

# Highway 101 Overcrossing & Reach Trail at Adobe Creek/Palo Alto Baylands

## Project Status Report



**City of Palo Alto**  
**Planning & Transportation Commission**  
December 12, 2012

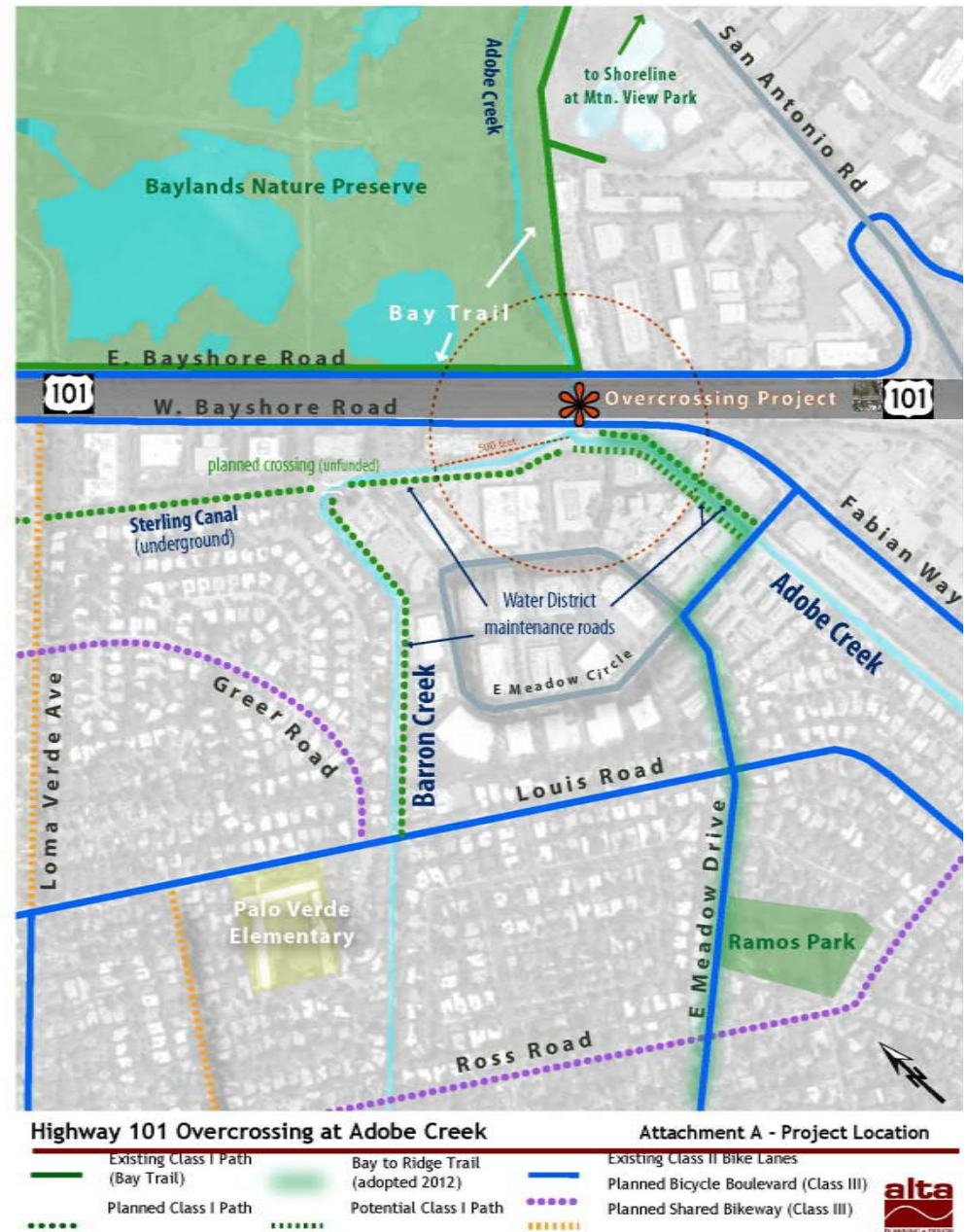


# Tonight's Purpose

1. Present and seek input on preliminary overcrossing alignment alternatives
2. Discuss and comment on environmental review scope, timeline
3. Provide update on project funding

