



U.S. 101 Interchange Improvements at Three Locations

Transportation Authority of Marin

Administration, Projects and Planning
Executive Committee

October 13, 2025

History

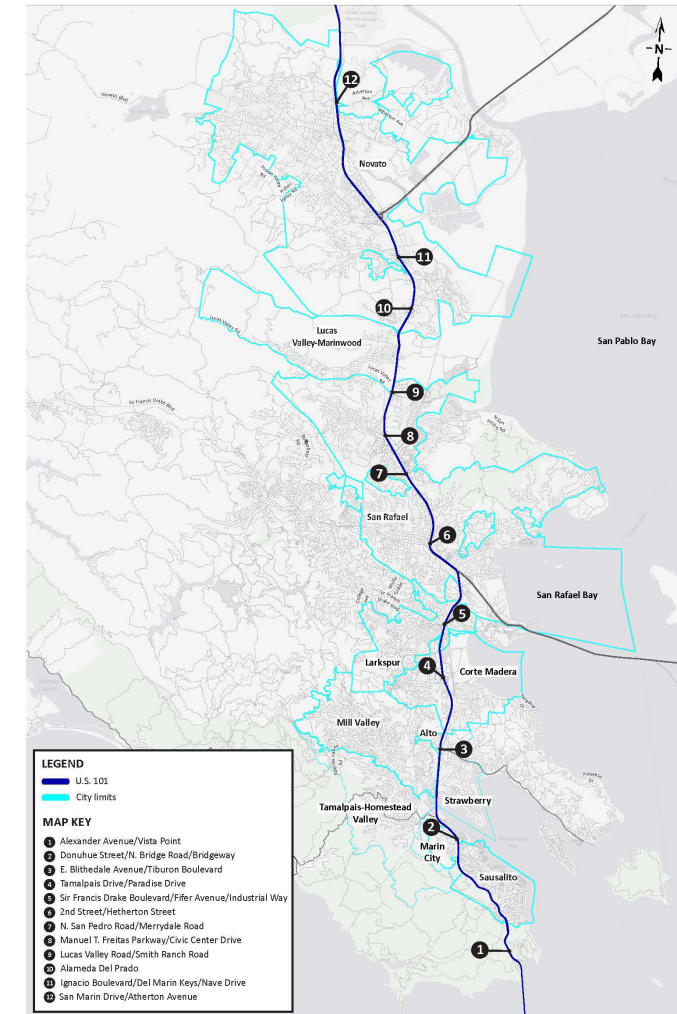
During the Expenditure Plan development process for the sales tax renewal, 11 interchanges were identified for potential improvements to allow smoother travel for all users and to improve access to Highway 101 and local roads, as follows:

- Alexander Avenue
- Bridgeway/Gate 6
- Tiburon Boulevard/East Blithedale
- Paradise Drive/Tamalpais Drive
- Sir Francis Drake Boulevard
- San Rafael on-ramps at 2nd Street and Heatherton Avenue
- Merrydale Road/North San Pedro Road
- Manuel T. Freitas Parkway
- Lucas Valley/Smith Ranch Road
- Ignacio Boulevard
- San Marin Drive/Atherton Avenue

During early outreach it was decided to add a twelfth project at Alameda del Prado/Nave Drive

History (Cont.)

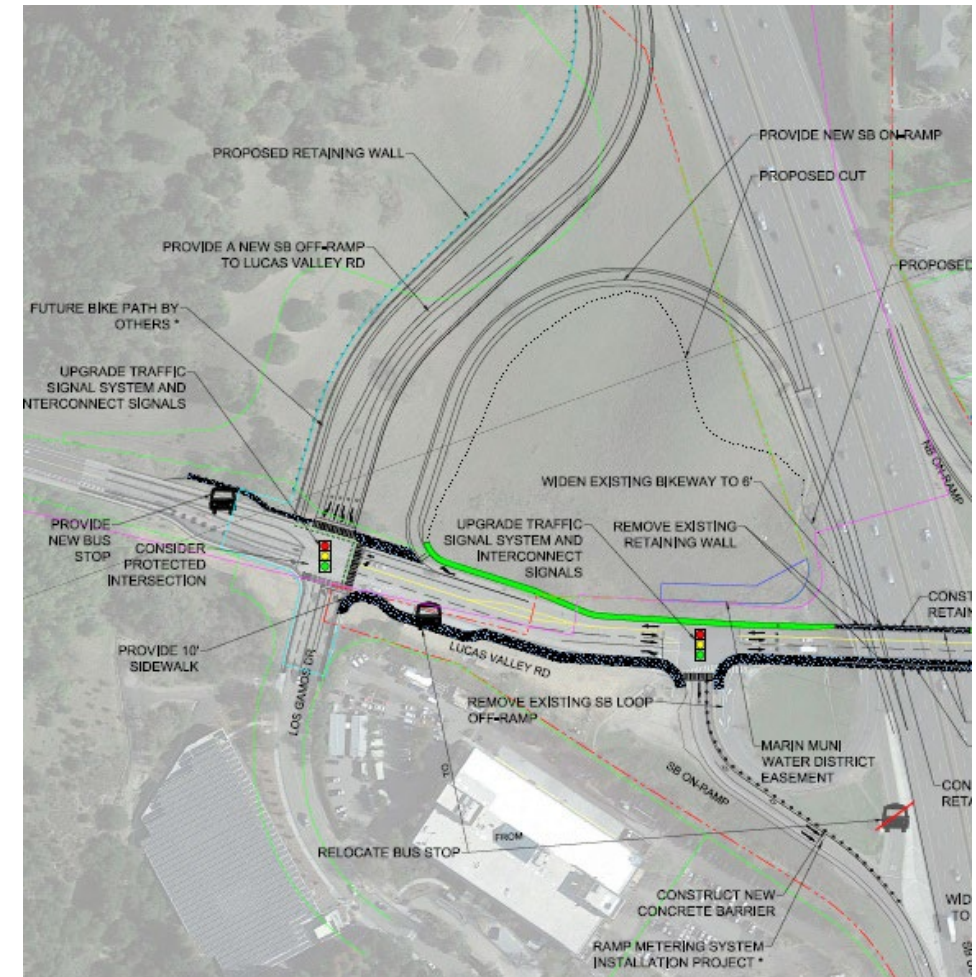
- HNTB was selected to prepare a Caltrans Project Study Report for 3 of the interchanges
- First order of work was to prepare general alternatives for the twelve interchanges and work with local jurisdictions to develop:
 - Existing Conditions Assessments
 - Online Surveys
 - Opportunities & Concept Development
 - Cost Estimates
 - Public Outreach
 - Existing Conditions, Constraints & Opportunities Memos
 - Evaluation & Prioritization
 - Prioritization Recommendations & Draft Implementation Plans



Interchange Concepts Developed to Address Issues

“Long-term” concepts:

- Concept plans are representative of potential long-term measures
- Focus on addressing all identified multimodal needs
- Meet design standards
- Can involve significant infrastructure investment

