

Presentation for the

August 20, 2020

City School Liaison
Committee Meeting



CITY OF
**PALO
ALTO**

Connecting Palo Alto

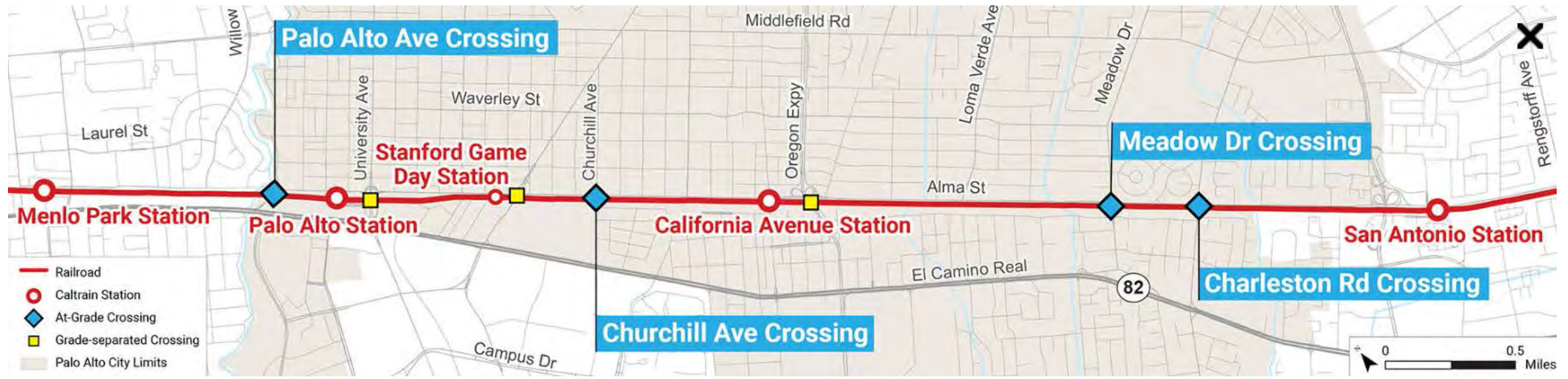
Rail Grade Separation Project

Connecting Palo Alto

Existing Conditions

Total of Seven Crossings

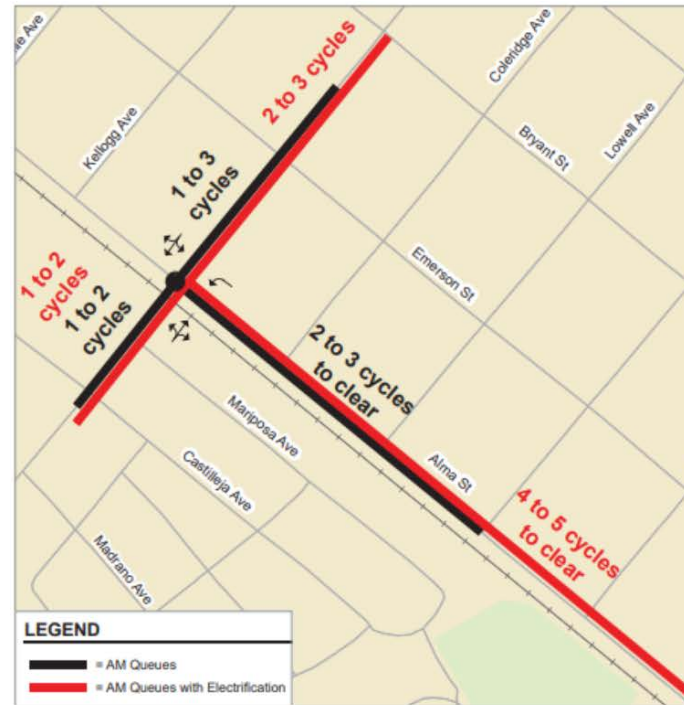
Grade Separated	At-Grade Crossings
Embarcadero Road, University Ave, Oregon Expressway (County)	Palo Alto Ave, Churchill Ave, Meadow Drive & Charleston Road



Connecting Palo Alto

Why?

- Caltrain Electrification
- Increased Trains (from 8 to 12 during AM/PM peak hours)
- Increased Gate Down time (15% of total time in hour)
- Will cause increased delays to all modes of Traffic (Vehicular, Pedestrian, Bike, Bus Transit)



Alma Street and Churchill Avenue AM Peak Vehicular Queues



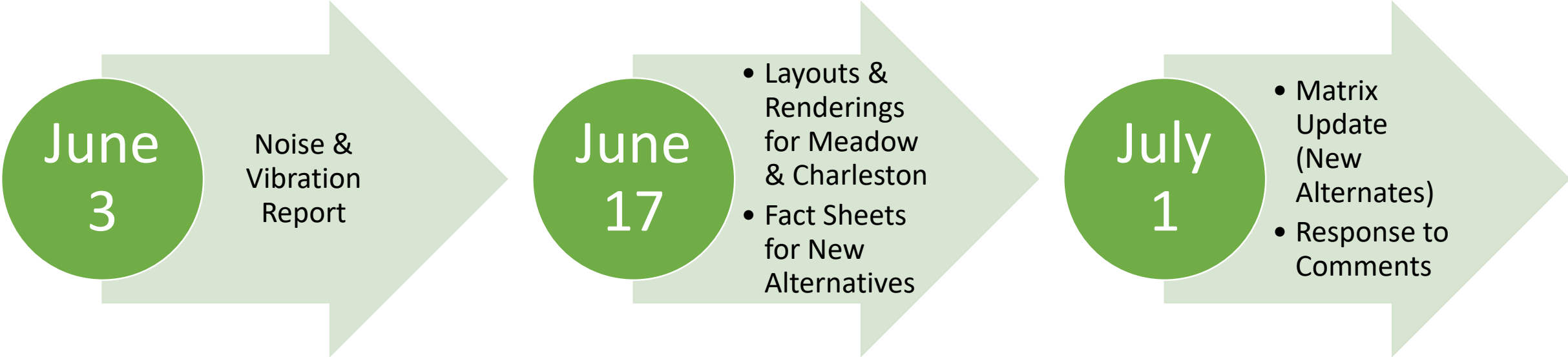
Alma Street and Churchill Avenue PM Peak Vehicular Queues

Alternatives Under Consideration

- Churchill
 - Closure Plus Mitigations
 - Viaduct
 - Partial Underpass (New)*
- Meadow-Charleston
 - Trench
 - Hybrid
 - Viaduct
 - South Palo Alto Tunnel (Passenger Train only, Freight at Grade)
 - South Palo Alto Tunnel (Freight and Passenger Train)
 - Underpass (New)*