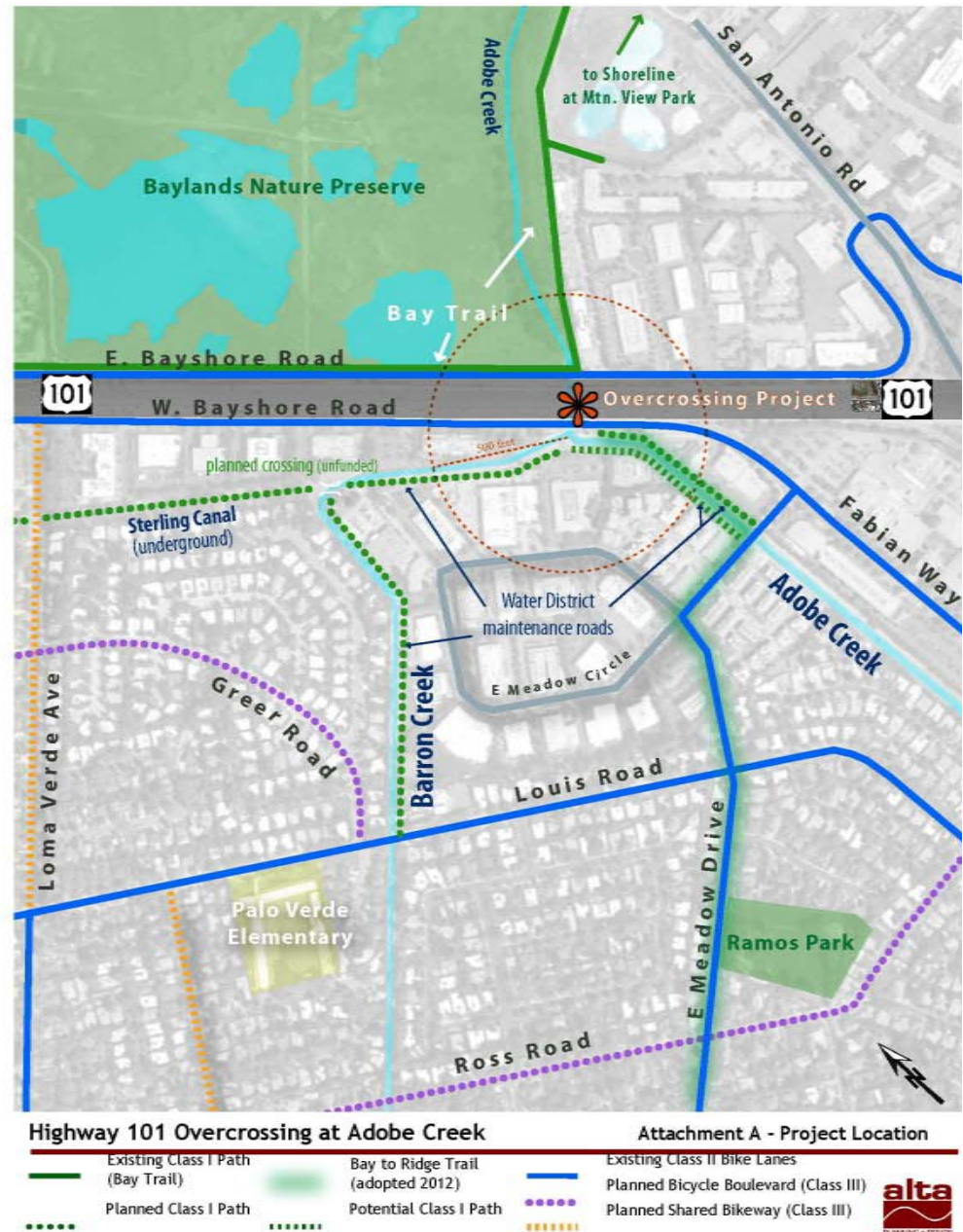


# Highway 101 at Adobe Creek



# Highway 101 at Adobe Creek

- **Public Preferred Crossing Location**
- **Underpass Studied and Rejected**
  - Flood channel at capacity
  - Caltrans discourages new underpasses
  - Safety considerations
- **74,000 annual trips projected**
  - 42,000 trips for existing seasonal underpass
- **Overcrossing option to provide all-year access**
- **Adobe Creek Reach Trail**





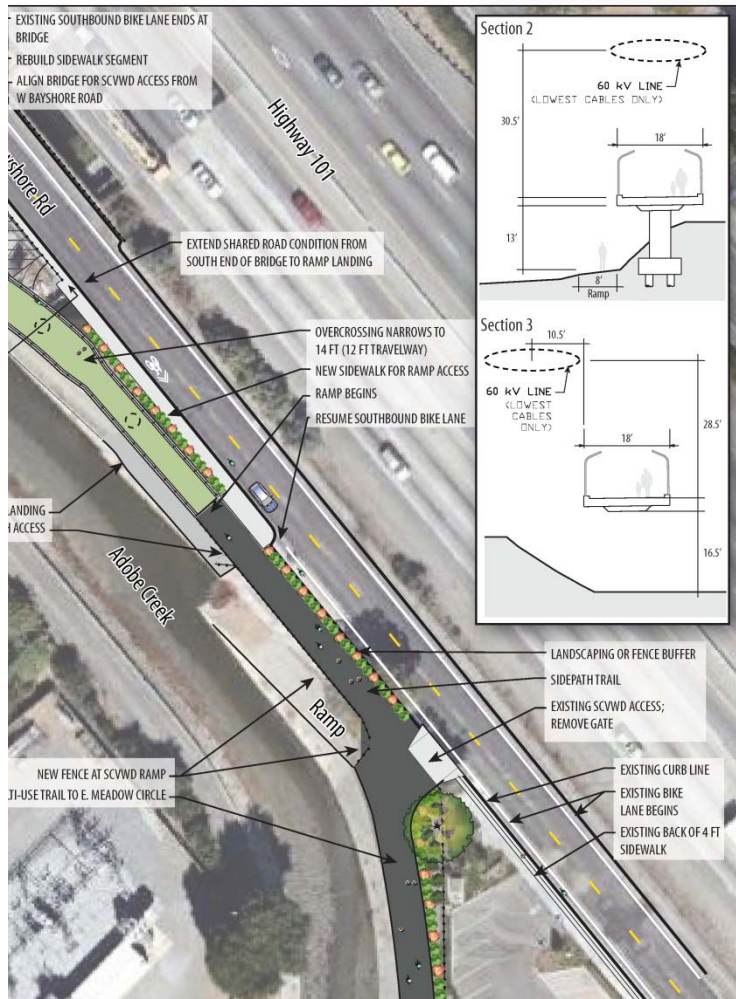
# Preliminary Design & Environmental Review



- **Alignment Alternatives**
  - Refined touchdowns with options
  - Review of utility & private property impacts
- **Additional Project Outreach**
  - PABAC, PRC, PTC, ARB, City Council
  - Up to 2 public workshops
- **Additional Studies**
  - Preliminary survey, geotechnical report; bridge value engineering
  - User counts, parking survey
- **Environmental Assessment**
  - City of Palo Alto: Lead agency for CEQA
  - Caltrans: Lead agency for NEPA
- **Adobe Creek 'Reach' Trail**
  - Water District coordination/feasibility
  - Preliminary Design (30%)