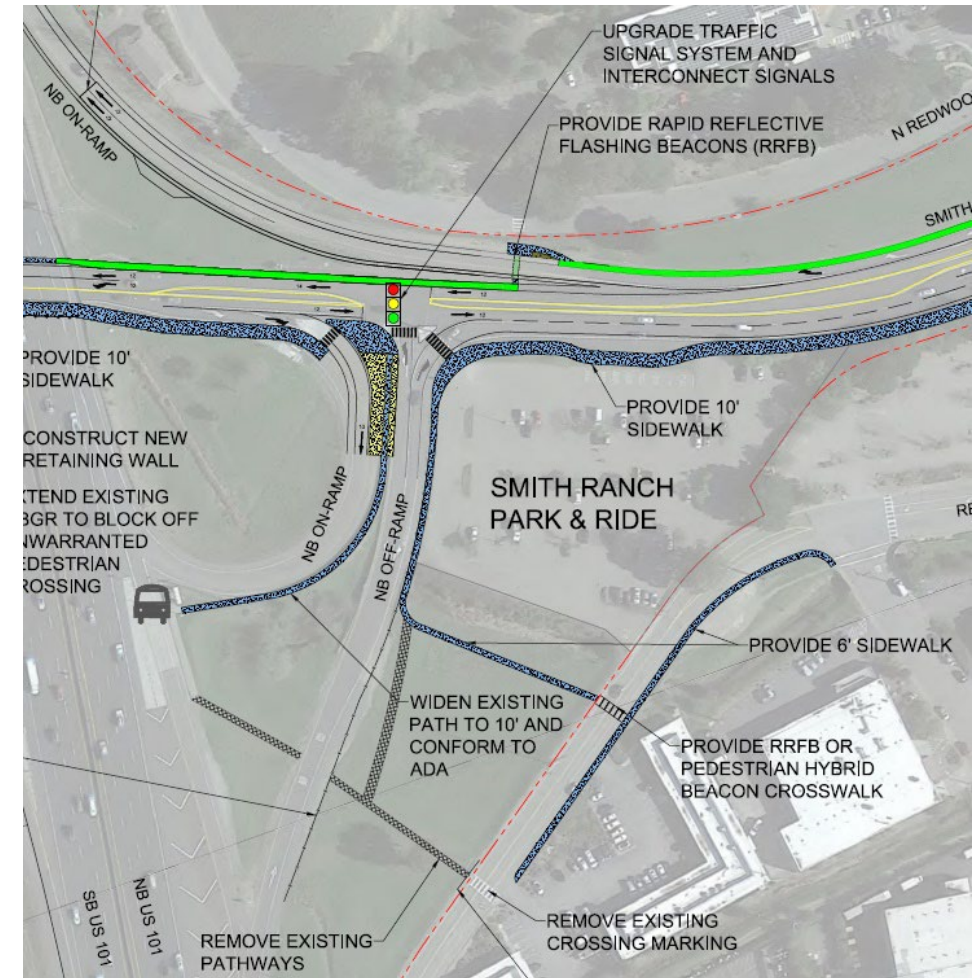


Sample long-term concept: Lucas Valley/Smith Ranch interchange

Interchange Concepts Developed to Address Issues

“Near-term” concepts:

- Concept plans are representative of potential near-term measures
- Focus on addressing pedestrian, bicycle and some transit needs, although some needs would require “long-term” remedies
- May not correct all existing nonstandard conditions
- Designed to transition/phase into long-term plans



Sample near-term concept: Lucas Valley/Smith Ranch interchange

Concepts Evaluation Based on Weighted Goals

All interchange concepts were evaluated against goals weighted by the Executive Committee:

- Enhance health & safety
- Relieve local traffic congestion
- Improve multimodal access to/from & across Highway 101
- Promote economic vitality
- Implementability

Most goals included addressing GHG & VMT reduction and equity measures

Goal	Base Case
Enhance health & safety	23%
Relieve local traffic congestion	22%
Improve multimodal access	20%
Promote economic vitality	15%
Implementability	20%
Total	100%

July 2022 TAM Board Decision

Board chose to **pursue long-term improvements** at:

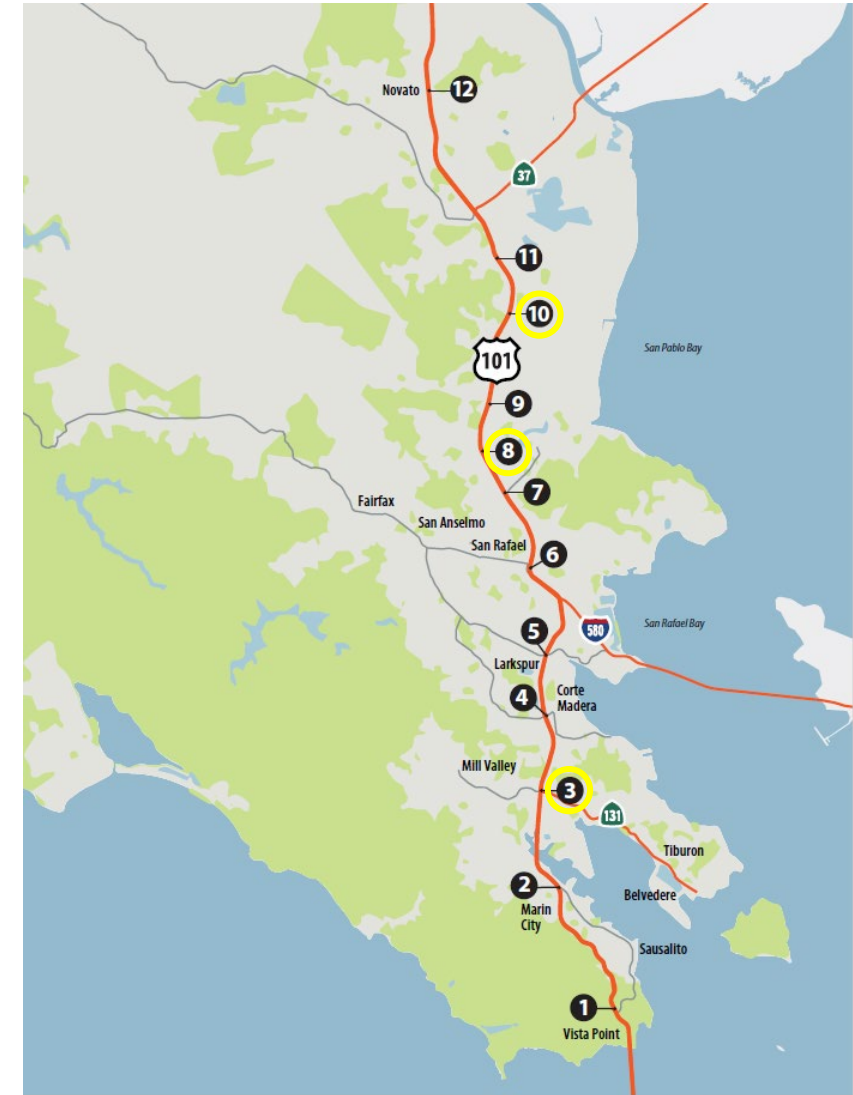
- Tiburon Boulevard/East Blithedale
- Manuel T. Freitas Parkway/Civic Center Drive

and, **near-term improvements** at:

- Alameda del Prado/Nave Drive

Single Project Initiation Document (PID) was prepared **for all three** of the above Projects

- Caltrans approval is expected by early 2026



Summary of Alternatives

Alameda del Prado/Nave Drive (near-term improvements)

- Alternative 1A – Signalized Intersections
- Alternative 1B – Roundabouts

SR 131 (Tiburon Boulevard)/East Blithedale Avenue

- Alternative 2A – Widen Bridge + MUP
- Alternative 2B – MUP Undercrossing Structure
- Alternative 2C – MUP Overcrossing Structure
- Alternative 2D – Replace Bridge + MUP

Manuel T. Freitas Parkway/Civic Center Drive

- Alternative 3A – Signalized Intersections
- Alternative 3B – Signalized Intersections + MUP Overcrossing
- Alternative 3C – Signalized Intersection + MUP Undercrossing
- Alternative 3D – Roundabouts
- Alternative 3E – Roundabouts + MUP Overcrossing
- Alternative 3F – Roundabouts + MUP Undercrossing