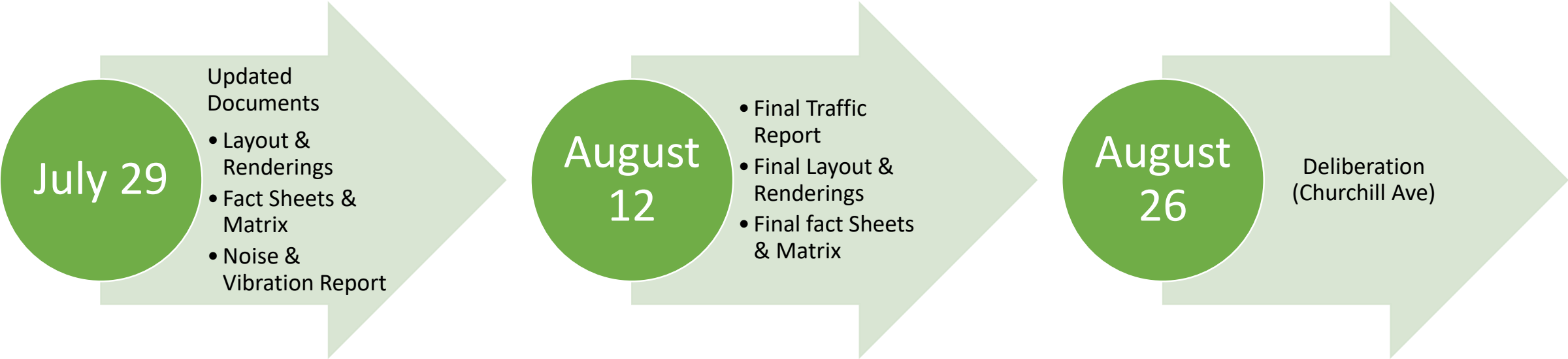
XCAP Meetings Update



XCAP Update - Continued



XCAP Update - Continued

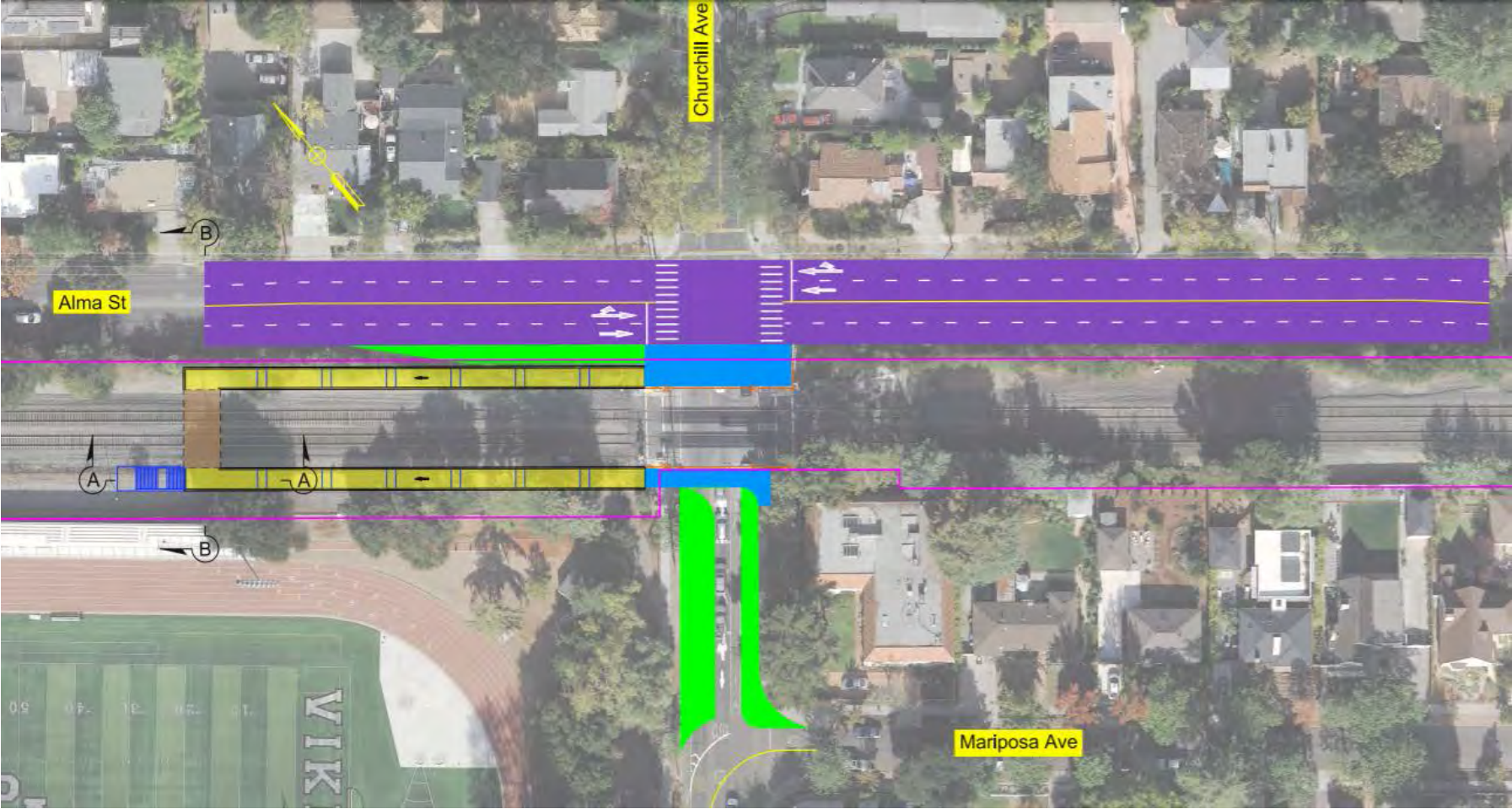


Alternatives in Consideration

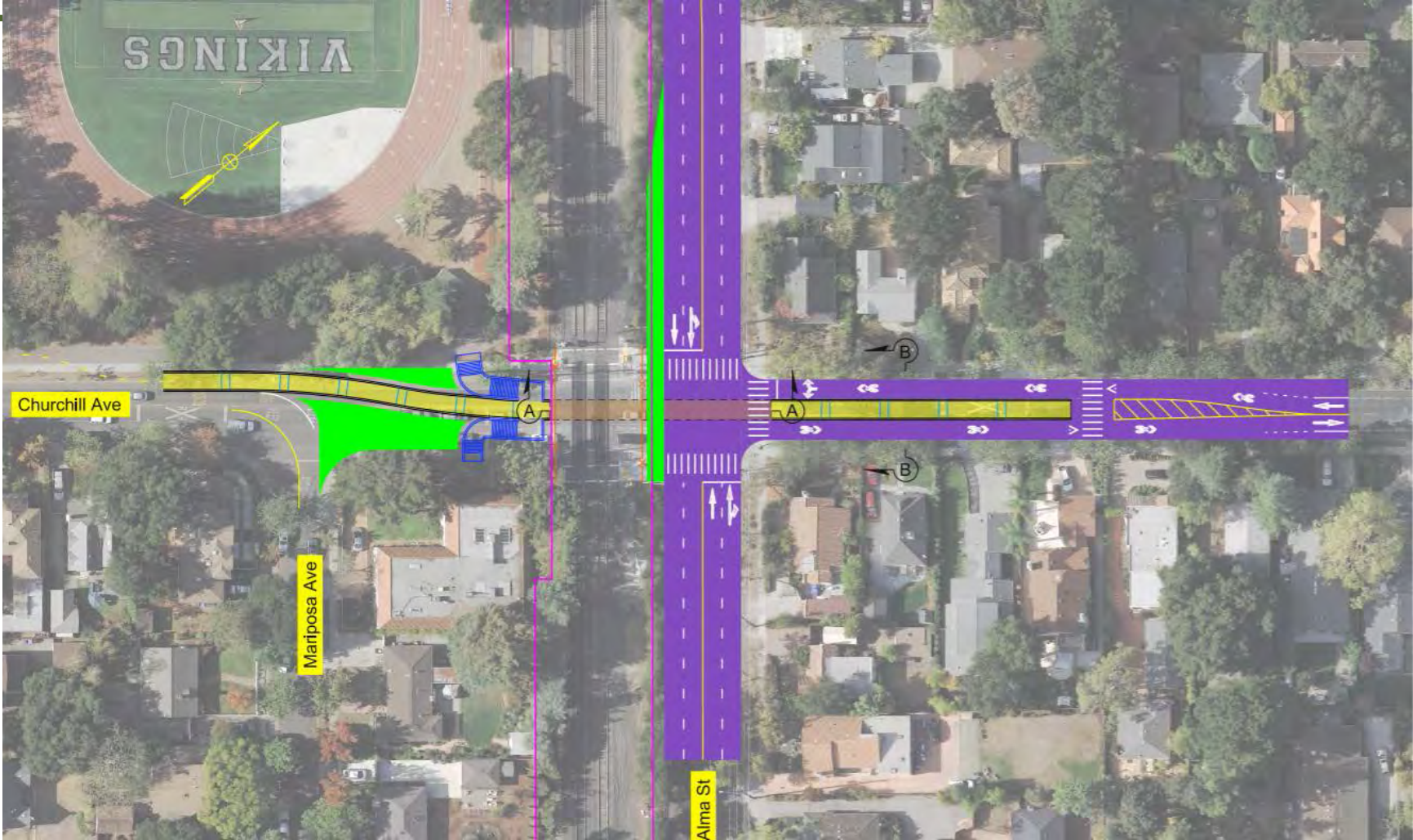
Churchill Ave – Alternatives

- **Closure**
- **Viaduct**
- **Partial Underpass**

Churchill Ave – Closure with Mitigation Option 1



Churchill Ave – Closure with Mitigation Option 2