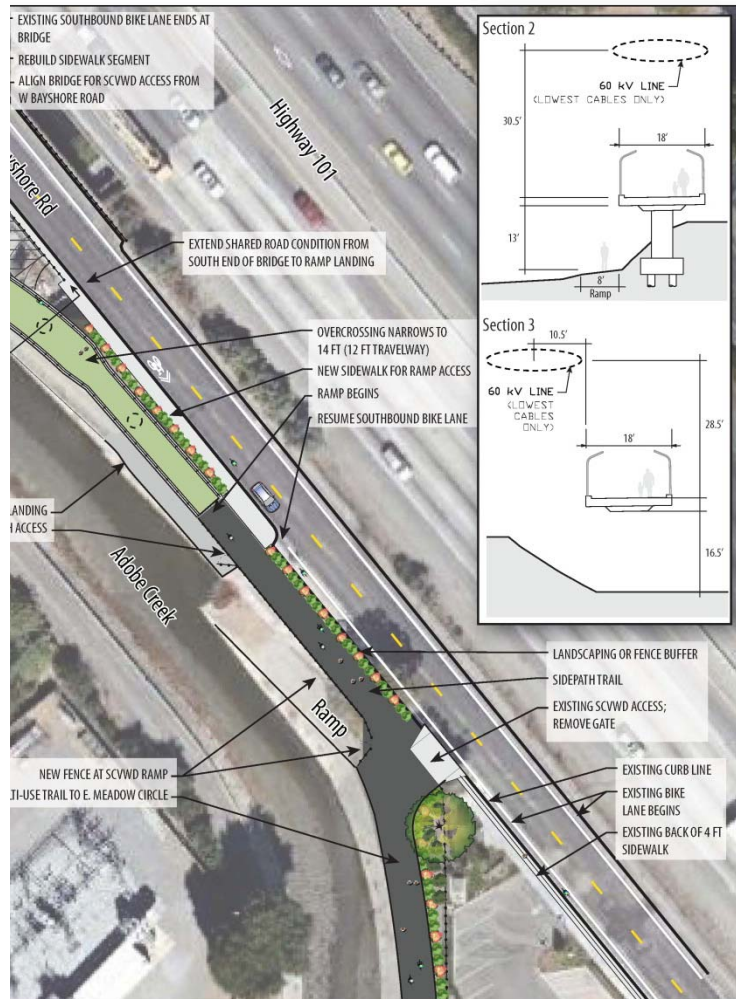
# Understanding Key Constraints



- **Overhead utility clearances**
  - 25' vertical clearance from “walkable” surface”, 6' horizontal
- **Water District maintenance access**
  - 16' vertical clearance at Adobe/Barron Creek confluence; no impacts to vehicle ramp
  - Lefkowitz tunnel access not needed
- **Caltrans design standards**
  - Highway clearances (18.5 feet)
  - Bridge curvature and design speed
  - One center span column
- **ADA accessibility**
  - Ramp Slopes (maximum 8% with landings)
  - Approaches
- **Baylands impacts**
  - Potential visual & biological impacts
  - Section 4F (Least Impact Alternative)



# Design Objectives



- Provide safe, user-friendly crossing experience 365 days of the year
- Optimize connections into trail and on-street bicycle networks
- Efficient design that minimizes unnecessary costs and impacts
- Integrate and celebrate Baylands access
- Provide approved template for upcoming architectural design competition