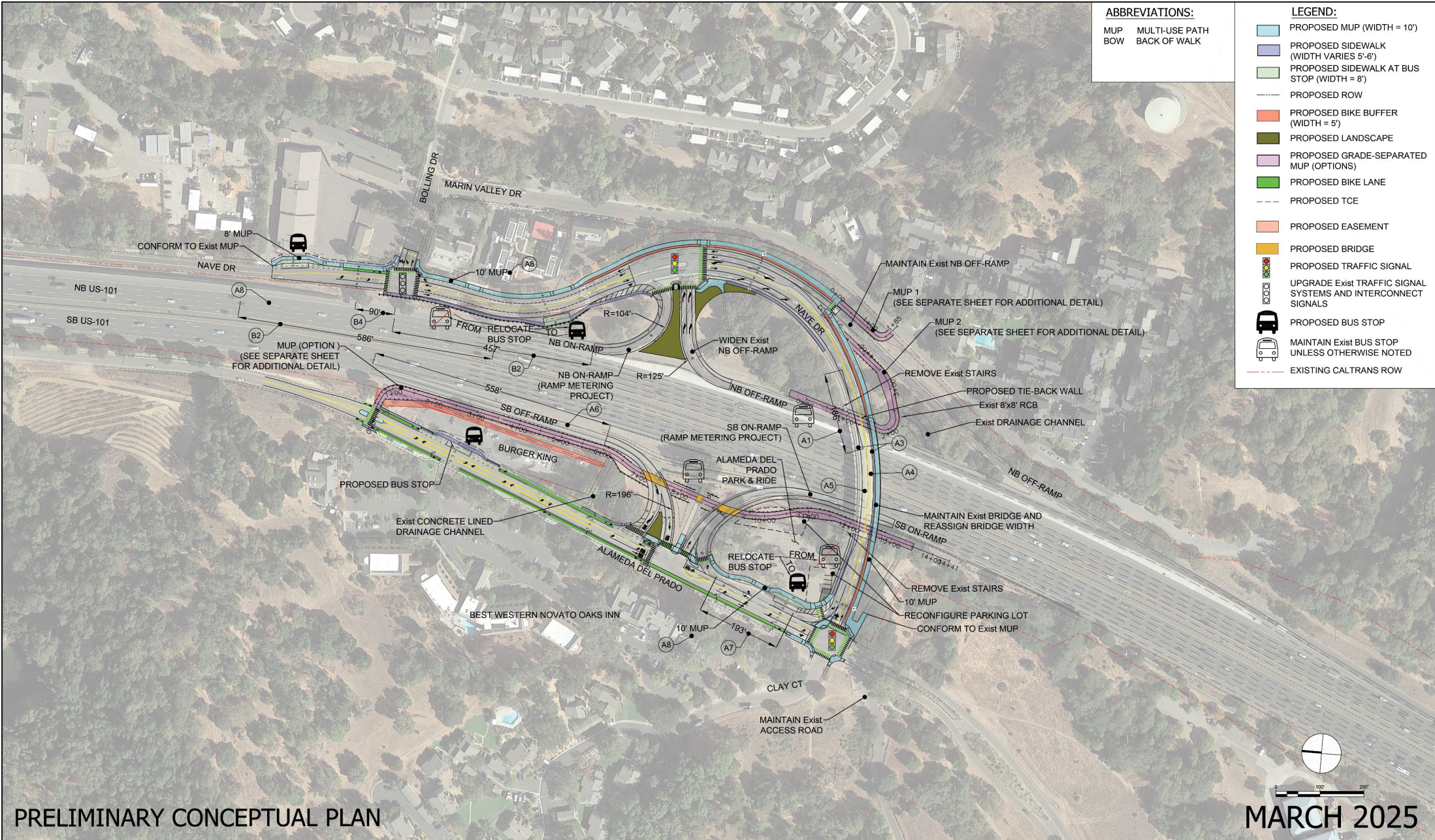
Alameda del Prado/Nave Drive

Two Build Alternatives

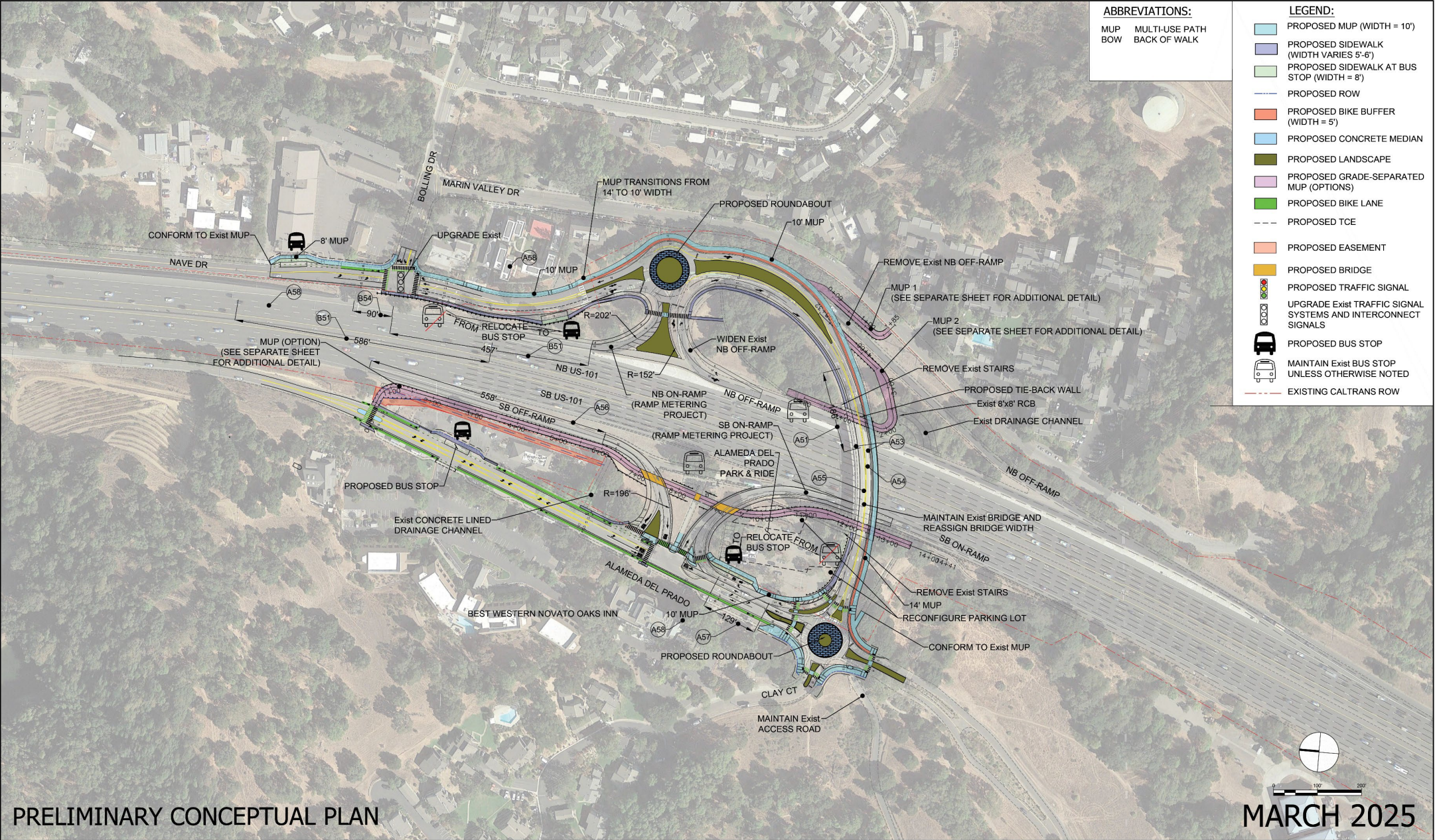


Alameda Del Prado / Nave Drive

Alternative 1A: Signalized Intersections