Churchill Ave – Closure with Mitigation

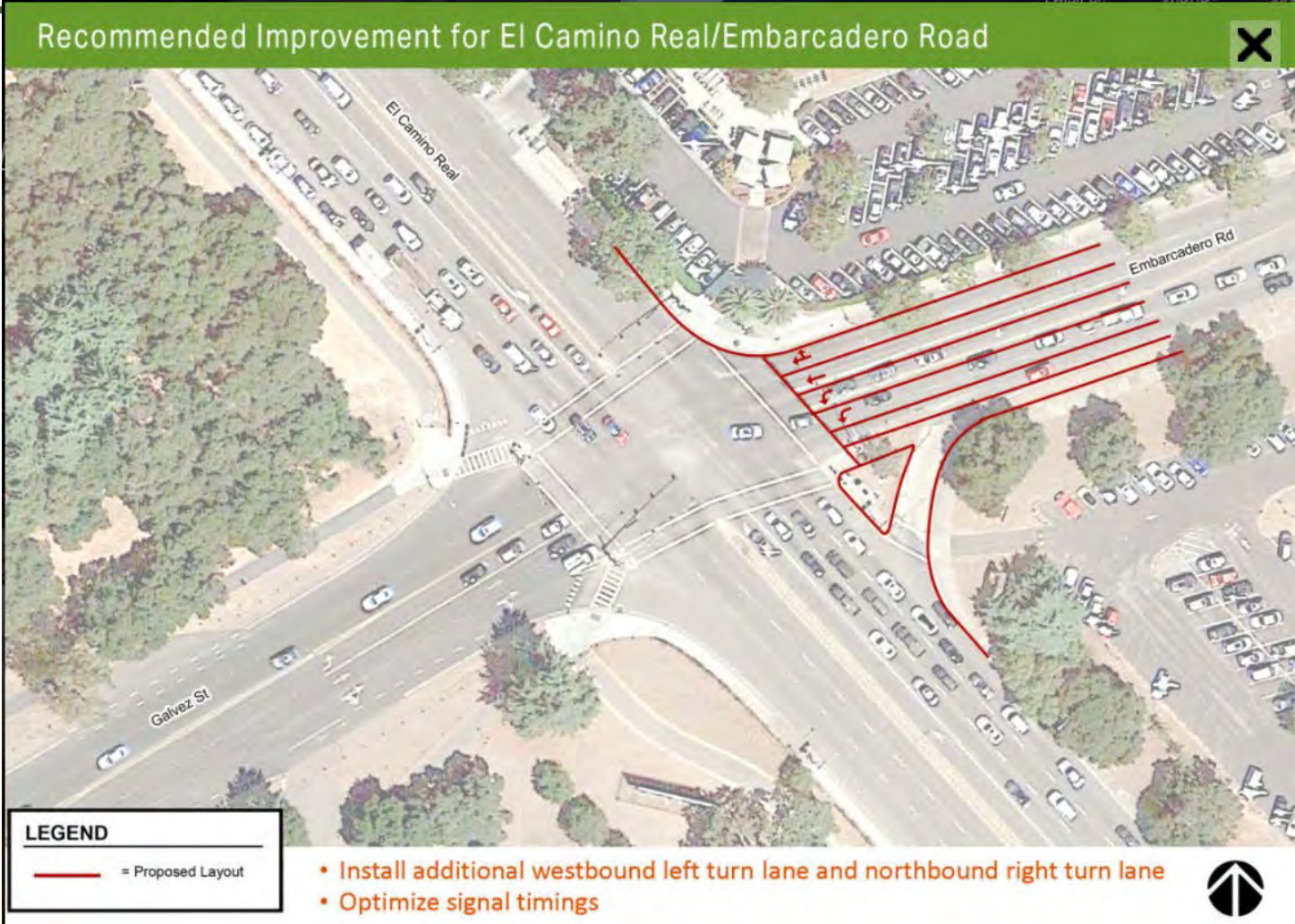
Mitigations

- **Detailed Traffic Study Performed by Traffic Engineering Consultant**
- **Based on Study, recommended improvements for following Intersection Improvements to address traffic impacts**
 - Embarcadero, Alma, High & Kingsley
 - El Camino & Embarcadero
 - El Camino & Pagemill/Oregon Expressway
 - Oregon Expressway & Alma