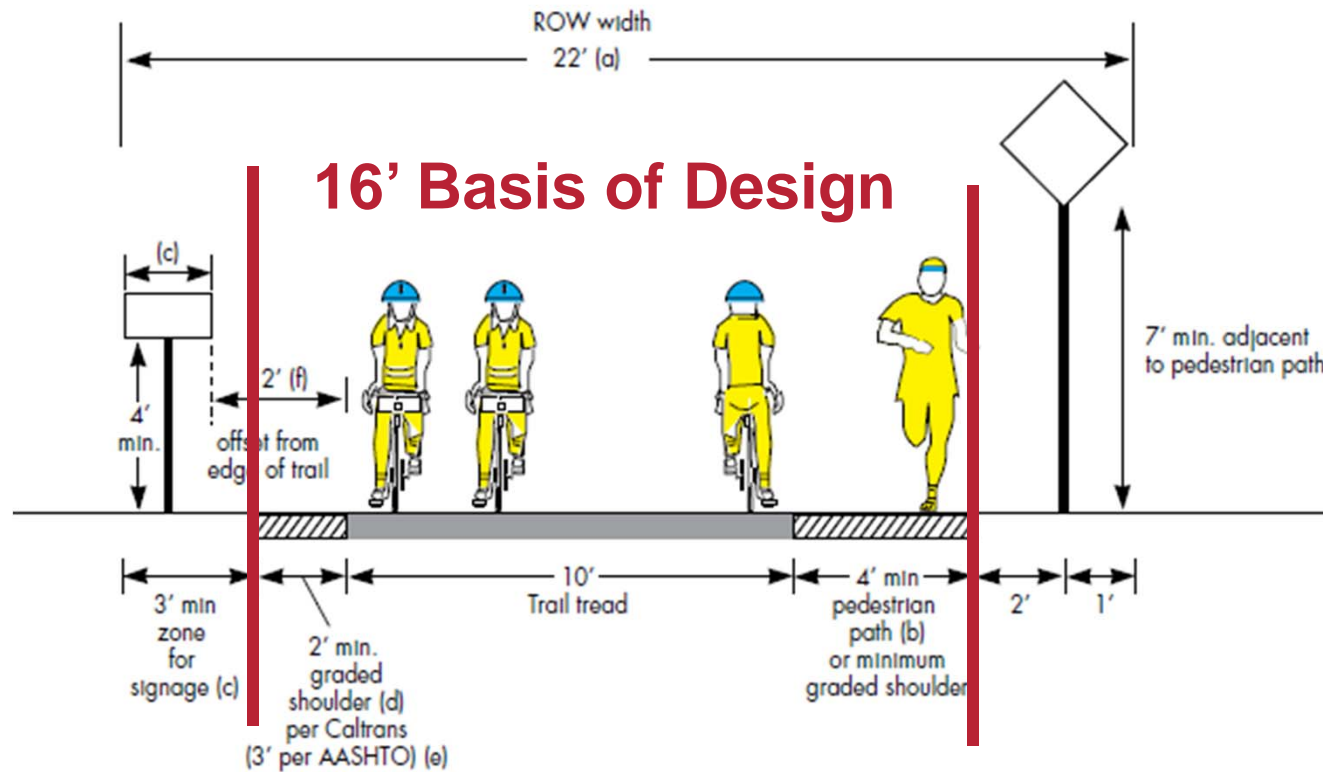


# Preliminary Draft Bridge Alternatives





# Bridge/ Trail Cross Section (*Proposed Preferred*)



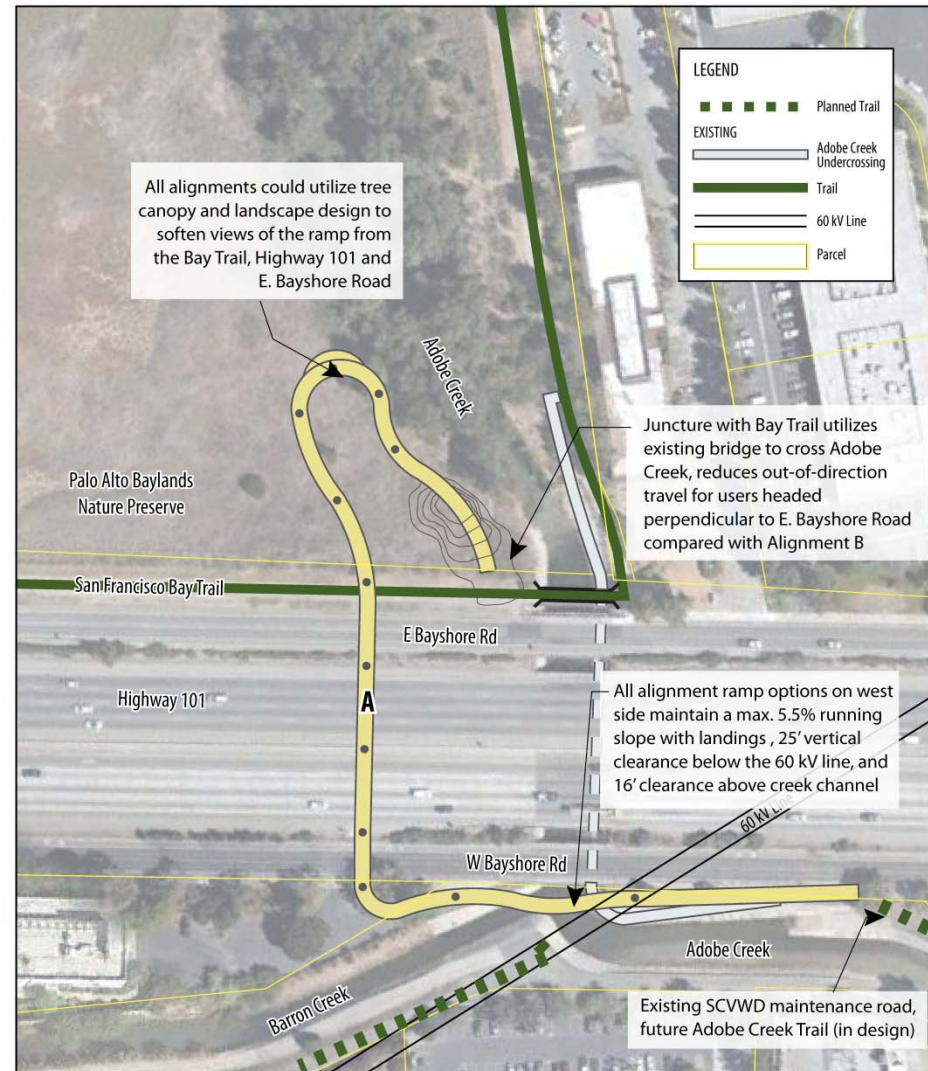
Note: When physical conditions require deviation from these minimums, they should be documented.  
See Figure 9-2 for bike path cross-section in a constrained right-of-way

**VTA Bicycle Technical Guidelines: Preferred Trail Section, Moderate Pedestrian Use**



# Alternative “A” – Staff Preferred Alignment

- Best meets design objectives
- Integrated trail connections
- Few sharp turns
- Minimal slopes (max 5.5%)
- Limited private property impacts on west side
  - Partial acquisition could help provide alternative access from north (via stairs)
- Potential visual and biological impacts to be explored, but indications are positive



