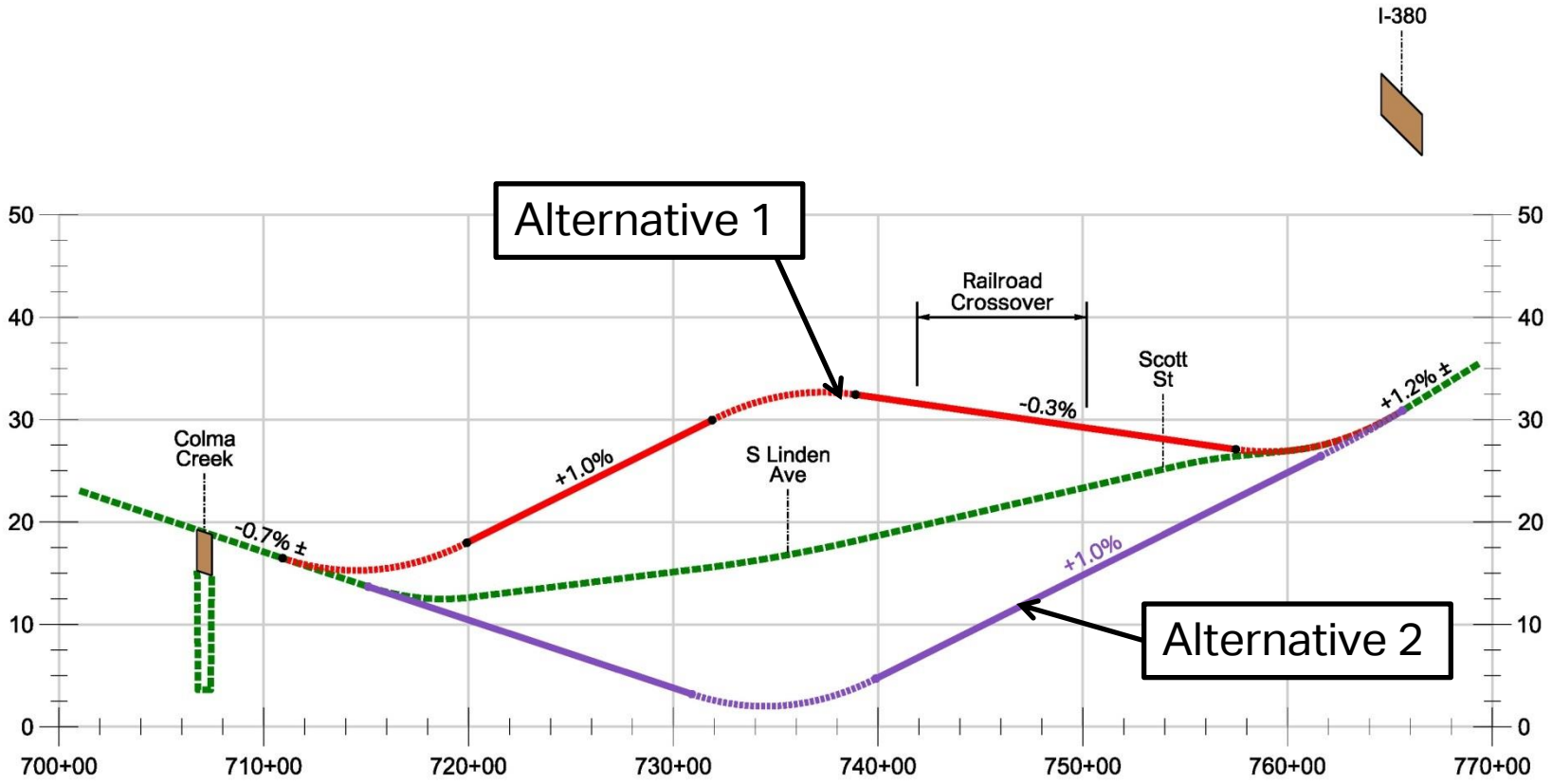
Options Studied, but Considered Infeasible

- Fully Raise Tracks over South Linden and Scott St
  - Physical constraints (I-380 viaduct to the south and Colma Creek to the north) do not allow the tracks to be raised fully.
- Fully Lower Tracks under South Linden Ave and Scott St
  - Physical constraints (Caltrain's San Bruno Station to the south and Colma Creek to the north) do not allow the tracks to be lowered fully.
- Vehicle Grade Separation at Scott St
  - Road profiles to achieve this require significant residential property impacts.
  - City of San Bruno is reconsidering previously adopted position that Scott Street remain open to vehicle traffic.