Alameda Del Prado / Nave Drive Alternative 1B: Roundabouts



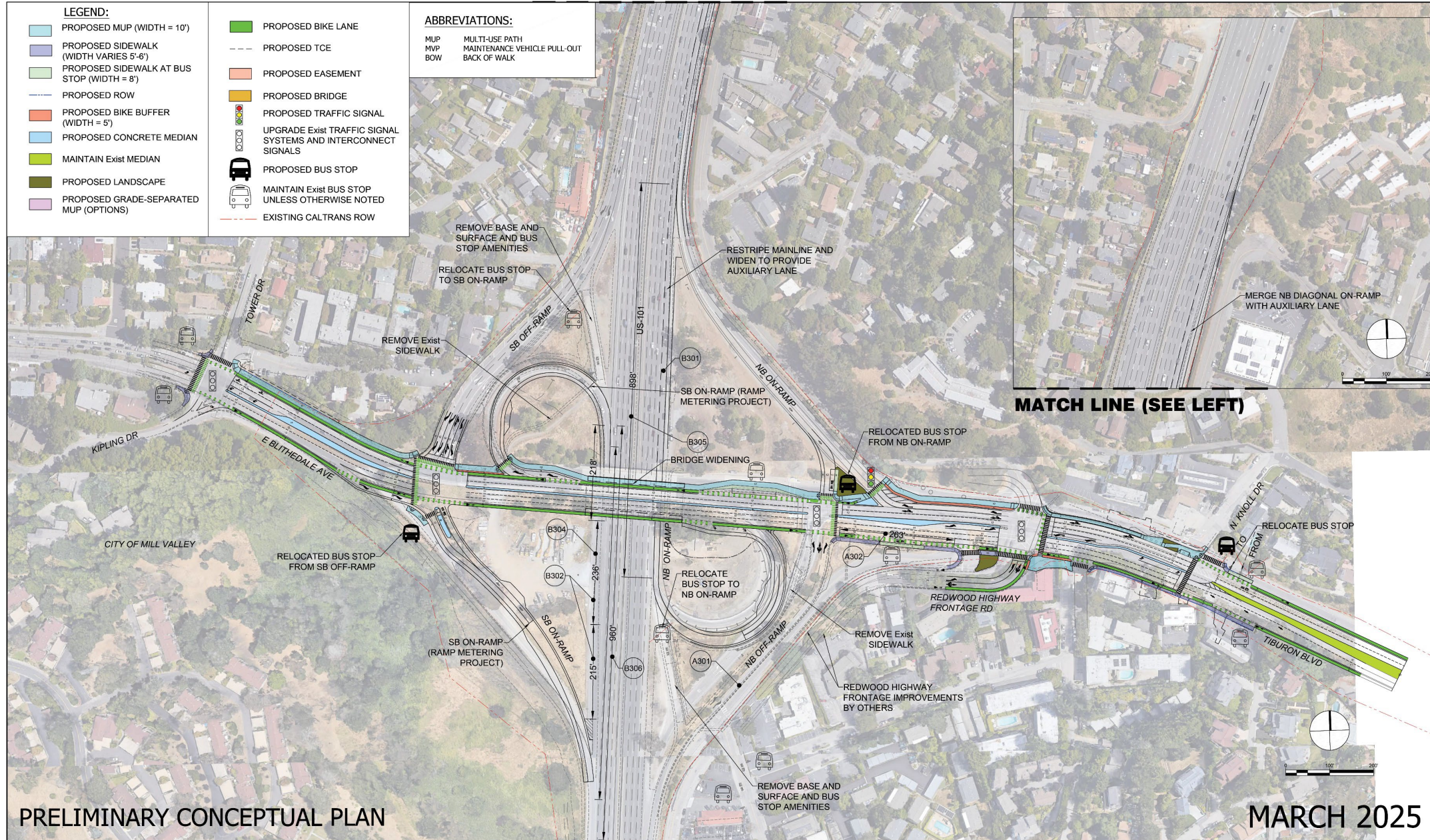
Tiburon Boulevard/East Blithedale

Four Build Alternatives

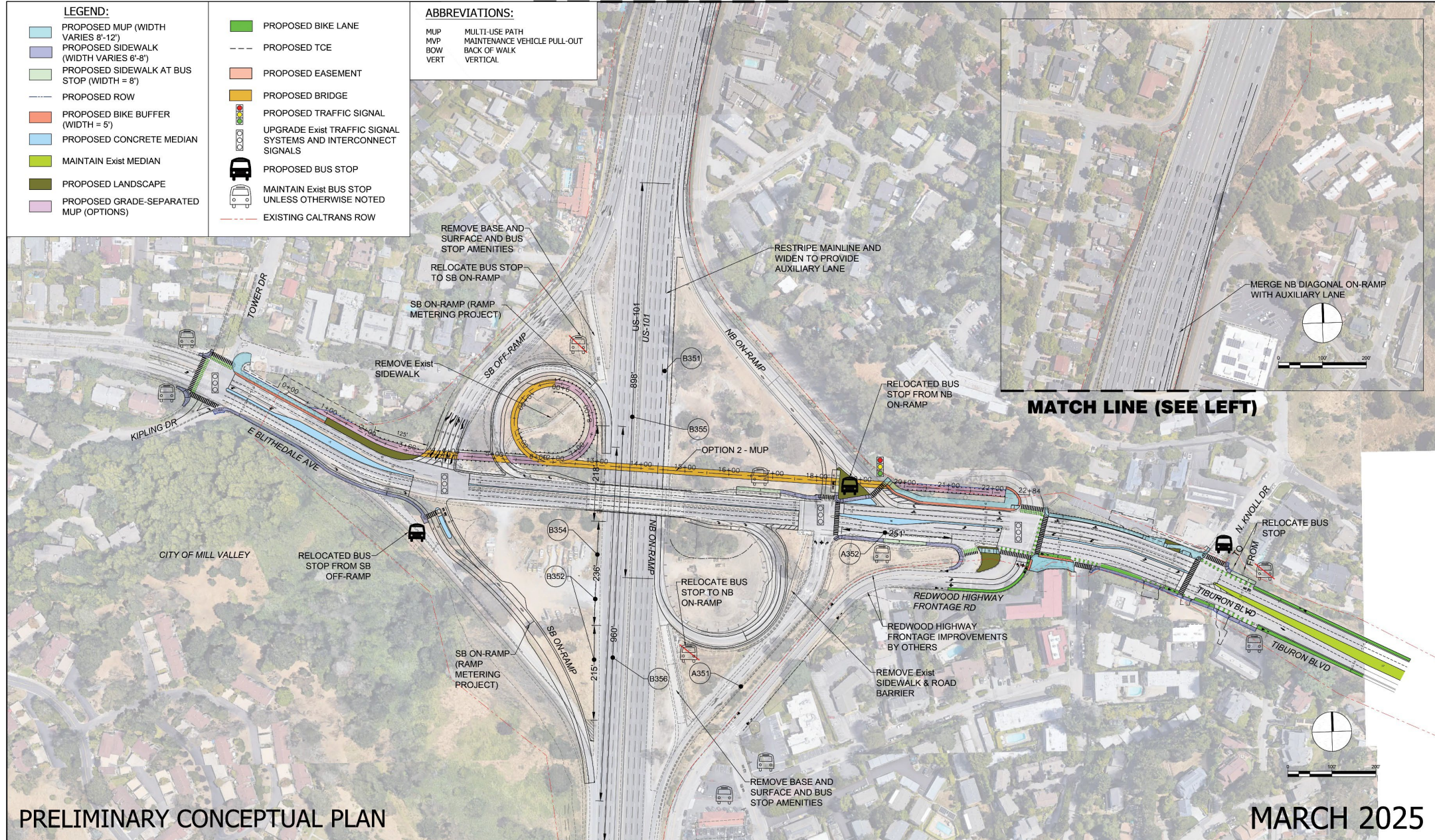


Alternative 2A: Widen Bridge + MUP

MATCH LINE (SEE RIGHT)