ALIGNMENT A - STAFF PREFERRED ALTERNATIVE



# Alternative “A” – Baylands Photo Simulation

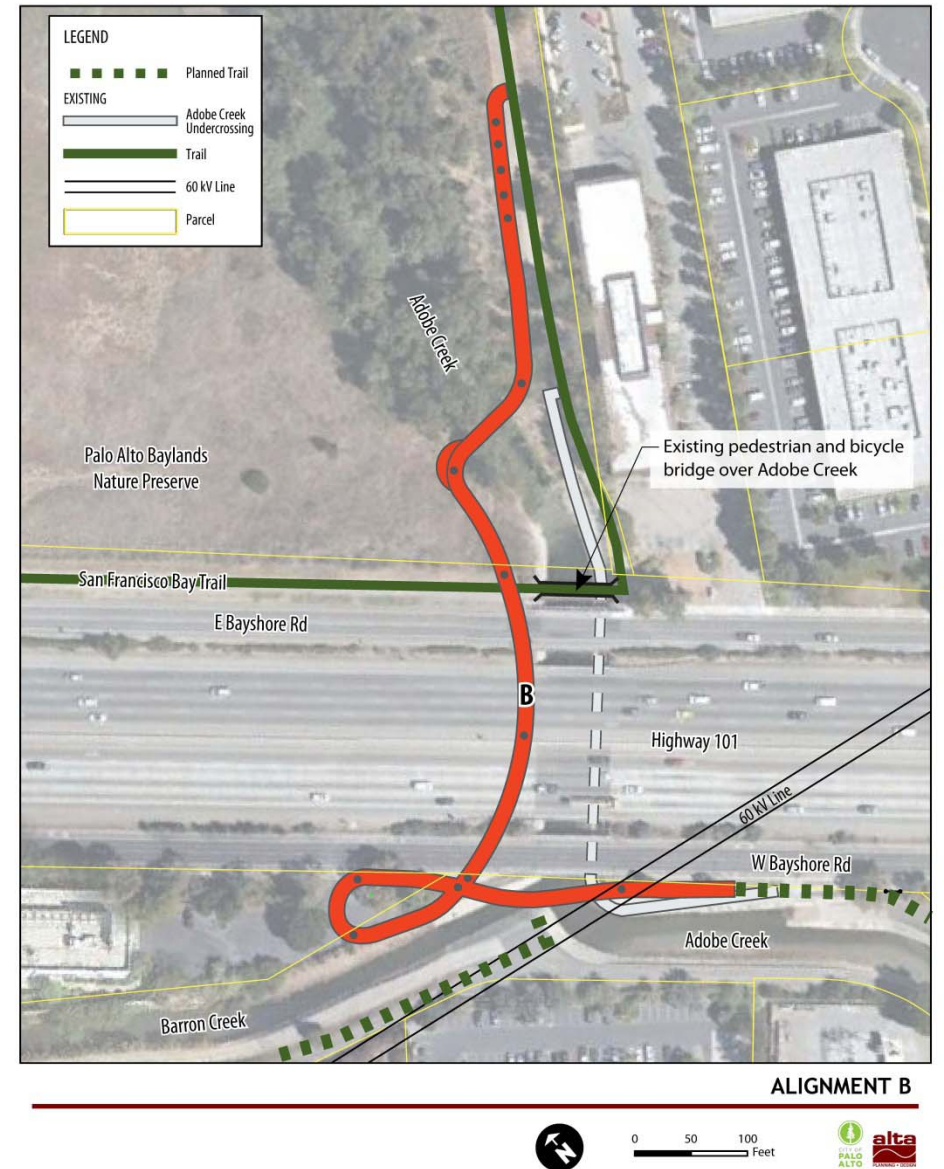


- Cost estimates will be provided during bridge engineering phase, but are projected to be within \$7-10 million range subject to further design
- Feasibility of Mechanically Stabilized Earth (MSE) ramp structure needs further analysis



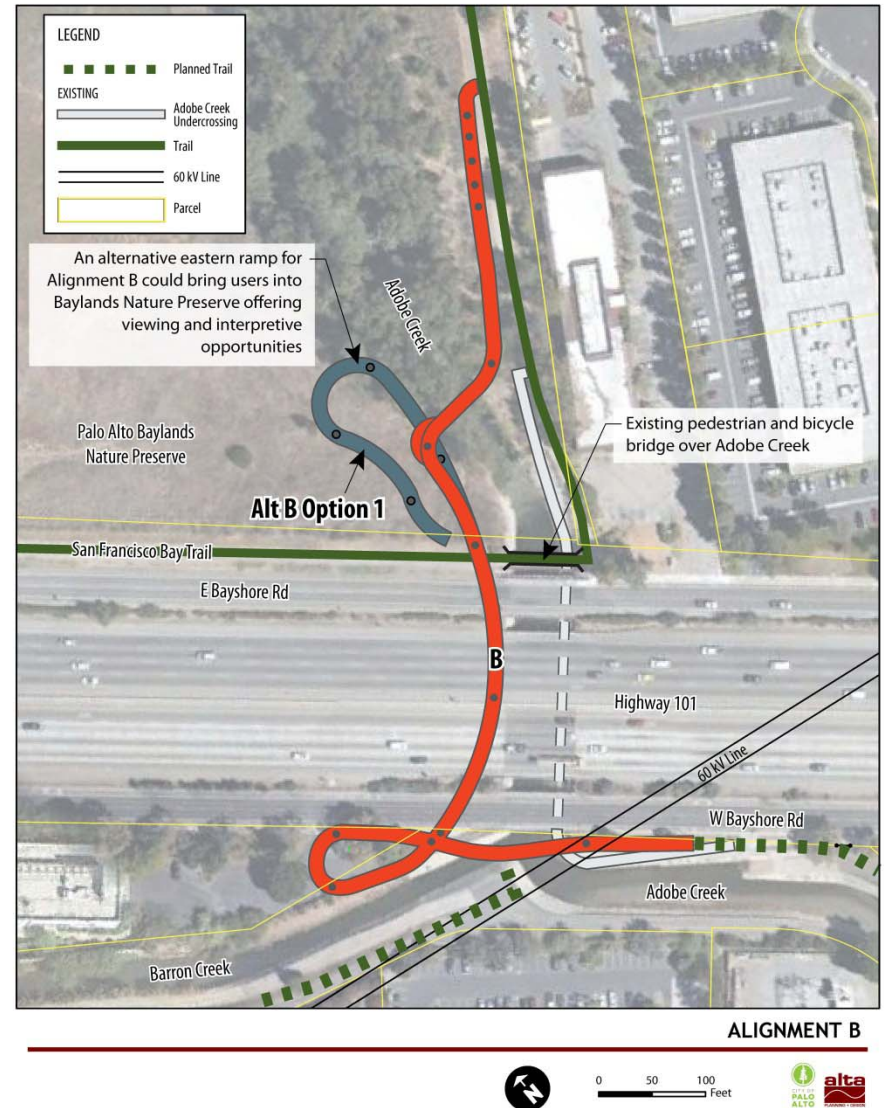
# Alignment “B”

- Gradual slopes and integrated trail connections
- Minimizes visual impacts to Baylands Nature Preserve
- 270 degree turn at Barron Creek
- Requires acquisition of private property
- Concerns of potential biological impacts, user conflicts at Bay Trail
- Requires additional bridge crossing of Adobe Creek