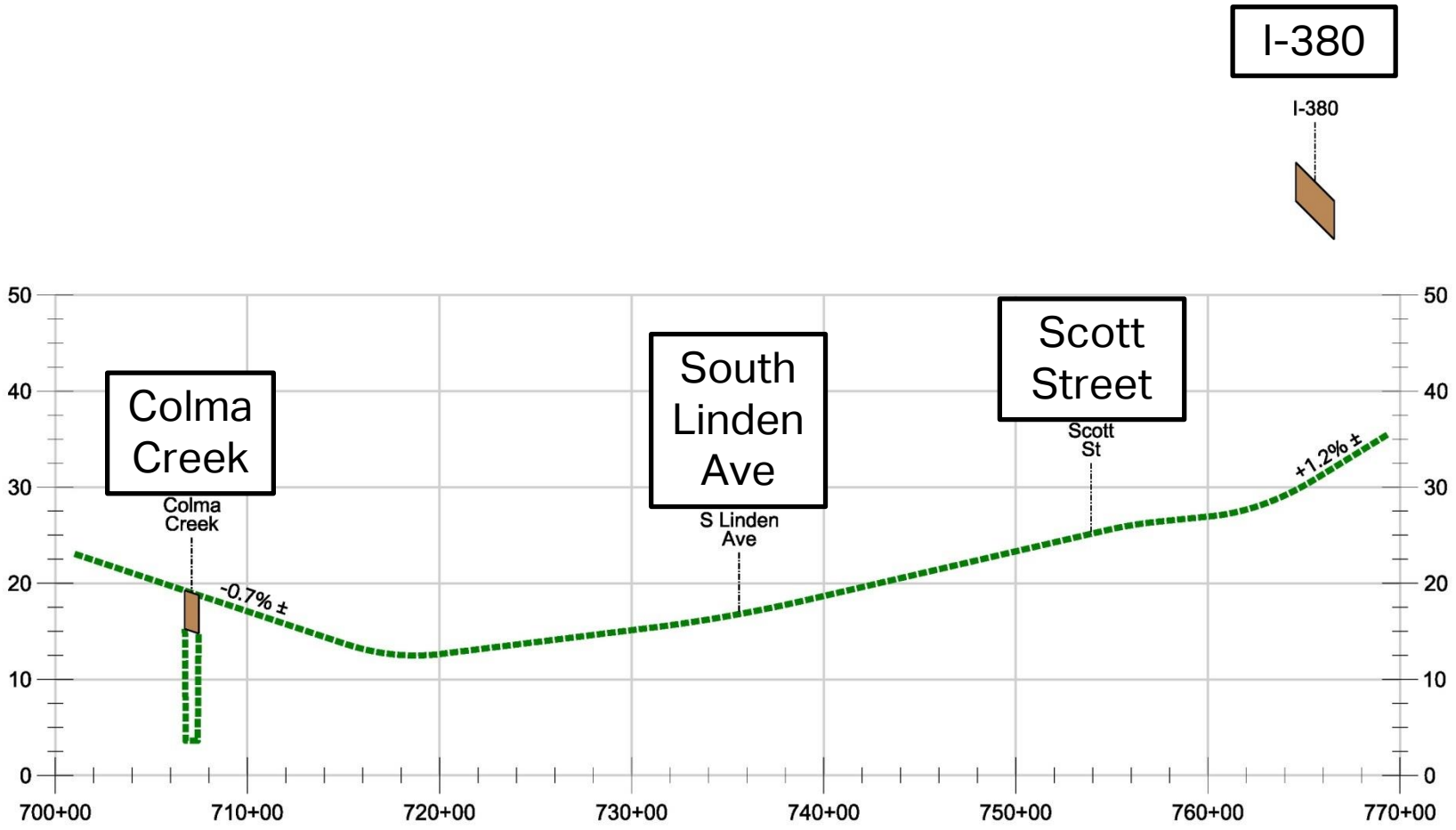
Existing Railroad Profile



Proposed Railroad Profiles (Alternative 1 and 2)

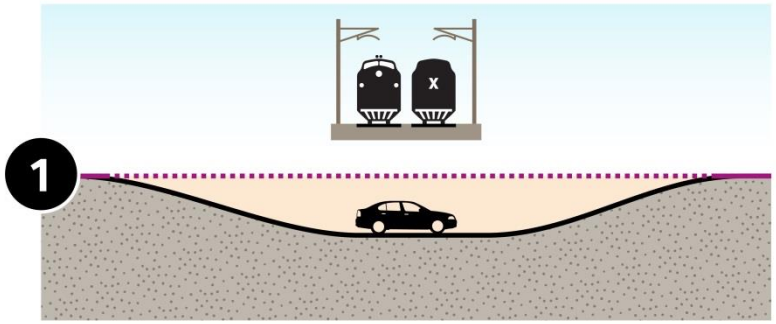


Existing Railroad Profile (Alternative 3 and 4)

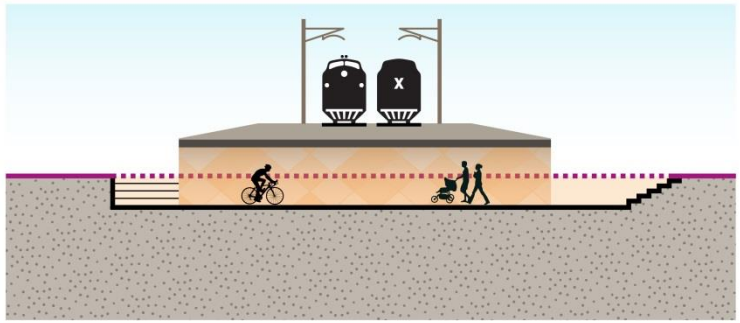


Four Alternatives to Evaluate

Alternative 1: Hybrid (Track Raised, Roadway Lowered)

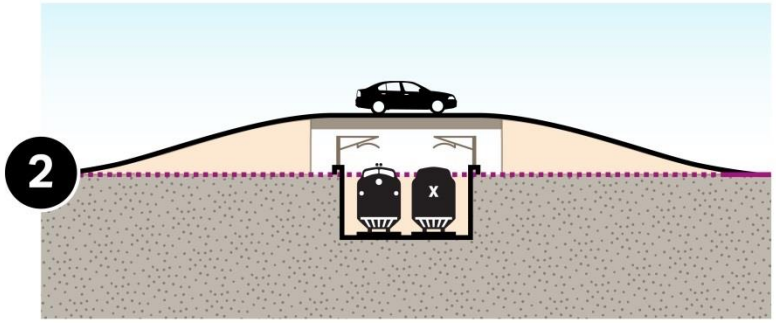


South Linden Avenue
Rail Partially Elevated/Roadway Partially Lowered

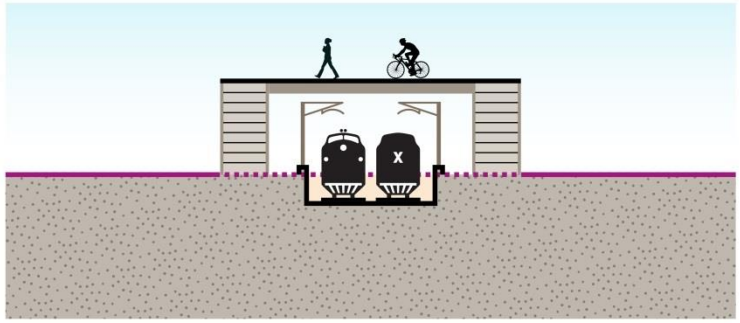


Scott Street
Rail Partially Elevated with a Pedestrian/Bike Underpass

Alternative 2: Hybrid (Track Lowered, Roadway Raised)