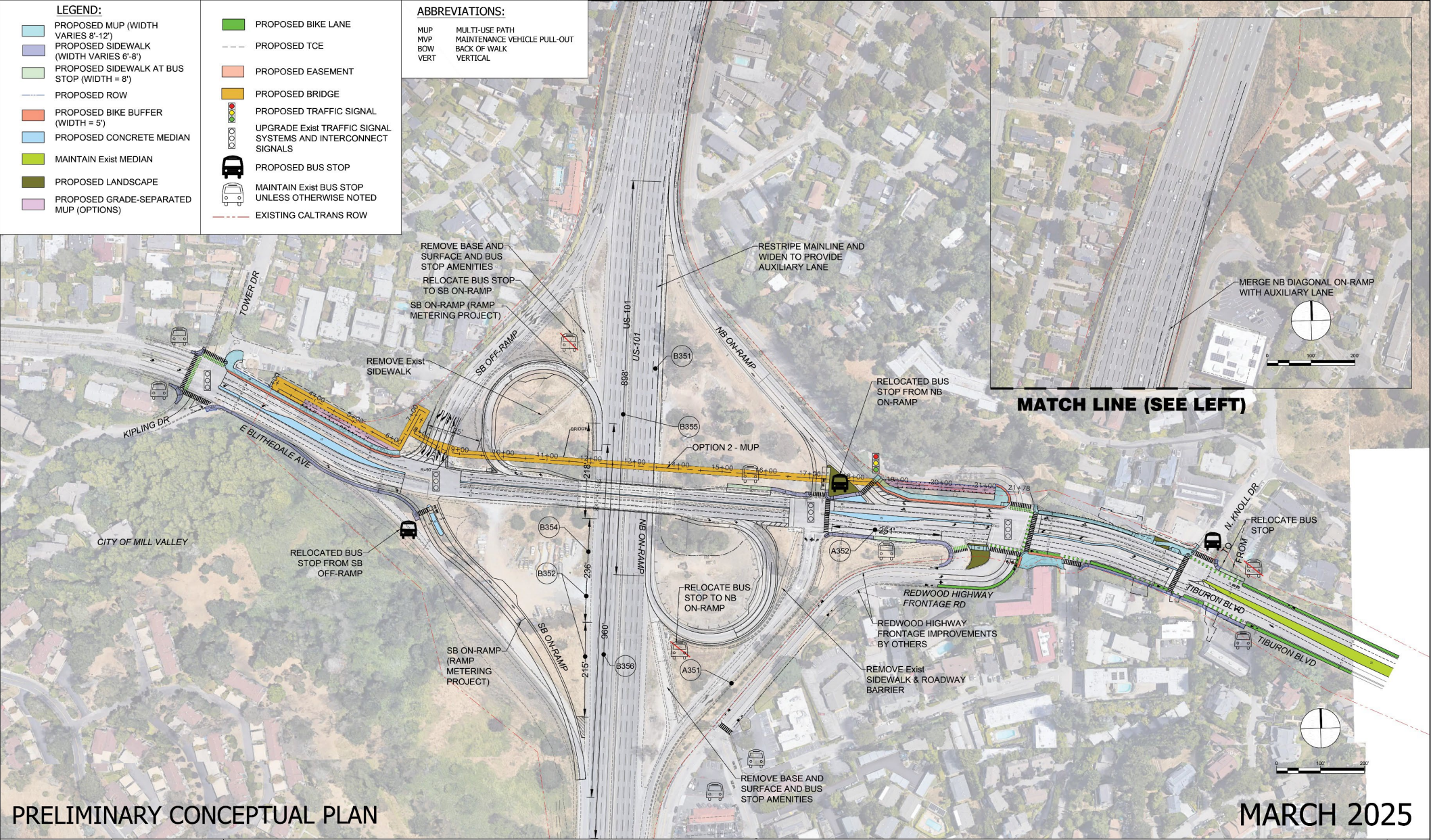


MATCH LINE (SEE RIGHT)



Alternative 2C: MUP Overcrossing Structure

MATCH LINE (SEE RIGHT)