Churchill Ave – Closure with Mitigation



Churchill Ave – Closure with Mitigation



Churchill Ave – Closure with Mitigation



Figure 10
El Camino Real and Page Mill Road/Oregon Expressway Improvements

Churchill Ave – Closure with Mitigation

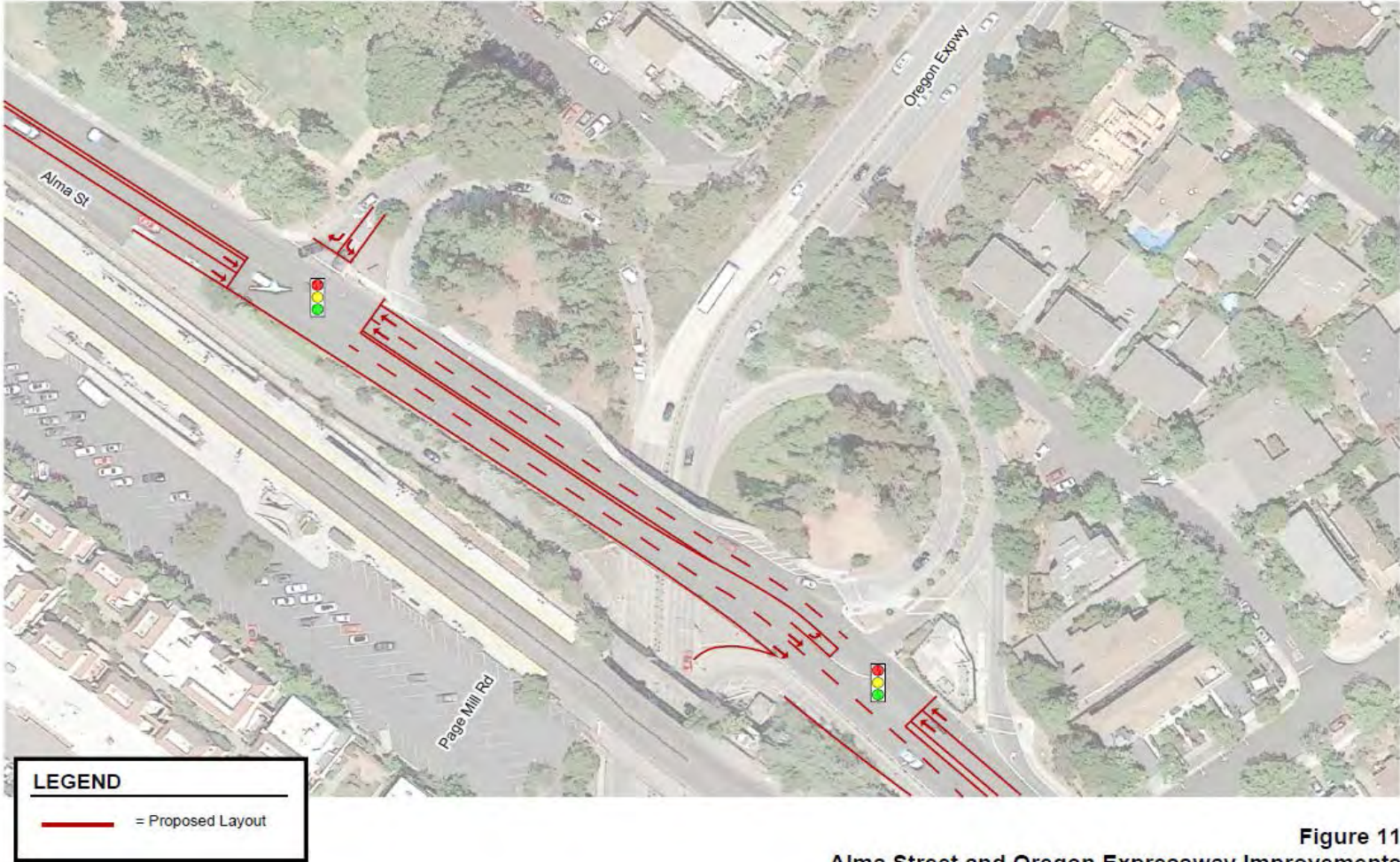
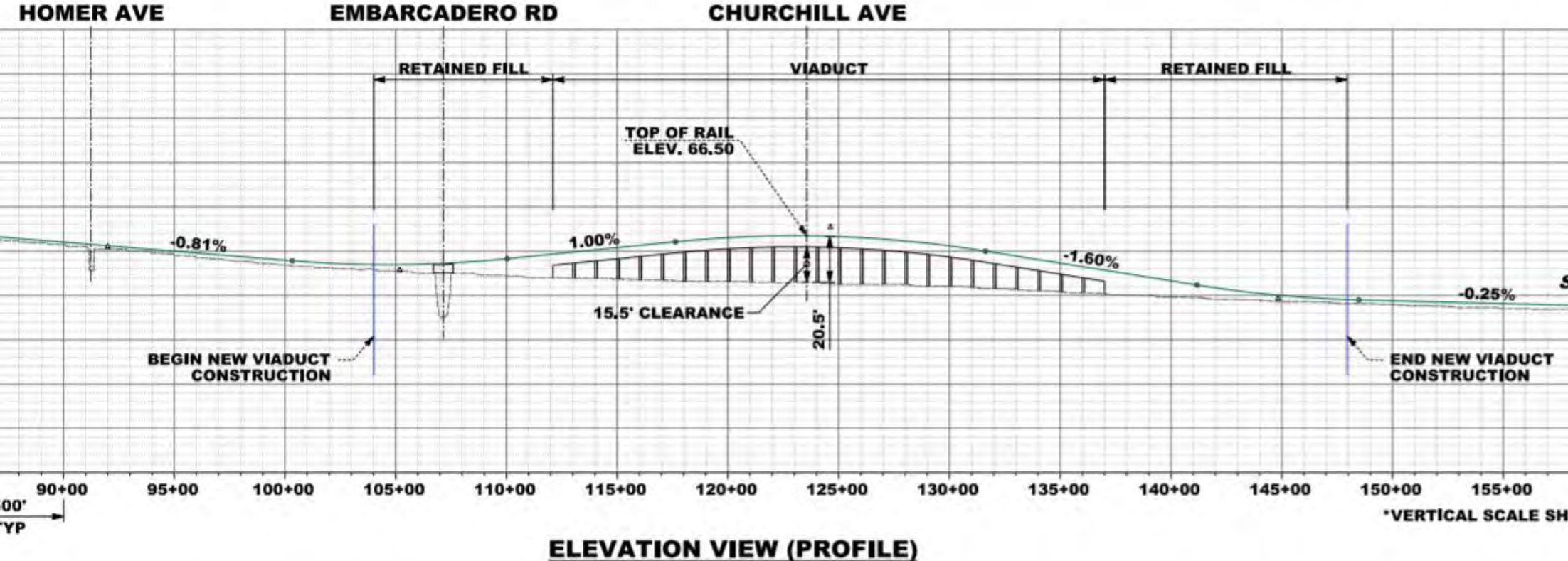
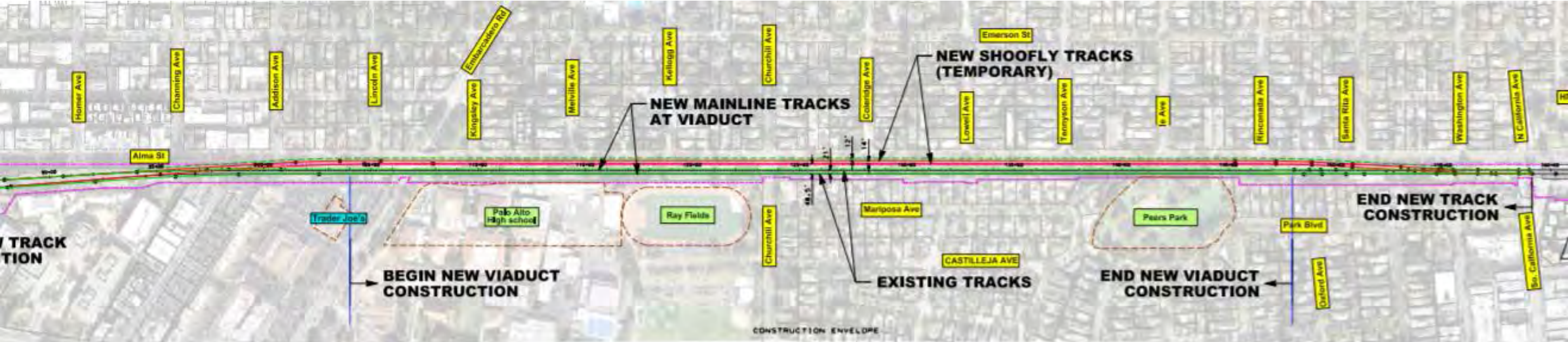