# Alternative B with Optional Ramp 1

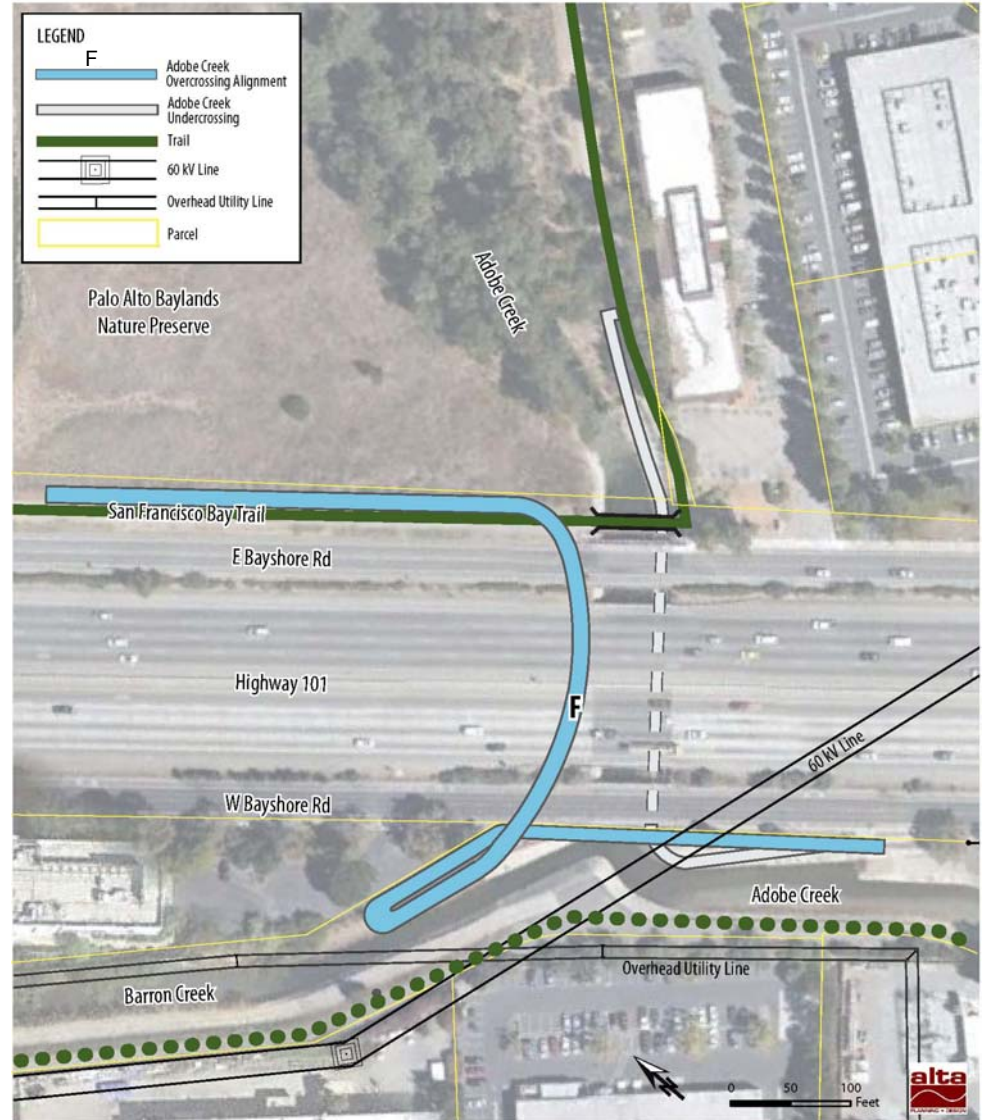
- Gradual slopes and integrated trail connections
- Reduced concern of biological and user impacts
- Does not include additional creek bridge (preferred by SCVWD)
- Multiple turns on bridge
- Requires acquisition of private property





# Alternative “F”

- No physical impacts to private property and Baylands\*
- Integrated connection at Adobe Creek Reach Trail
- Minimal slopes
- Sharp turn at Barron Creek
- Bay Trail connection would force out-of-direction travel for many users
- Potential for visual impacts, particularly for Baylands
- Is compatible with Option 1 ramp shown in Alternative B

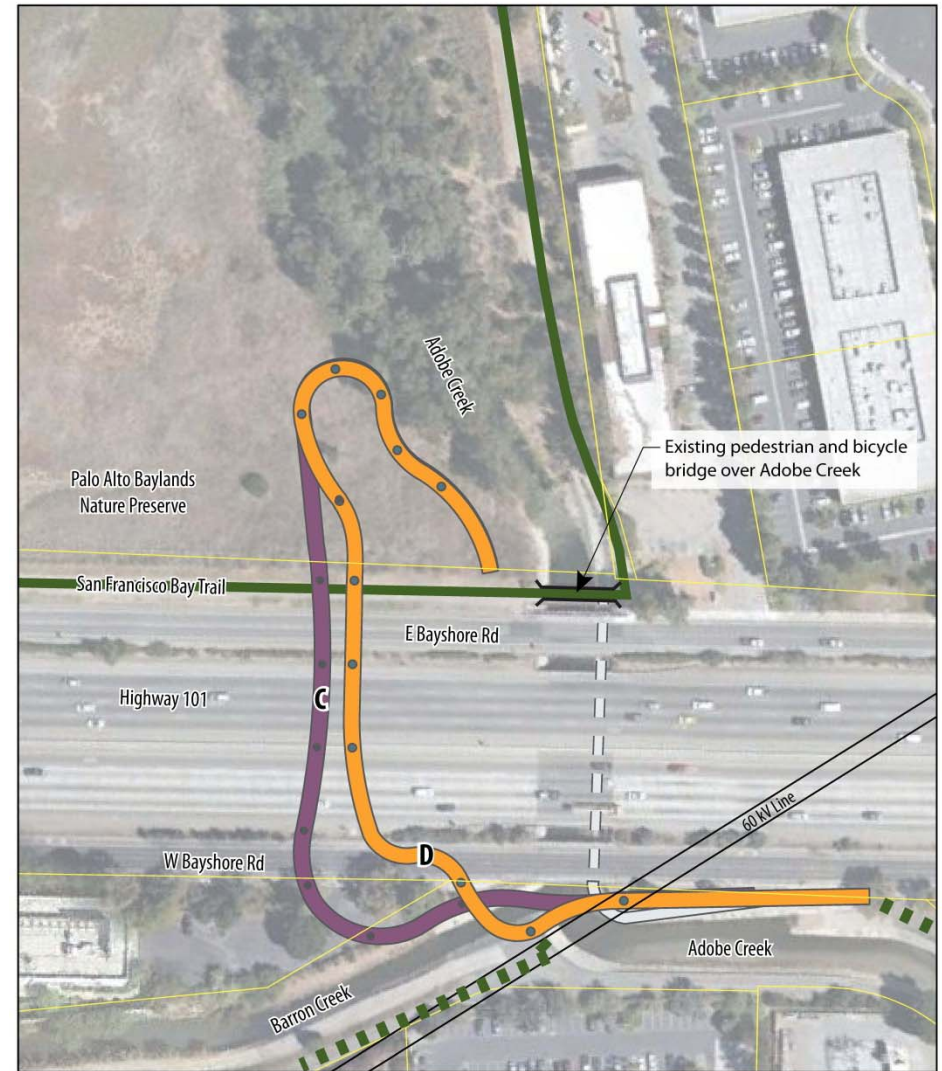




# Alternatives “C” and “D”

## Dropped from further consideration

- Alignment C includes additional impacts to private property
- Alignment D avoids private property but double-crossing of creeks strongly discouraged by SCVWD
- Ramp landings shared with Alignment A (redundant alternatives for environmental review purposes)