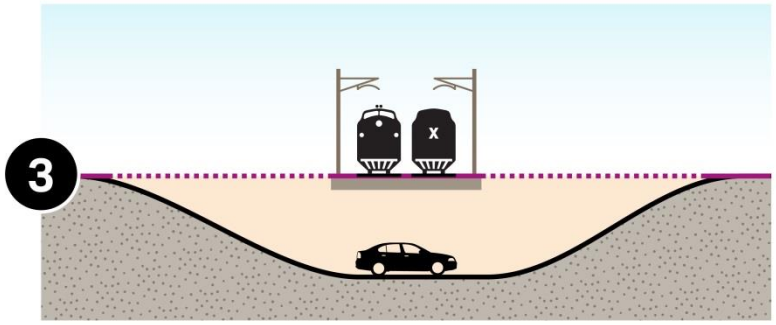
South Linden Avenue
Rail Lowered, Roadway Elevated



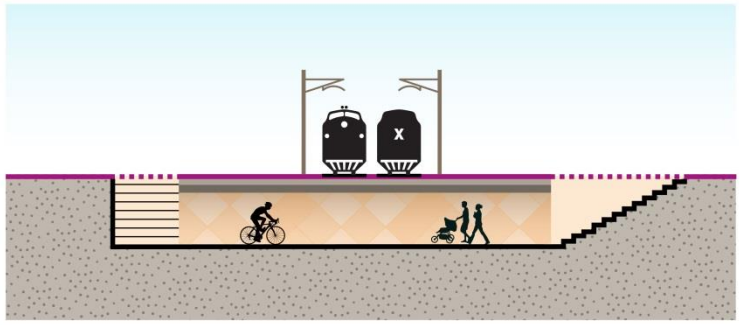
Scott Street
Rail Lowered with a **Ped/Bike Overpass or Underpass**

Four Alternatives to Evaluate

Alternative 3: Rail at grade with Roadway Underpass

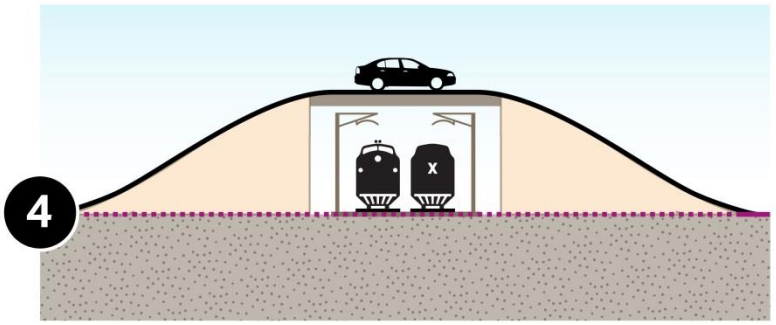


South Linden Avenue
Rail at-grade, Roadway Lowered

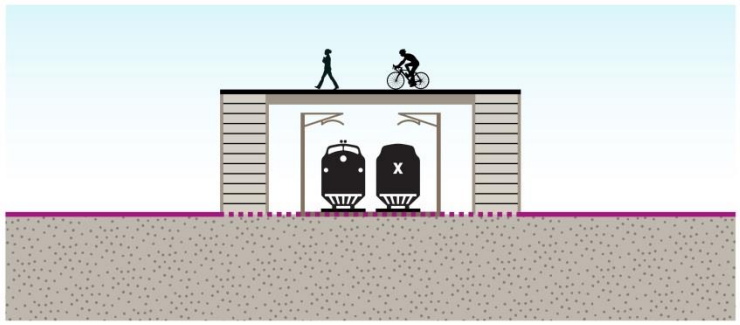


Scott Street
Rail at-grade with a **Ped/Bike Overpass or Underpass**

Alternative 4: Rail at grade with Roadway Overpass



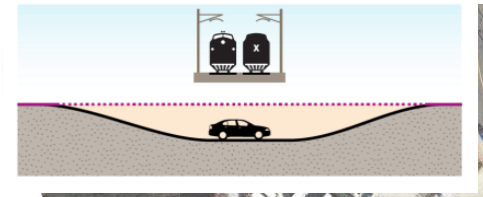
South Linden Avenue
Rail at-grade, Roadway Elevated



Scott Street
Rail at-grade with a **Ped/Bike Overpass or Underpass**

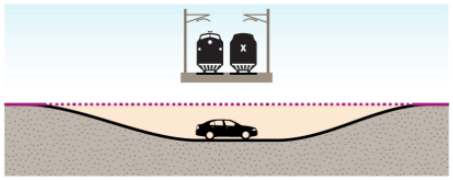
Alternative 1: Hybrid (Track Raised, Roadway Lowered)

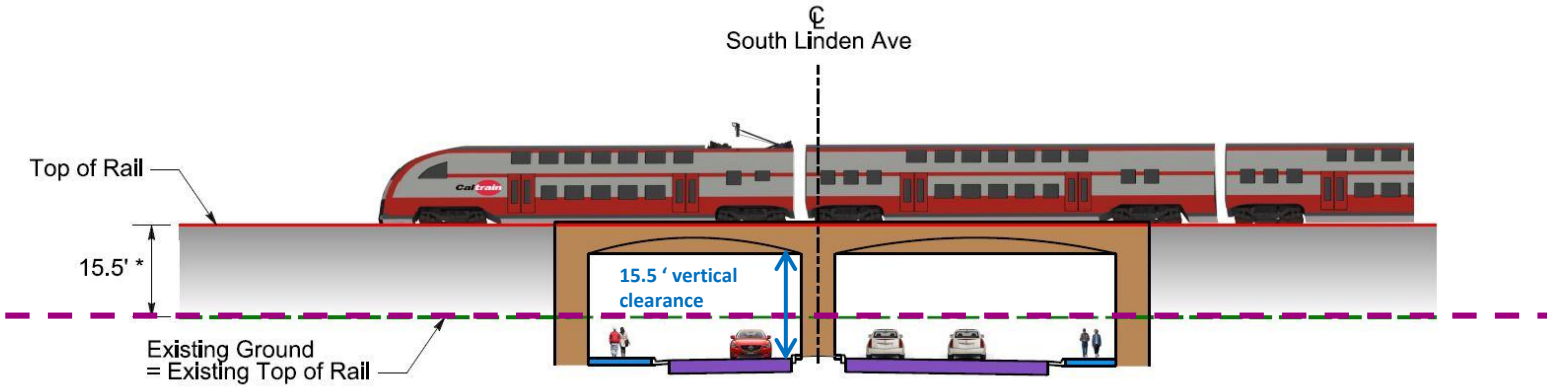
South Linden Avenue Layout



Alternative 1: Hybrid (Track Raised, Roadway Lowered)