Figure 11
Alma Street and Oregon Expressway Improvements

Churchill Ave – Viaduct

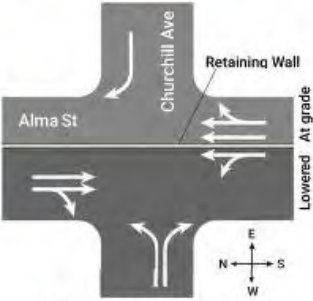
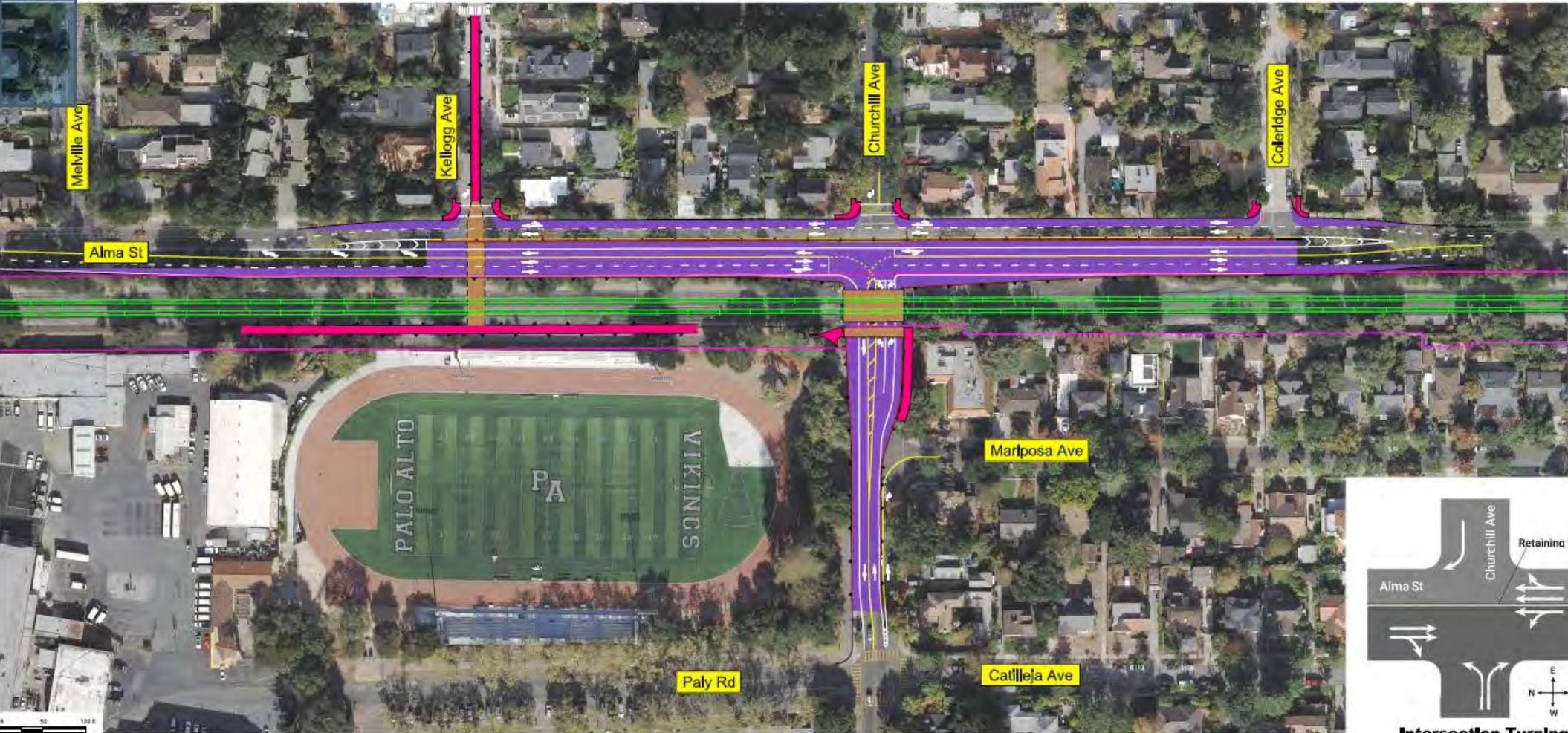