ALIGNMENT ALTERNATIVES



0 50 100 Feet



# Alternative “E”

## Dropped from further consideration

- Briefly explored as alternative trail access concept as response to public comments
- Alternative impacts to private property (not preferred)
- Does not meet overhead clearance requirements for SCVWD maintenance activities
- Barron/Adobe Creek access trail would be closed 4-6 weeks every few years by SCVWD





# No Build Alternative: *Lefkowitz Tunnel* (Seasonal)



The existing seasonal undercrossing would continue to be in operation six months of the year, on average, with minimal potential for upgrades (e.g. removal of barriers, lighting)



# No Build Alternative:

# *San Antonio Road*



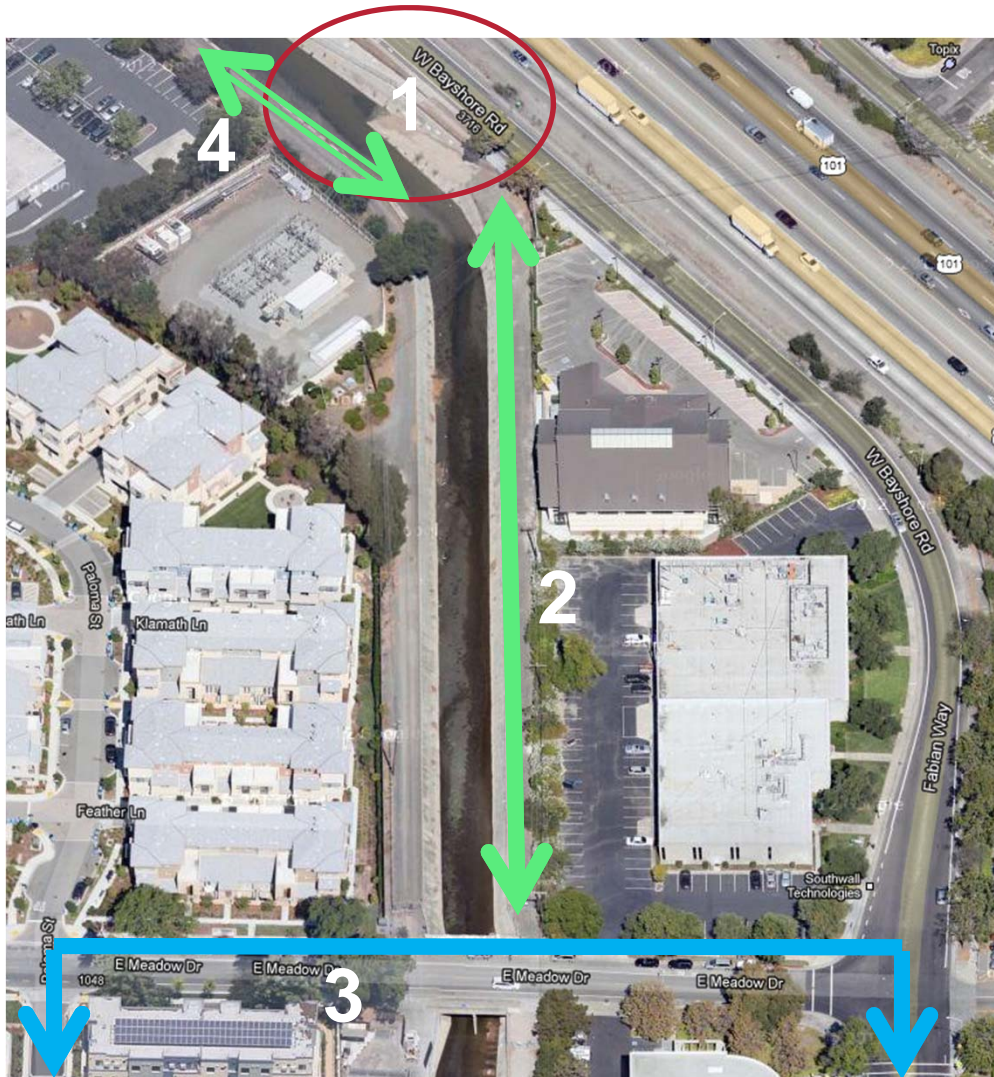


# No Build Alternative: *Oregon* *Expressway*





# Adobe Creek Reach Trail



1. Existing underpass and future overcrossing project
2. Existing SCVWD maintenance road and planned creek trail
3. Existing bike lanes and proposed “enhanced” bikeways
4. Future potential Sterling Canal Trail



# Palo Alto Bicycle Advisory Committee

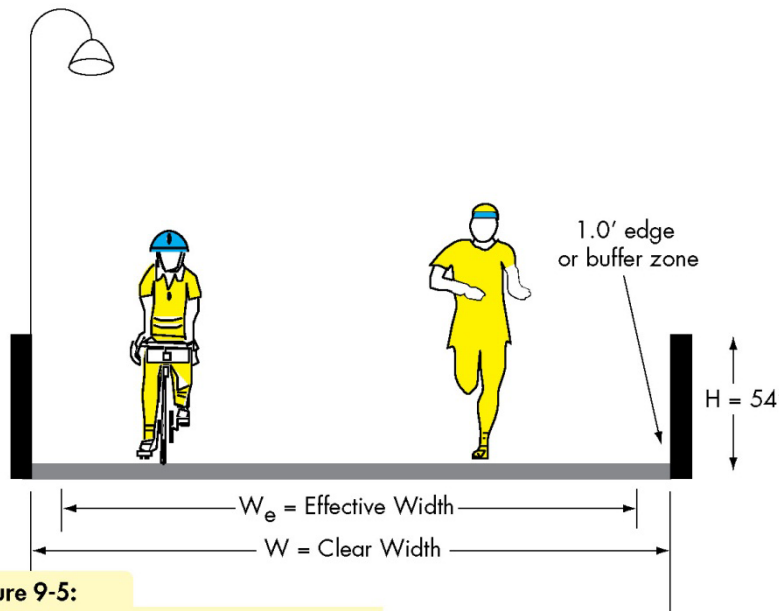


Figure 9-5:  
Typical Bicycle Bridge Cross Section

VTA Bicycle Technical Guidelines: Typical Bicycle Bridge Section

- Confirmed strong overall support for bridge
- Support for ramp option north of Adobe Creek at Bay Trail (A, B1)
- Avoid sharp turns & bollards
- Maintain lowest feasible ramp slopes (maximum 5%)
- Valley Transportation Authority (VTA) preferred trail width as initial design basis (16' with 10' min. effective bicycle trail width)