South Linden Avenue Typical Section



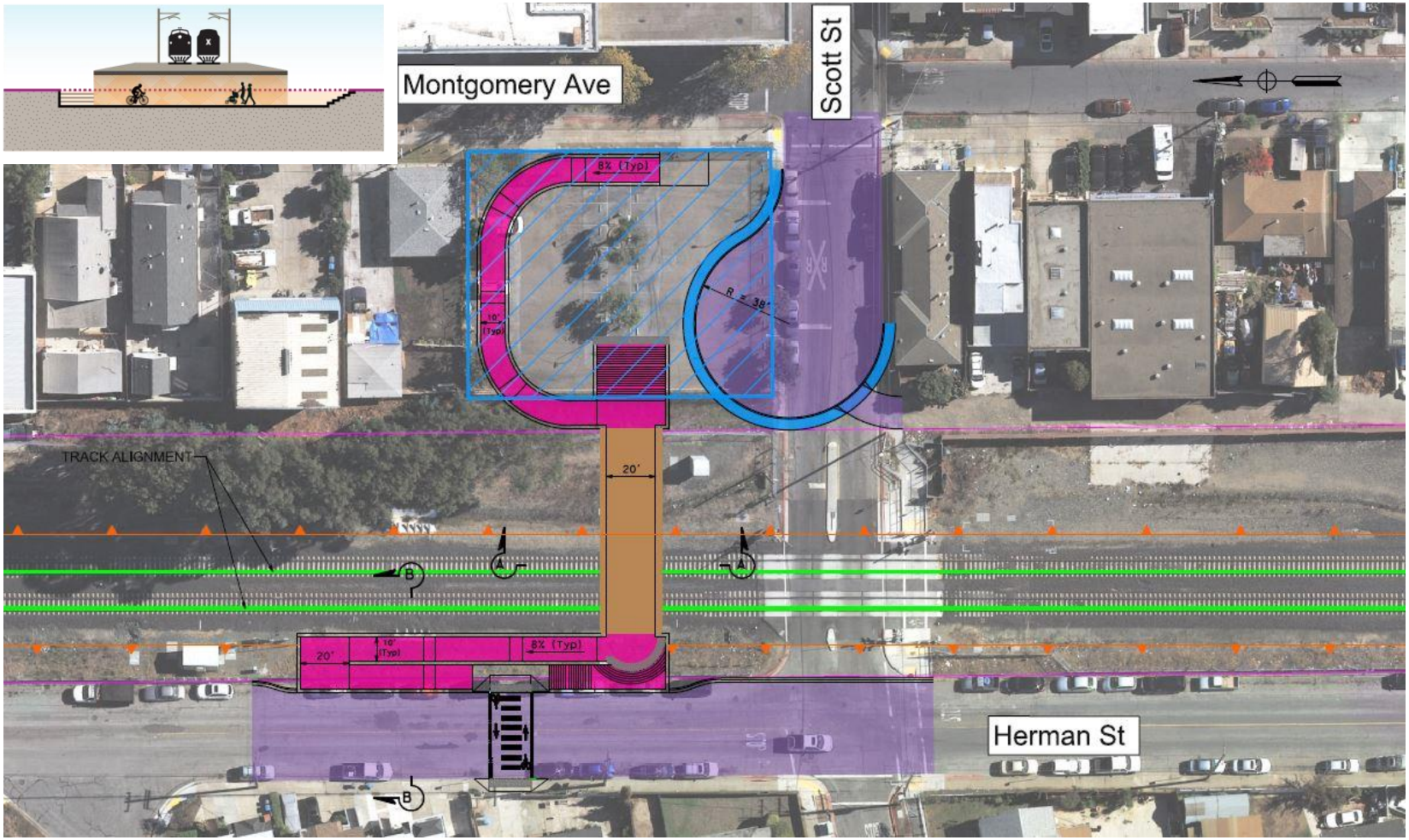


Hybrid Alternative

- Holly Street, San Carlos
- Issues
  - Long embankments
  - Raised tracks
  - Improved connectivity
  - Reduced impact to adjacent properties

Alternative 1: Hybrid (Track Raised, Roadway Lowered)

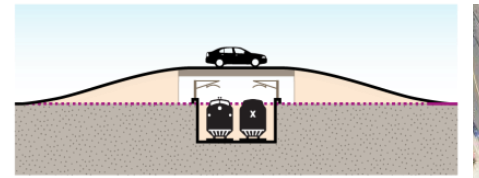
Scott Street Layout



Pedestrian Undercrossings

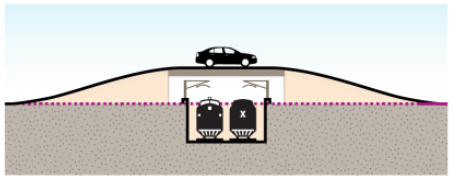
Alternative 2: Hybrid (Track Lowered, Roadway Raised)