Churchill Ave – Viaduct



AERIAL VIEW (PLAN)

Churchill Ave – Partial Underpass



Churchill Ave – Partial Underpass



Churchill Ave – Partial Underpass

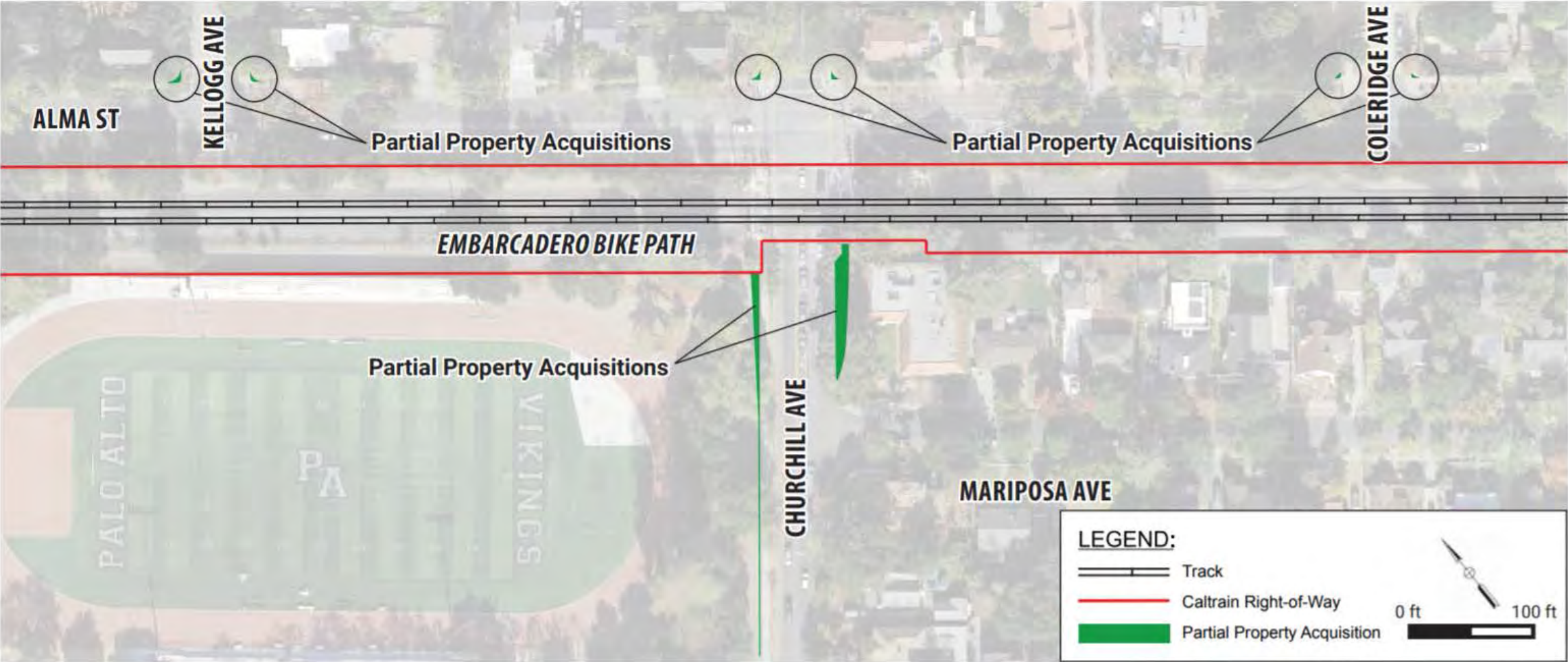


Churchill Ave – Partial Underpass



Churchill Ave – Partial Underpass

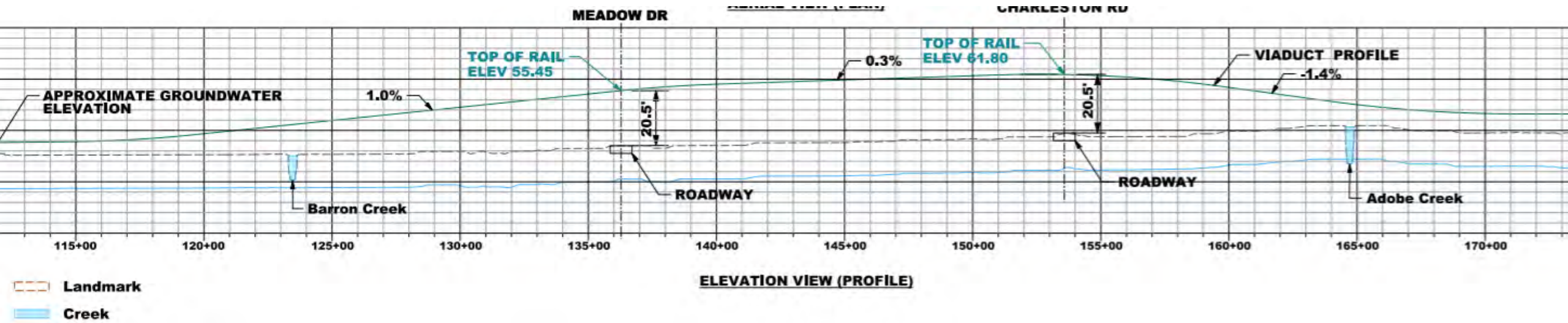
Conceptual Private property Impacts



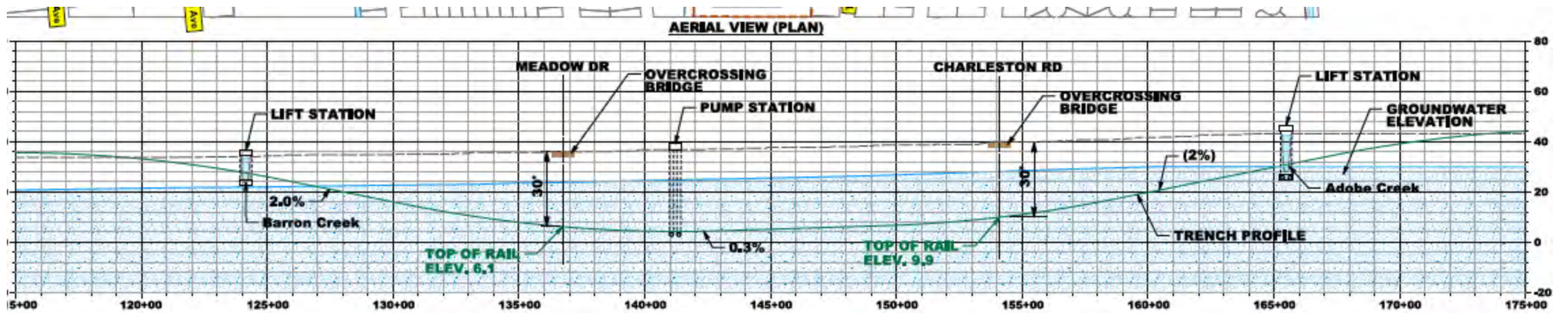
Meadow Charleston – Alternatives

- **Viaduct**
- **Trench**
- **Hybrid**
- **Underpass**
- **Tunnel (Passenger Train and Freight)**
- **Tunnel (Passenger Train and Freight on Grade)**