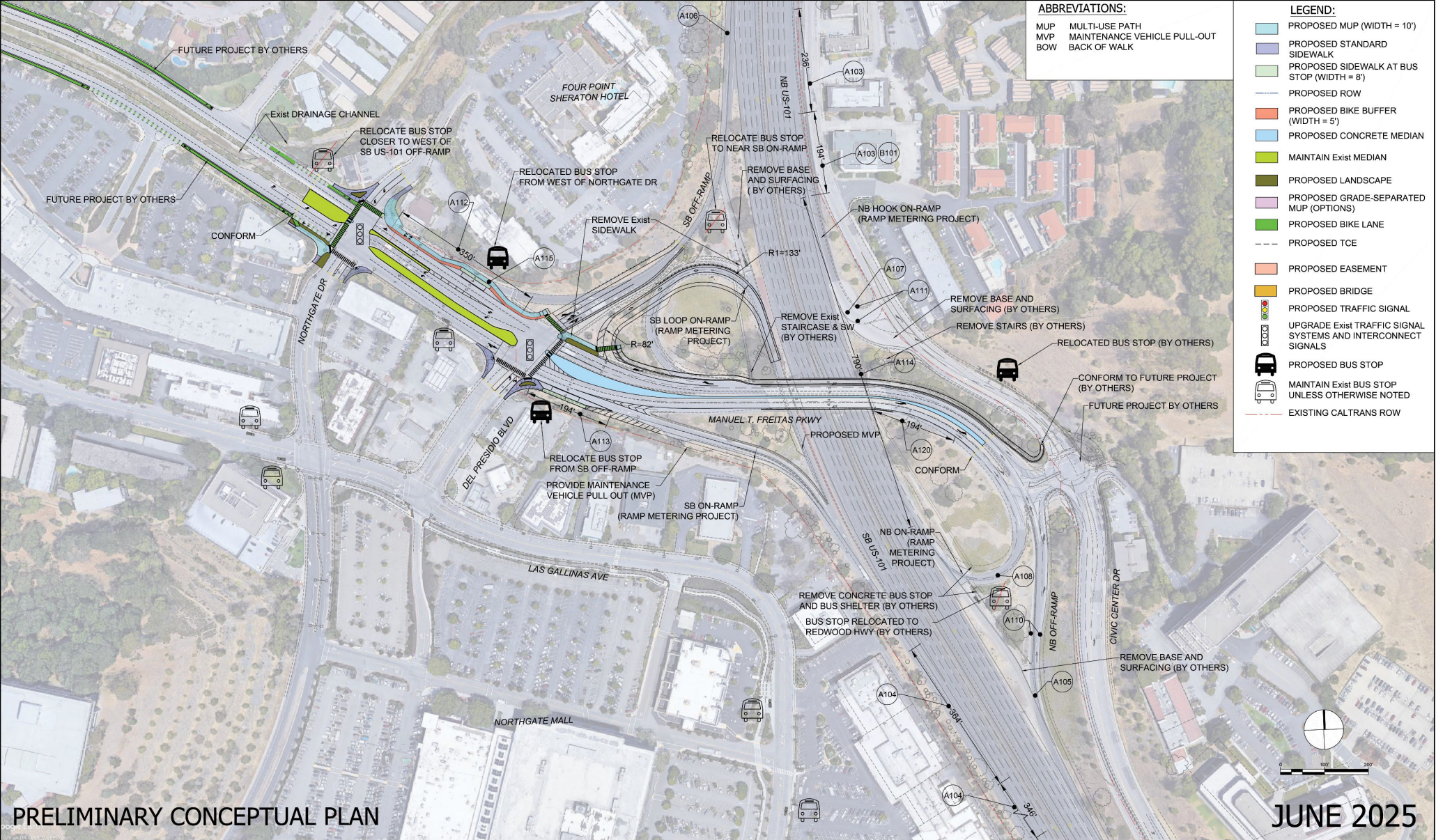
Manuel T. Freitas Parkway

Six Build Alternatives



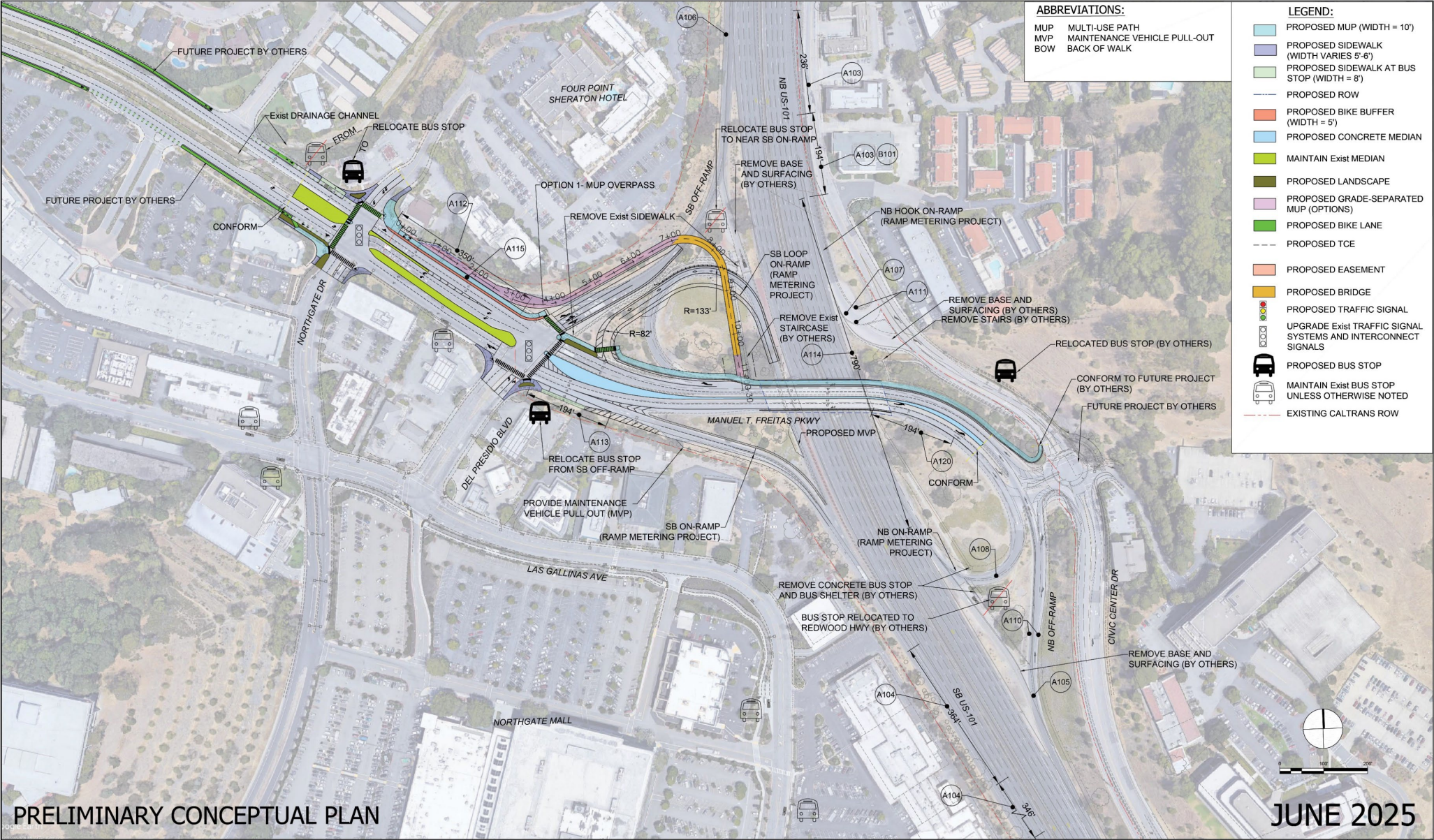
Manuel T Freitas Parkway / Civic Center Drive

Alternative 3A: Signalized Intersections



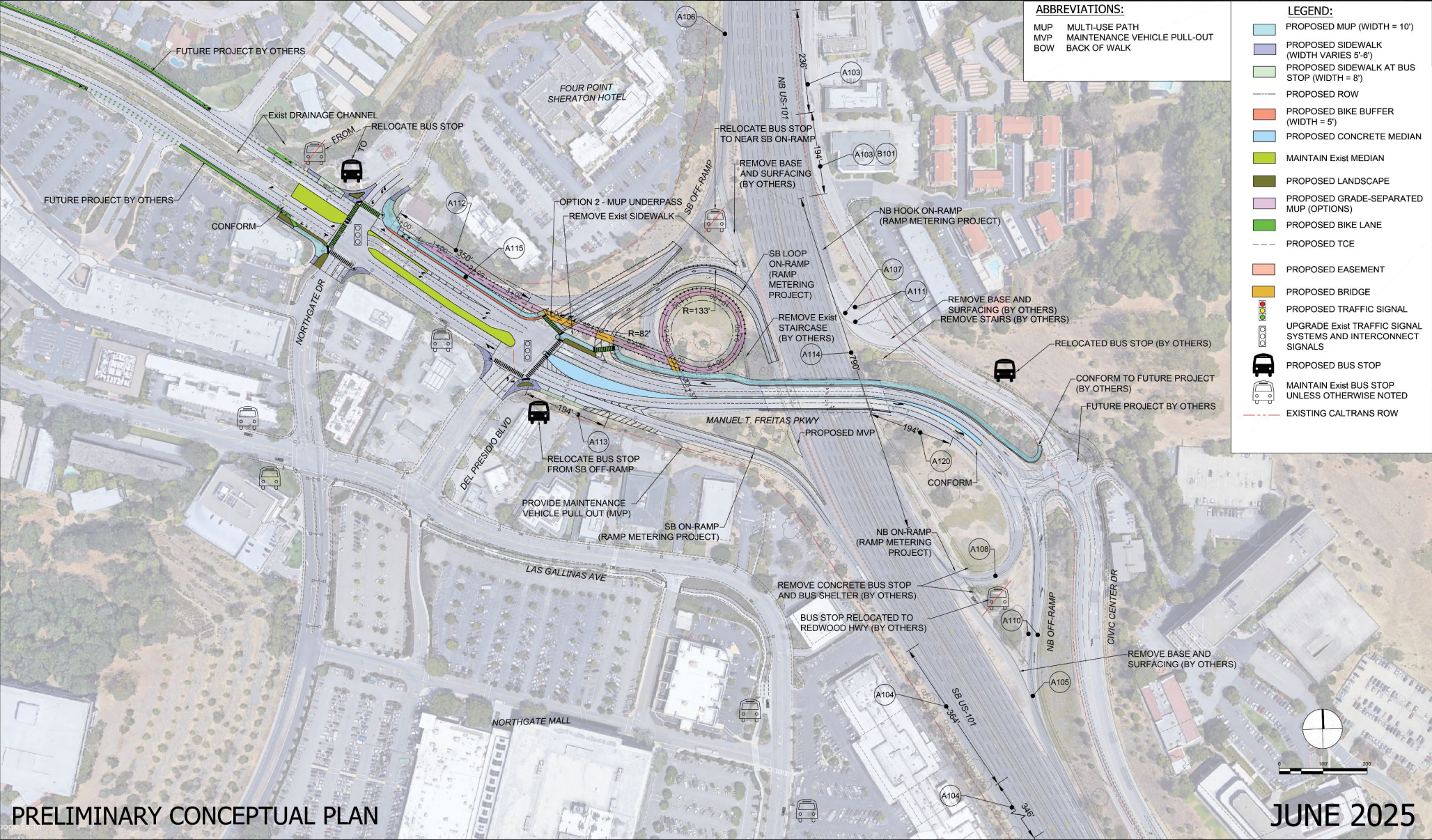
Manuel T Freitas Parkway / Civic Center Drive