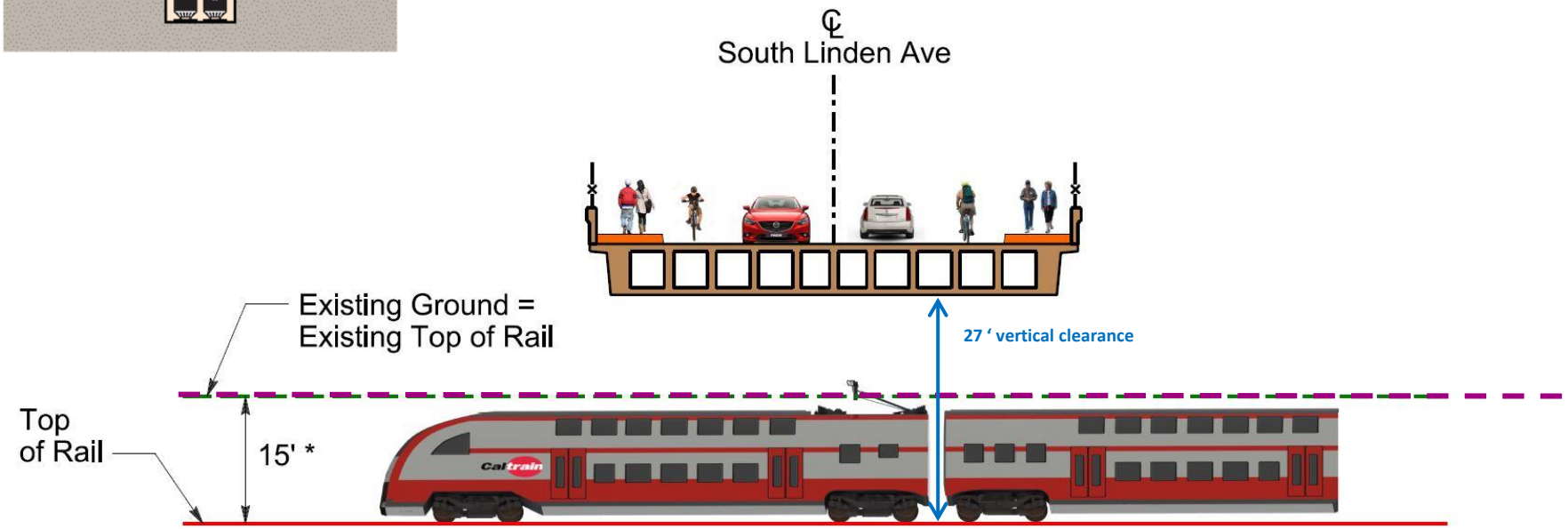
South Linden Avenue Layout



Alternative 2: Hybrid (Track Lowered, Roadway Raised)

South Linden Avenue Typical Section





* Elevation difference between the proposed and existing top of rail at the centerline of South Linden Avenue