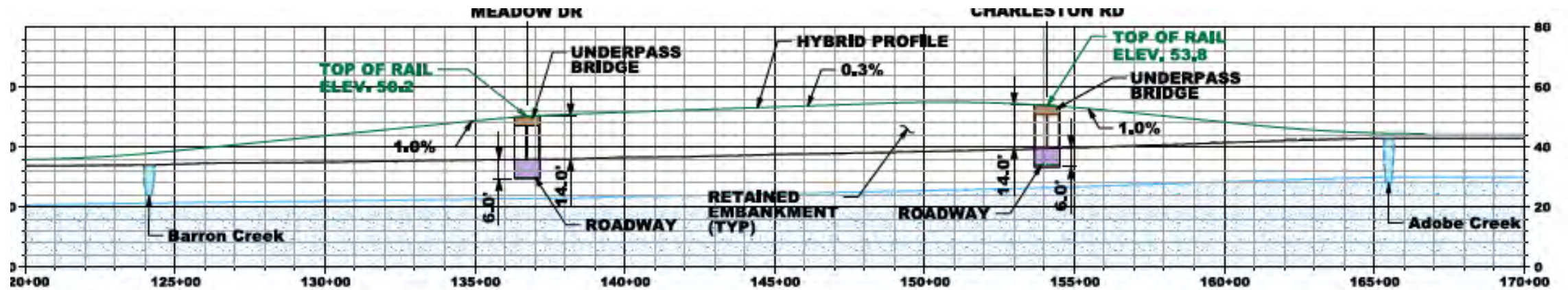
Meadow – Charleston - Viaduct



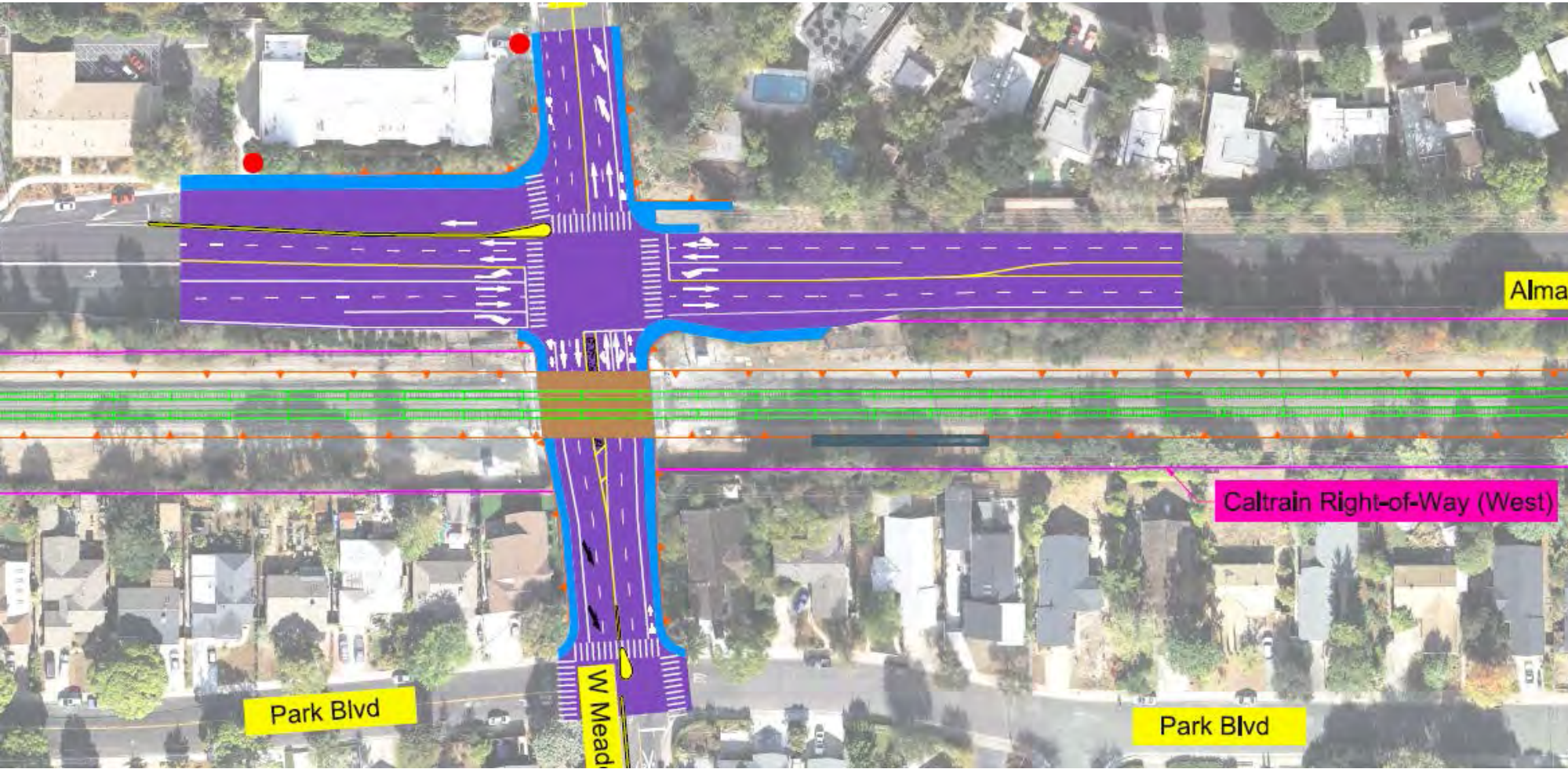
Meadow-Charleston – Trench



Meadow - Charleston – Hybrid Profile



Meadow Drive – Hybrid Layout



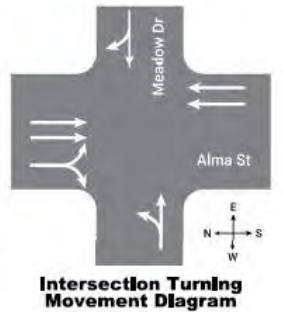
Charleston Drive – Hybrid Layout



Meadow Drive – Underpass

Restricted Movements

- EBR
- WBL
- NBL (At Alma Village)
- NBR
- Ped/Bike Crossings at 2nd Street on west side and Emerson Street on east side