# Palo Alto Parks & Recreation Commission



- **Confirmed strong overall support for bridge**
- **Support for:**
  - E. Bayshore connection at Bay Trail in Baylands
  - Integrated design, interpretive signage and wayfinding
  - Habitat/landscape restoration
  - Adobe Creek Trail connection



# Environmental Scoping

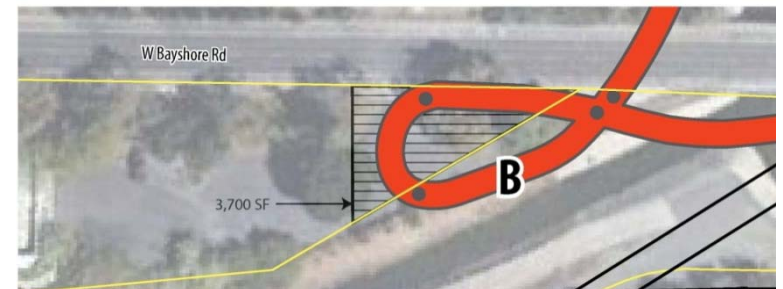
- **September 18 Public Workshop**
- **Comment Period Sept 18 - Oct 25th**
- **Public Comments:**
  - Supportive (none directly opposed to project concept)
  - Ensure/improve access from northern neighborhoods
    - W. Bayshore Road not a good connection
  - Support for alternatives with least impact to riparian corridor (not Alignment B)
  - Incorporate wildlife habitat
  - Several stated preferences for simple, cost-effective bridge



*W. Bayshore Road from Adobe Creek, looking northwest*

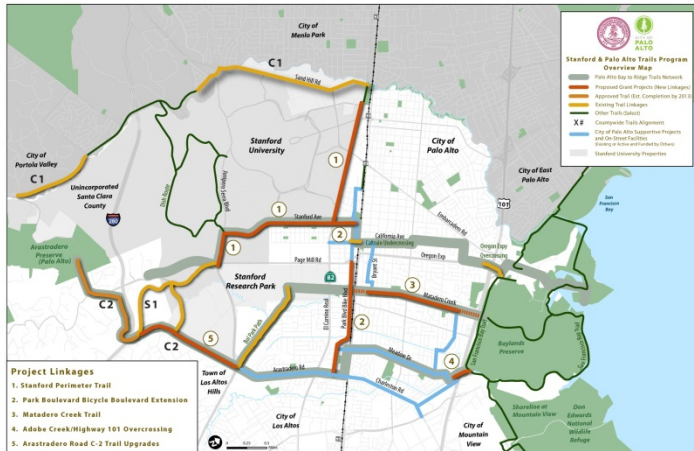
# West Bayshore Road Access

- Existing sidewalk gap, bicycle lane gap on creek bridge, high traffic speeds, highway noise
- **Project to fill sidewalk gap**
- **Potential upgrades to Greer Road (proposed bicycle boulevard)**
- **Potential for alternative stair access from 3600 West Bayshore (if partially acquired)**
- **Options to be further studied in environmental analysis**





# Project Funding Opportunities



- **\$10 million estimated project cost**
  - **\$4m Santa Clara County Trails Program**
  - **\$1.5m Local Match**



## \$4.5m Funding Options:

- **One Bay Area Grant Call for Projects**
- **Private-Public Partnerships\***

\*Pending Design Phase

# EIR/EA Issues to be Further Analyzed

- Aesthetics/Visual Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use, Population, and Housing
- Noise
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

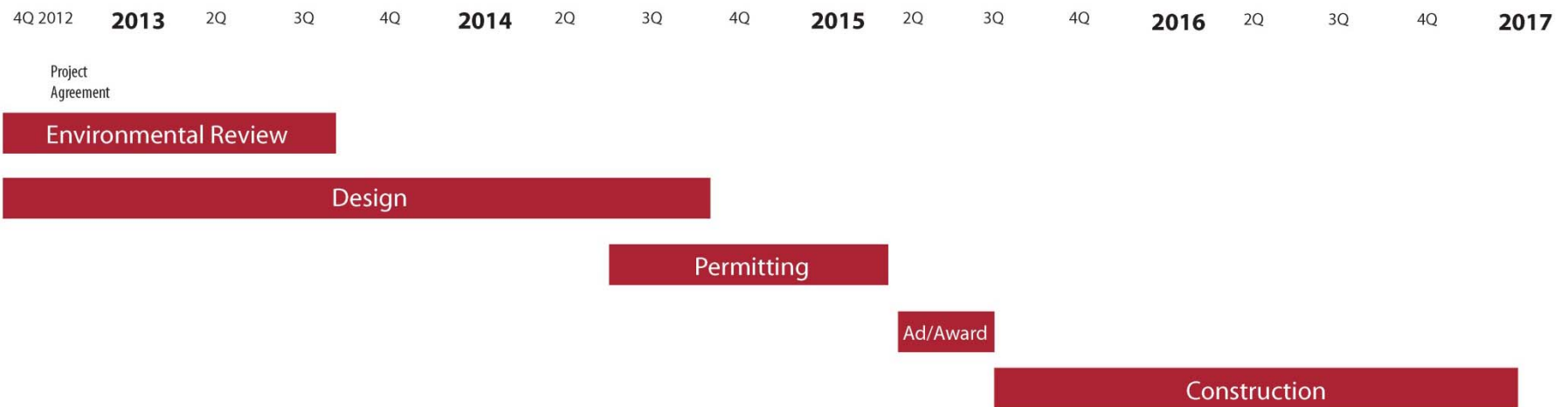


# EIR/EA Process



# Project Schedule\*

## Adobe Creek/Highway 101 Overcrossing and Creek Trail Estimated Project Schedule



\*Subject to change



# Next Steps

- Feb 2013 OBAG grant application
- Summer 2013 Draft EIR Public Hearing
- 2013 Architectural Design Competition