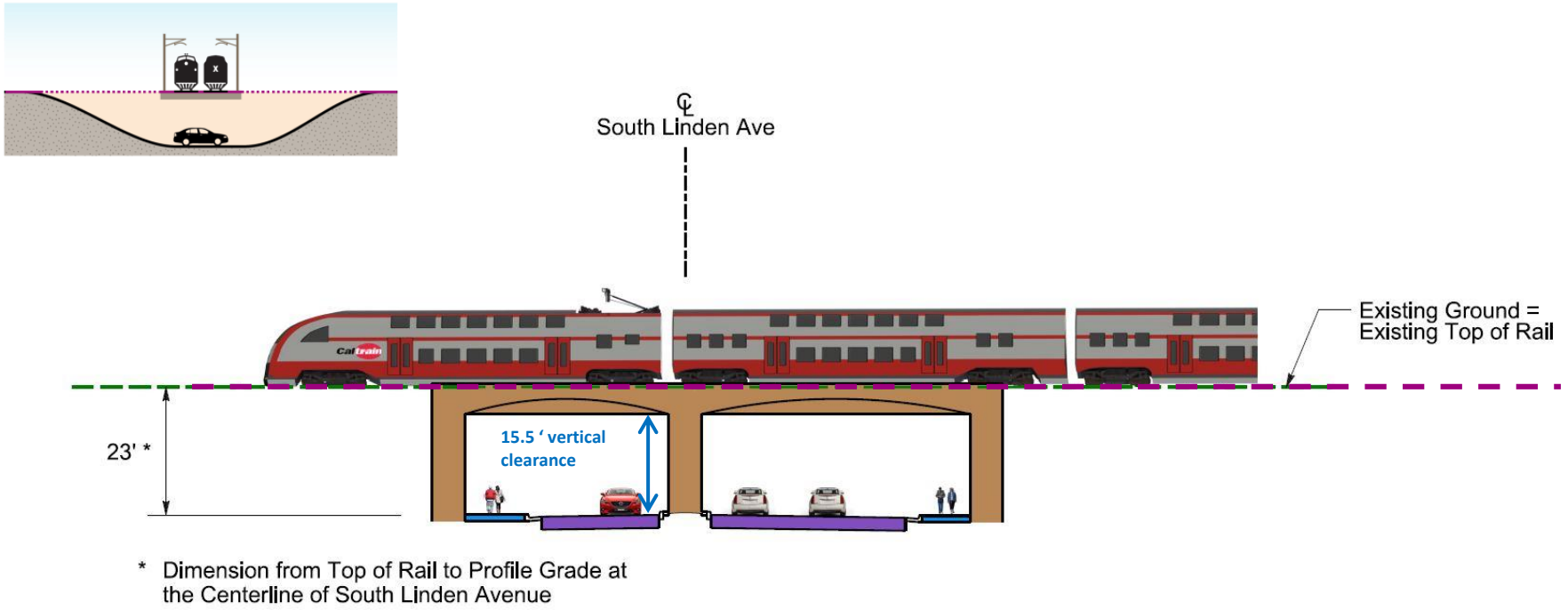
Pedestrian Overcrossings

Alternative 3: Rail at grade with Roadway Underpass

South Linden Avenue Layout

Alternative 3: Rail at grade with Roadway Underpass

South Linden Avenue Typical Section

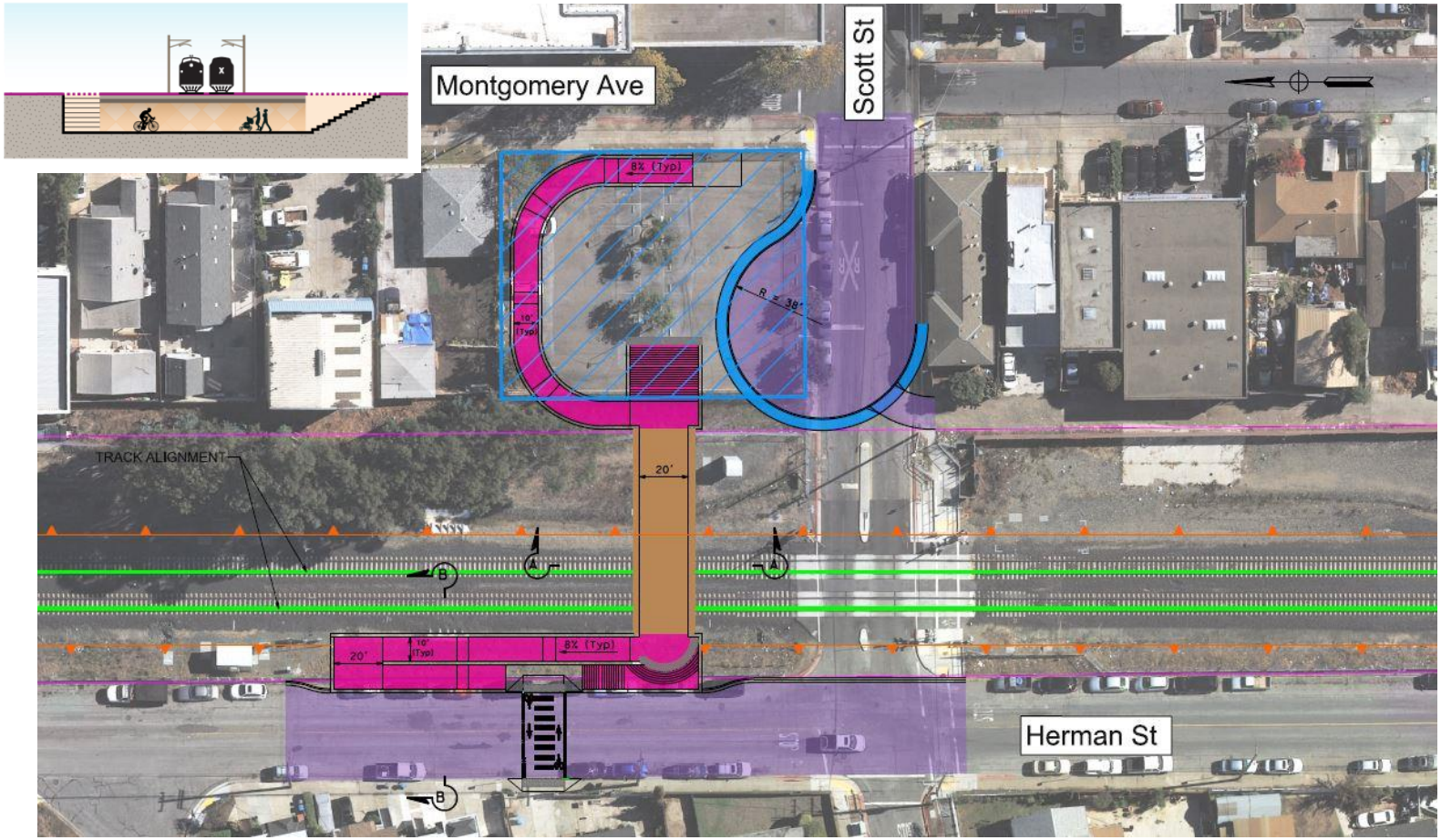


Underpass Alternative

- Jefferson Avenue, Redwood City
- Issues
  - Retaining walls
  - Limits access to adjacent properties
  - Side street connectivity

Alternative 3: Rail at grade with Roadway Underpass

Scott Street Layout



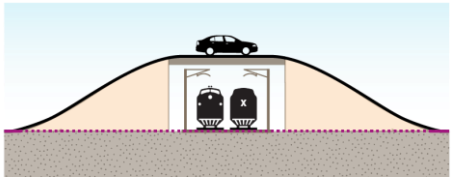
Pedestrian Undercrossings & Overcrossings

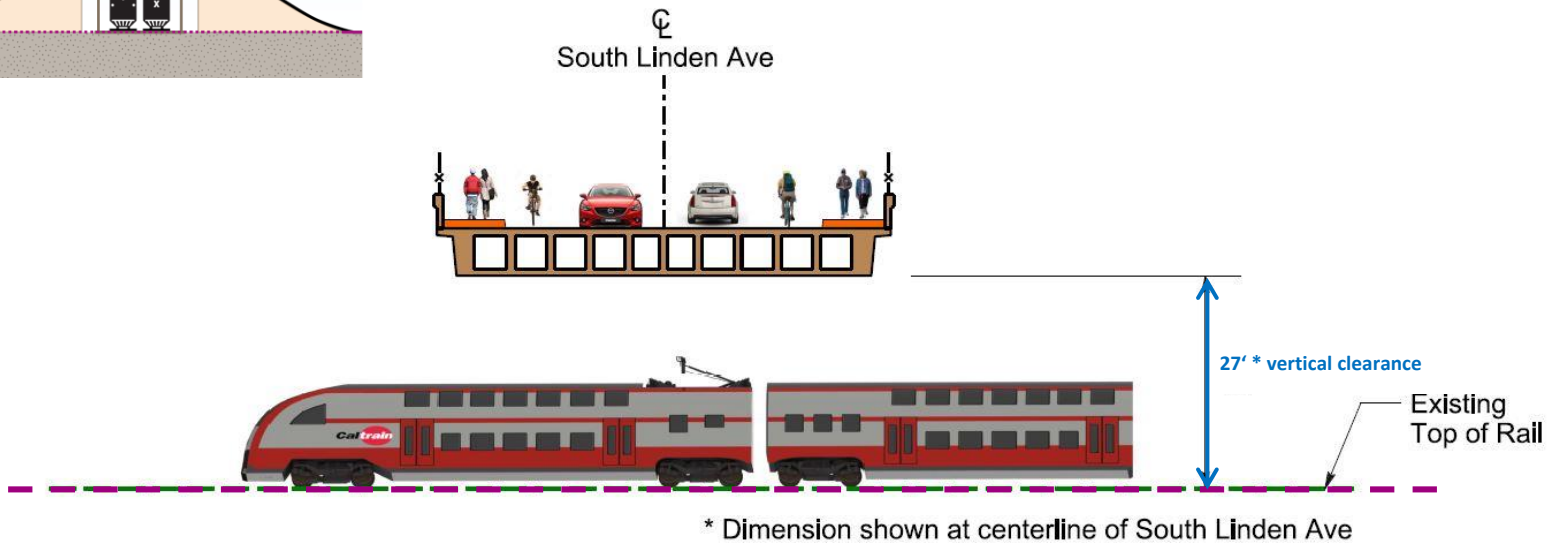
Alternative 4: Rail at grade with Roadway Overpass