Alternative 3B: Signalized Intersections + MUP Overcrossing



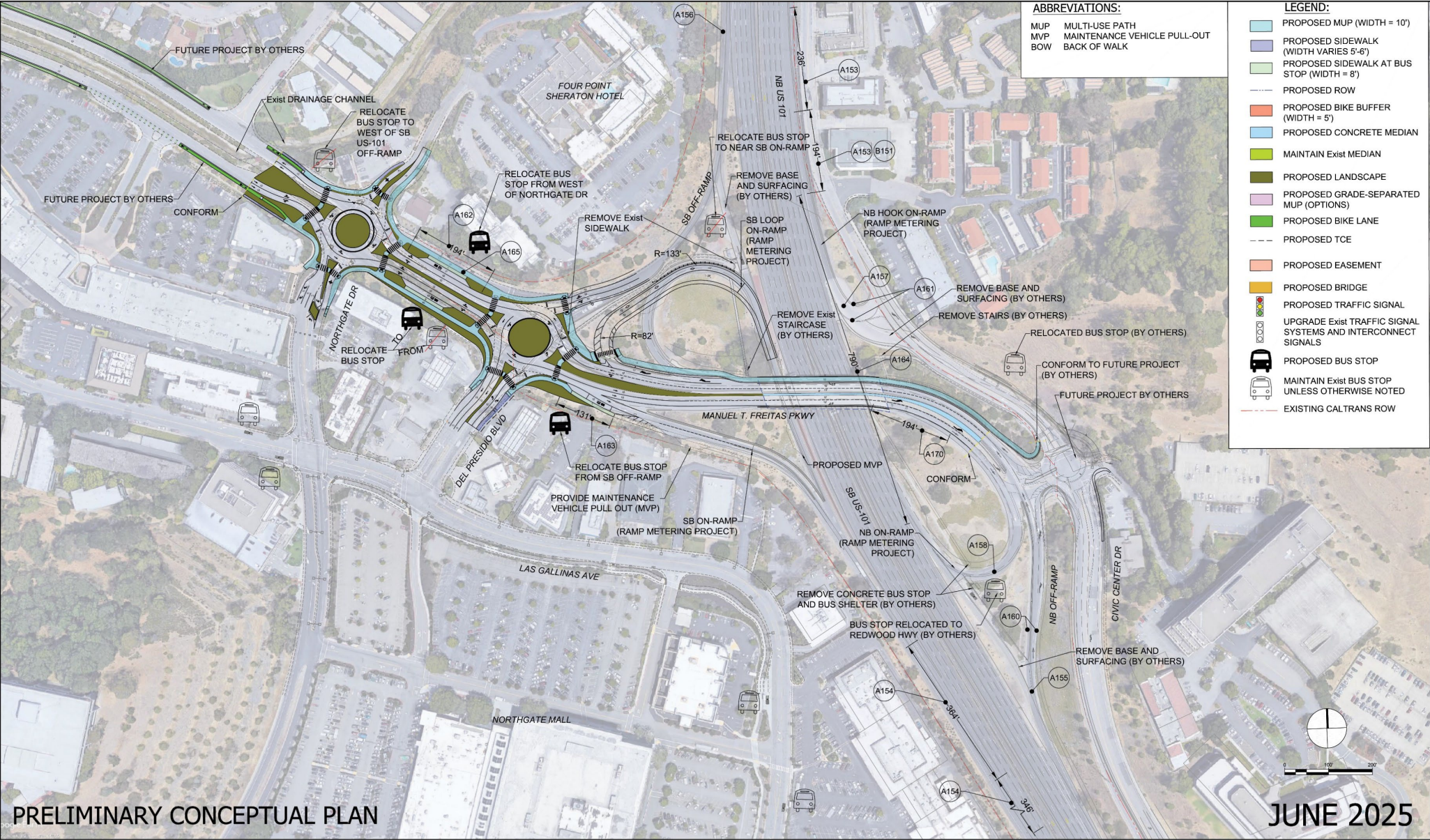
Manuel T Freitas Parkway / Civic Center Drive

Alternative 3C: Signalized Intersections + MUP Undercrossing



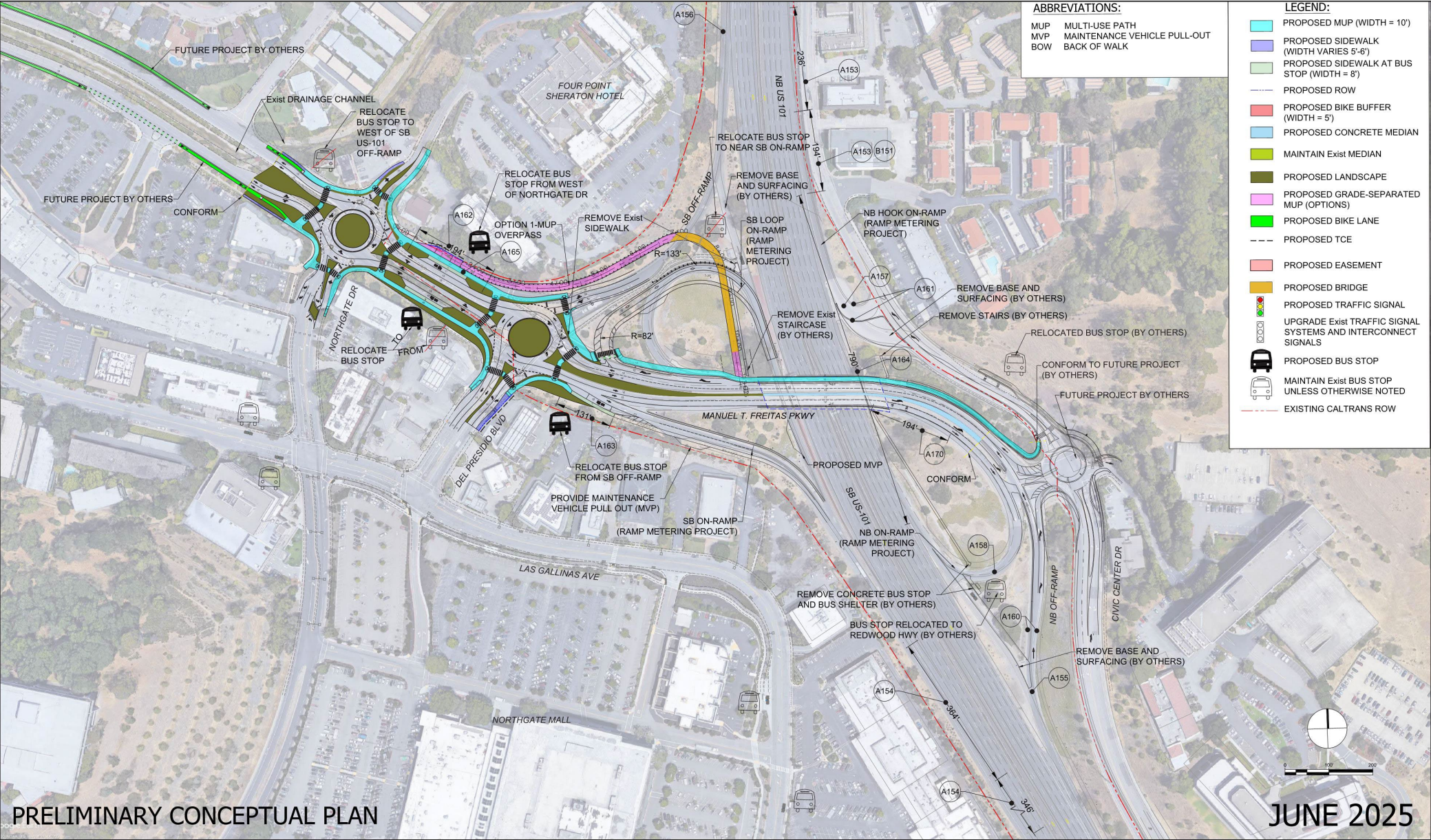
Manuel T Freitas Parkway / Civic Center Drive