Meadow Drive – Underpass

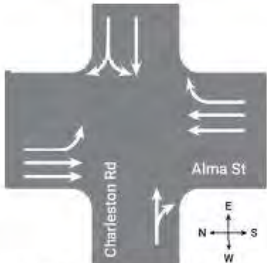


Note: This rendering does not include the following features that are shown on the layout:
Pedestrian/bike bridge on West Meadow Drive just west of railroad
Pedestrian/bike bridge on East Meadow Drive just east of Alma Street
Meadow Drive alignment shifted approximately 20 feet north
Lowering of Park Boulevard and West Meadow Drive intersection and associated retaining walls
Removal of buildings north of Meadow Drive due to property acquisitions
Pedestrian/bike/stair/ramp connection from Park Boulevard to the path on the south side of Meadow Drive
U-turn at Alma Village Circle and Alma Street intersection North of Meadow Drive

Charleston – Underpass

Restricted Movement

- EBL
- NBL
- SBR



Intersection Turning Movement Diagram

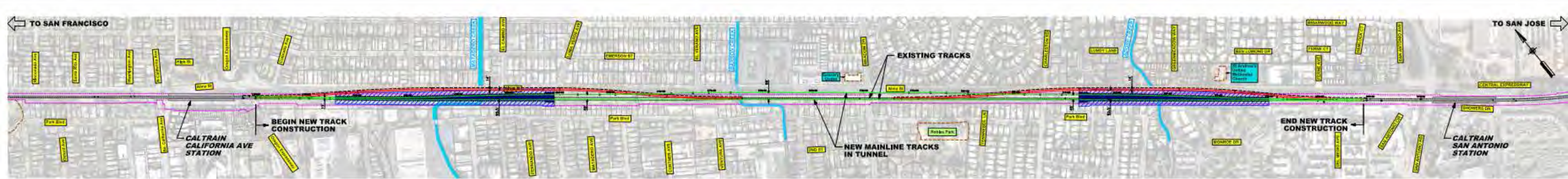
Charleston – Underpass



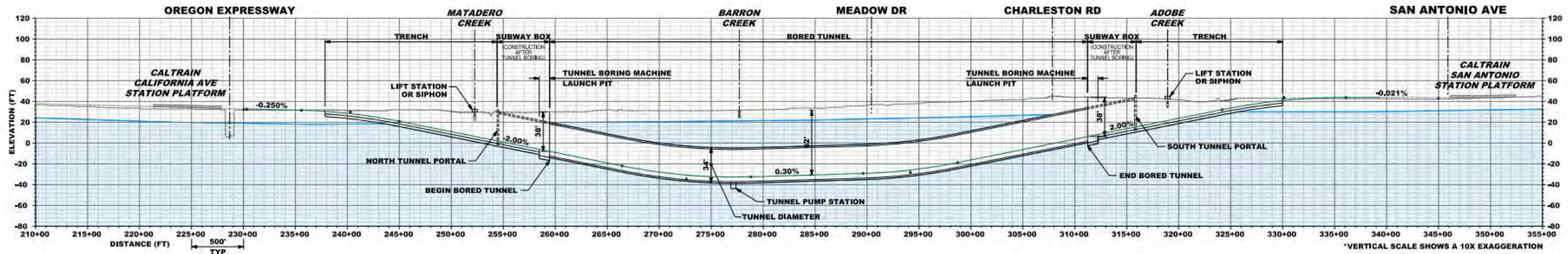
Charleston – Underpass



Meadow - Charleston – Tunnel (Passenger Train and Freight)



AERIAL VIEW (PLAN)

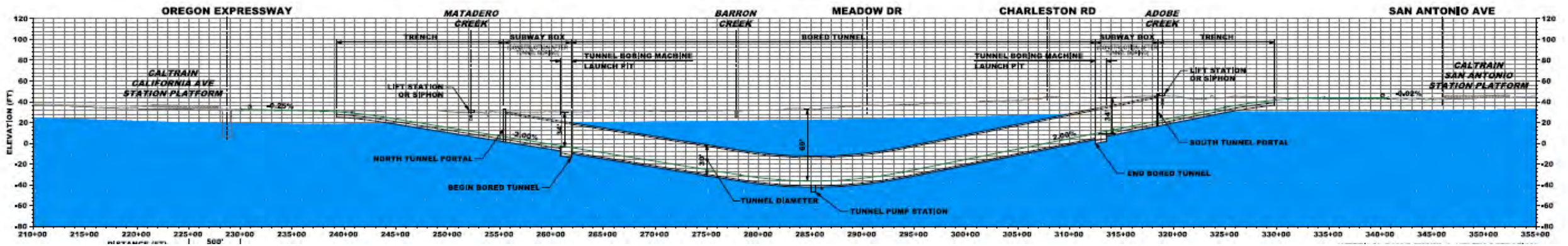


Meadow - Charleston – Tunnel

(Passenger Train only, Freight at Grade)



AERIAL VIEW (PLAN)





Next Steps

XCAP

- Deliberations – Beginning August 26, 2020
- City Council Update – September 2020
- Final XCAP Report – October 2020

Office of Transportation

- Town Hall Meeting - Beginning in Mid-August
- City Council Staff update in September/October 2020
- Final Project Study Report – December 2020

Virtual Townhall

CITY OF PALO ALTO
CONNECTING PALO ALTO - VIRTUAL TOWN HALL

CLICK TO PLAY CHURCHILL VIADUCT	CLICK TO PLAY CHURCHILL PARTIAL UNDERPASS
CLICK TO PLAY MEADOW - CHARLESTON TRENCH	CLICK TO PLAY MEADOW - CHARLESTON VIADUCT
CLICK TO PLAY MEADOW - CHARLESTON HYBRID	CLICK TO PLAY SOUTH PALO ALTO TUNNEL PASSENGER AND FREIGHT
CLICK TO PLAY SOUTH PALO ALTO TUNNEL WITH AT - GRADE FREIGHT	CLICK TO PLAY MEADOW - CHARLESTON UNDERPASS

GO TO CHURCHILL AVE. GO TO MEADOW CHARLESTON

PROJECT WEBSITE PROJECT NEWS LOCATION TOWNHALL FEEDBACK AND COMMENTS FAQ CONTACT US

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