South Linden Avenue Layout

Alternative 4: Rail at grade with Roadway Overpass

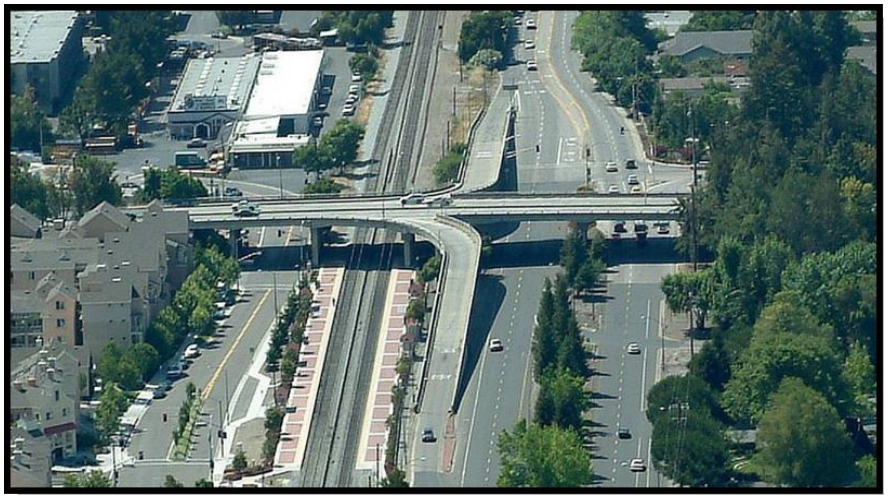
South Linden Avenue – Typical Section





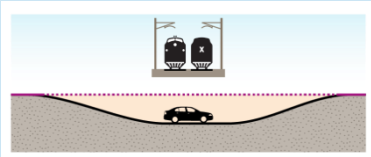
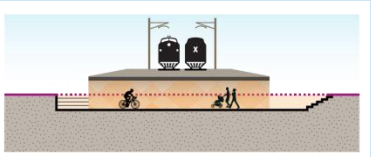
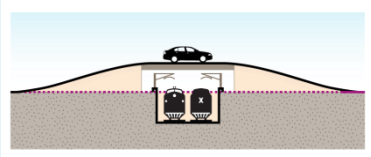
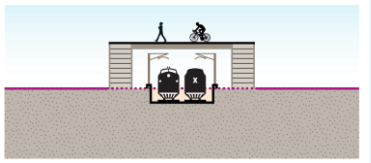
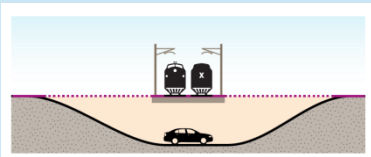
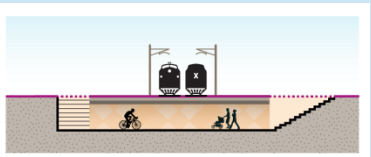
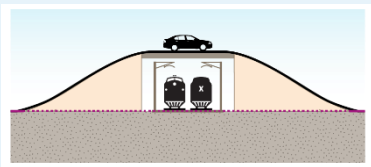
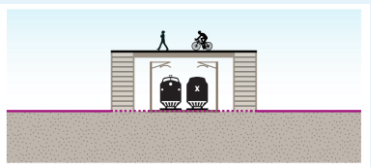
Overpass Alternative

- San Antonio Road, Mountain View
- Issues
  - Requires 30 ft bridge
  - Overpass length: 1,100 ft
  - Requires raising El Camino Real
  - Major visual impacts
  - Largest footprint



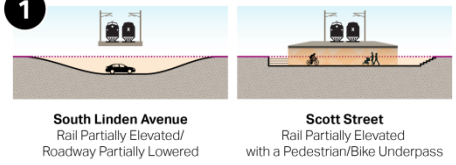
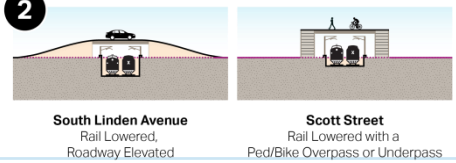
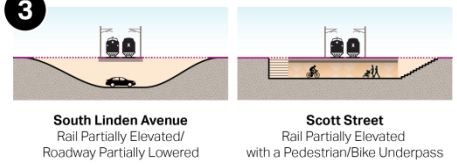
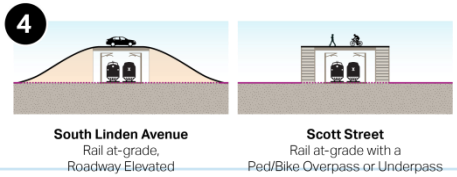
Pedestrian Undercrossings & Overcrossings

Summary of Alternatives

Alt	South Linden Avenue		Scott Street	
1		▪ Rail Elevated ▪ Roads Lowered		▪ Rail Elevated ▪ Road Closed ▪ Ped/Bike Tunnel
2		▪ Rail Lowered ▪ Roads Elevated		▪ Rail Lowered ▪ Road Closed ▪ Ped/Bike Crossing*
3		▪ Rail At-Grade ▪ Roads Fully Lowered		▪ Rail At-Grade ▪ Road Closed ▪ Ped/Bike Crossing*
4		▪ Rail At-Grade ▪ Roads Fully Elevated		▪ Rail At-Grade ▪ Road Closed ▪ Ped/Bike Crossing*