Alternative 3D: Roundabouts



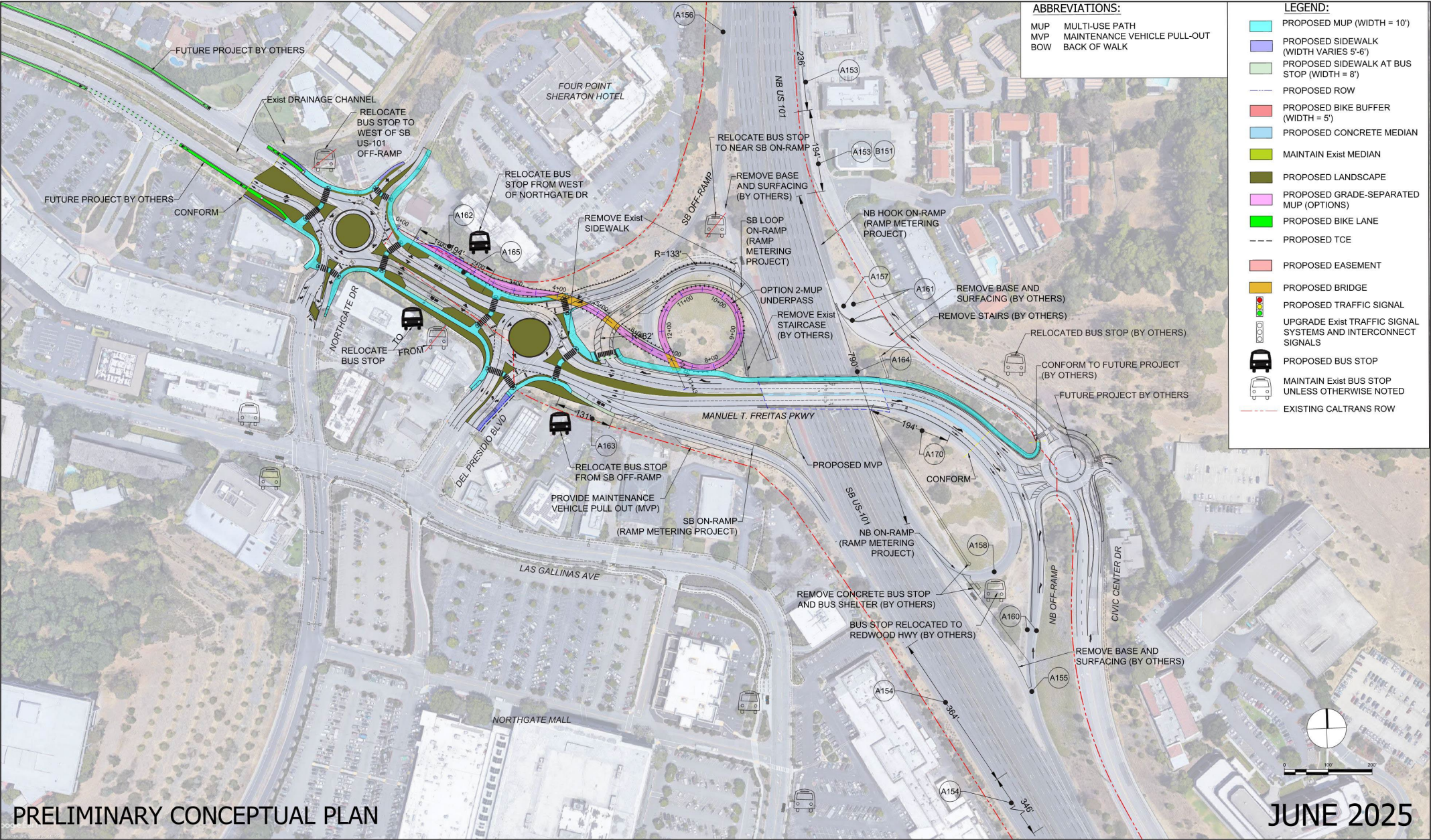
Manuel T Freitas Parkway / Civic Center Drive

Alternative 3E: Roundabouts + MUP Overcrossing



Manuel T Freitas Parkway / Civic Center Drive

Alternative 3F: Roundabouts + MUP Undercrossing



Summary of Alternatives

<u>Alternative</u>	<u>Construction Costs</u>	<u>Right of Way</u>	<u>Total Project Capital Outlay</u>
Alameda Del Prado/Nave Drive			
Alternative 1A: Signalized Intersections	\$48.2M	\$1.1M	\$49.3M
Alternative 1B: Roundabouts	\$52.5M	\$1.7M	\$54.2M
SR 131 Tiburon Blvd/E. Blithedale Ave			
Alternative 2A: Widen Bridge + MUP	\$51.3M	\$1.2M	\$52.5M
Alternative 2B: MUP Undercrossing Structure	\$66.7M	\$1.5M	\$68.2M
Alternative 2C: MUP Overcrossing Structure	\$69.0M	\$2.7M	\$71.7M
Alternative 2D: Replace Bridge + MUP	\$89.9M	\$1.2M	\$91.1M
Manuel T. Freitas Pkwy/Civic Center Dr			
Alternative 3A: Signalized Intersections	\$23.4M	\$0.3M	\$23.7M
Alternative 3B: Signalized Intersections + MUP Overcrossing	\$34.3M	\$0.5M	\$34.8M
Alternative 3C: Signalized Intersections + MUP Undercrossing	\$43.0M	\$0.4M	\$43.4M
Alternative 3D: Roundabouts	\$34.2M	\$0.5M	\$34.7M
Alternative 3E: Roundabouts + MUP Overcrossing	\$44.9M	\$0.6M	\$45.5M
Alternative 3F: Roundabouts + MUP Undercrossing	\$46.5M	\$0.6M	\$47.1M

Project Development Costs

- Typically, consultant costs for PAED phase are approx. \$1.5 million per alternative when NEPA actions are required. Economies of scale can adjust these estimates slightly
- TAM staff costs will be approximately \$0.5 million per project
- Therefore, PAED estimates are:
 - Alameda del Prado/Nave Drive \$4.0 million
 - Tiburon Boulevard/East Blithedale \$6.5 million
 - Manuel T. Freitas/Civic Center Drive \$8.5 million
- An additional \$6 to \$8 million will be necessary for the design phase for each preferred alternative

Revenues and Measure AA Expenditure Plan Review

In September, Staff presented a draft proposal to the Board to reduce the Interchange Program from 3% to 2.5% to fund Crossing Guard Program

- Interchanges = 3% of Measure AA
- \$4.1 M expended to date, ~\$23.9 M remaining expected over life of Measure AA
- Reducing the share by 0.5% would remove ~\$4 M over the remaining years of the Expenditure Plan, may have future impacts
- Construction phase of any of the Interchange projects remain unfunded

Remaining	\$23.9 M
Remaining if 0.5 percent redirected	\$19.9M

Technical Advisory Committee (TAC)

Final alternatives reviewed and recommended by specially formed TAC that also made recommendations to reduce the original 12 interchanges to three.

TAC members included representatives from:

- Marin County
- Mill Valley, Tiburon, San Rafael, Novato, and Belvedere
- Caltrans
- Marin Transit and GGBHTD
- TAM

Project Scoring

Each of the three projects were evaluated utilizing the following metrics:

- Relieve Local Traffic Congestion
- Improve Multi-Modal Access
- Promote Economic Vitality
- Identified Users Benefits
- Safety
- Schedule
- Right of Way Needs
- Magnitude of Required Permits and Mitigation
- Other Recent Investments

Implementation Plan

- Scoring was performed using various weighing factors
 - In all cases, Alameda del Prado/Nave Drive was scored third
 - The other two projects came in either first or second depending on the emphasis placed on some of the metrics
- Scoring reviewed by TAC
- TAC was also requested to weigh in on the approach going forward. Comments were roughly evenly divided between the following approaches:
 - Advance all three projects through the PAED phase
 - Advance one project through both the PAED and Design phases
 - Advance one project through PAED and advance another one through PAED and Design phases
- At the time, TAC unaware of potential reduction of 0.5% of the Measure AA funds.

Estimated Schedule

- December 2025 – Implementation Plan selected
- July 2026 – Caltrans Co-Operative Agreement signed
- July 2026 – Consultants selected
- Mid 2029 – Final Environmental Document(s) approved
- Late 2031 – Design approved
- Late 2032 – Right of Way Agreements signed
- 2034 – Construction complete

Schedule assumes that construction funding can be obtained prior to 2030

Preliminary Staff Recommendation

- Advance Manuel T. Freitas Parkway/Civic Center Drive and Tiburon Boulevard/East Blithedale projects to completion of the PAED phase
- Total estimated cost is \$15 million. Costs will be greatly reduced if alternatives can be eliminated early in the environmental process before substantial funds are expended on the various studies
- Upon completion of both PAED phases, Board may have option to advance one project to design or to complete PAED on the remaining project. Funding picture will be clearer after actual PAED costs are known (the number of alternatives may have been reduced)
- Should the Board decide not to transfer funding to the crossing guard program, or if revenues are greater than expected, sufficient funds should be available for one design effort

Board Options

The following options assume the TAM Board will adopt the 0.5% reduction in Measure AA funding for these projects

1. Accept the staff recommendation and advance Manuel T. Freitas and Tiburon Blvd/E. Blithedale to the PAED phase
2. Pause and wait to see the outcome of the Measure AA Expenditure Plan Review process
3. Request additional information
4. Recommend other permutations of PAED/Design approaches for the three Projects
5. Revisit the other nine interchanges to verify that conditions have not changed and reassess, potentially to proceed with one PAED at either Manuel T. Freitas or East Blithedale at this time

Requested Actions

1. If comfortable, provide direction to staff on the various options for discussion (possible action) at the full Board
2. Recommend to the Board to authorize the Executive Director to extend the current contract with the project consultant (HNTB) by one year to December 2026 to complete the PID and to prepare documentation for the PAED consultant selection exhibits and agreements with Caltrans. Not to Exceed amount of \$4.4M will remain unchanged.

Questions?

Questions & Discussion