* A Ped/Bike Underpass (Tunnel) or an Overcrossing can be designed for this alternative

Advantages & Disadvantages

Alternative	Advantages	Disadvantages
1 	▪ Least Property Impacts ▪ Lowest Cost (Probable)	▪ Shoofly Required*
2 	▪ Reduces Train Noise (Rail Elevation Lowered)	▪ More Property Impacts than Alt 1 ▪ Shoofly Required* ▪ High Cost
3 	▪ Rail Remains At-Grade	▪ More Property Impacts than Alt 1 ▪ Limits Access to Adjacent Properties ▪ Greatest Impacts to Sidestreets ▪ Shoofly Required* ▪ High Cost
4 	▪ Rail Remains At-Grade ▪ No Shoofly Required	▪ Greatest Property Impacts ▪ Visual impacts ▪ High Cost

*** Shoofly will result in disruption to traffic on Dollar/ Herman during construction**

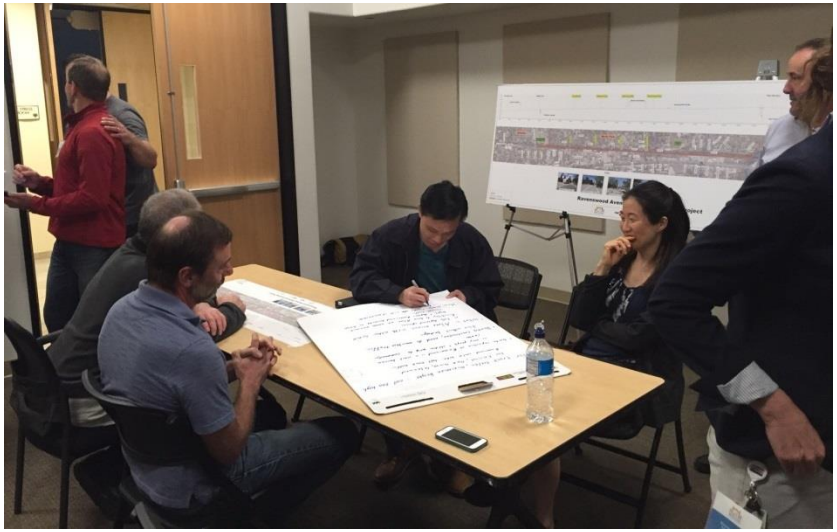
Design Constraints/Considerations

- Design Requirements (Vertical clearance, etc.)
- Railroad Operations
- Right-of-Way & Utilities
- Accessibility (Elevation Change)
- Traffic Impacts
- Constructability
- General Visual Impact/Overall Aesthetics
- Construction Costs

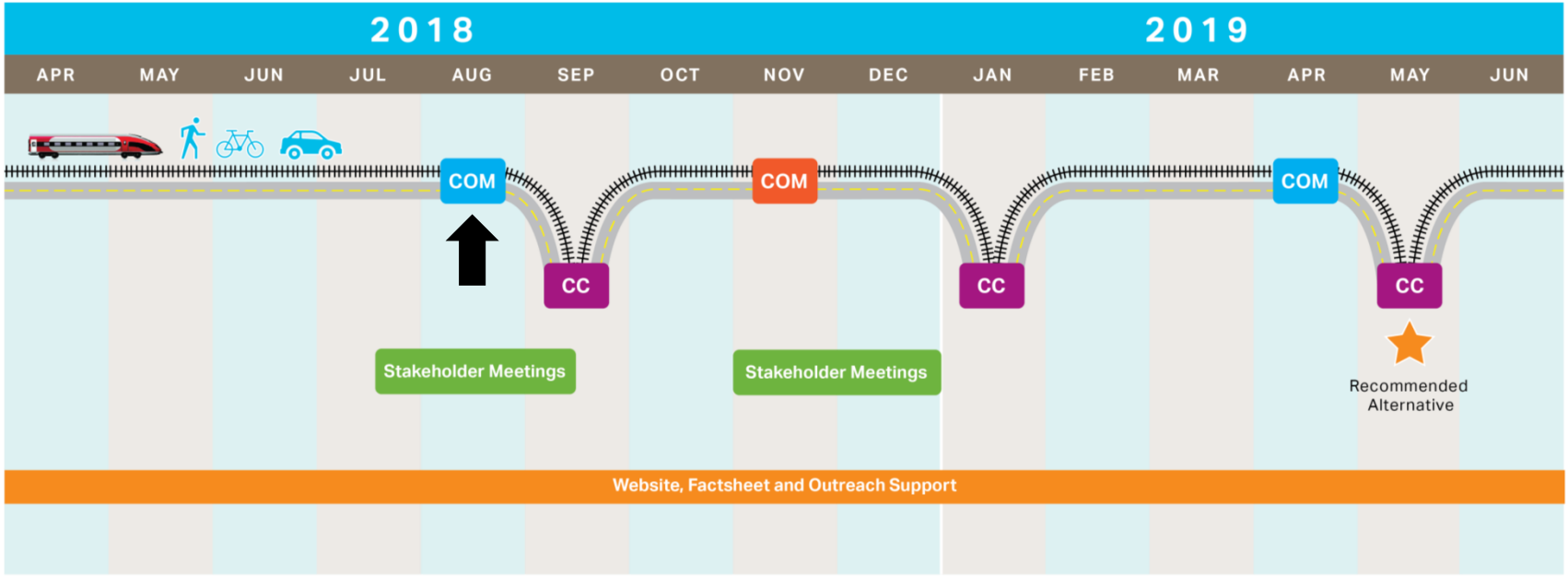
Questions and Answers

Stations

- South Linden Avenue
- Scott Street
- Infeasible Options



Next Steps



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Recommended Alternative—Advance to Environmental Clearance

Today's Meeting

Thank you