

THIS PRINT COVERS CALENDAR ITEM NO. : 12

**SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY**

DIVISION: Sustainable Streets

BRIEF DESCRIPTION:

Approving various bicycle improvements and traffic modifications on Alemany Boulevard between Putnam Street and Bayshore Boulevard, on Putnam Street from Crescent Avenue to Alemany Boulevard East, and on San Bruno Avenue from Alemany Boulevard East to Silver Avenue. These modifications will improve safety for bicyclists, pedestrians and motorists by installing bikeways on Alemany Boulevard, Putnam Street and southbound San Bruno Avenue.

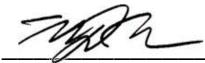

SUMMARY:

- This project will add Class IV bikeways on Alemany Boulevard from Putnam Street to Bayshore Boulevard by reducing travel lanes from three to two in each direction.
- This project will add southbound Class II bike lanes to Putnam Street from Crescent Avenue to Alemany Boulevard East and to San Bruno Avenue from Alemany Boulevard East to Hale Street to improve bikeway connections to the Alemany Boulevard bikeway and the overall connectivity of the San Francisco Bike Network.
- This project will add Class III shared lane markings to southbound San Bruno Avenue from Hale Street to Silver Avenue.
- The proposed action is the Approval Action as defined by the SF Administrative Code Chapter 31.

ENCLOSURES:

1. SFMTAB Resolution
2. Project Area and Typical Cross Sections

APPROVALS:

	DATE
DIRECTOR 	8/13/2018
SECRETARY 	8/13/2018

ASSIGNED SFMTAB CALENDAR DATE: August 21, 2018

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PURPOSE

Approving various bicycle improvements and traffic modifications on Alemany Boulevard between Putnam Street and Bayshore Boulevard, on Putnam Street from Crescent Avenue to Alemany Boulevard East, and on San Bruno Avenue from Alemany Boulevard East to Silver Avenue. These modifications will improve safety for bicyclists, pedestrians and motorists by installing bikeways on Alemany Boulevard, Putnam Street and southbound San Bruno Avenue.

STRATEGIC PLAN GOALS AND TRANSIT FIRST POLICY PRINCIPLES

This action supports the Vision Zero Policy goal to eliminate traffic fatalities as well as the following SFMTA Strategic Plan Goals and Objectives:

Goal 1: Create a safer transportation experience for everyone

Objective 1.2: Improve the safety of the transportation system.

Goal 2: Make transit and other sustainable modes of transportation the most attractive and preferred means of travel

Objective 2.2: Enhance and expand use of the city's sustainable modes of transportation

Transit First Policy Principles:

1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.
2. Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.
3. Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce traffic and improve public health and safety.
6. Bicycling shall be promoted by encouraging safe streets for riding, convenient access to transit, bicycle lanes, and secure bicycle parking.

DESCRIPTION

The Alemany Boulevard interchange is where U.S. 101, I-280, San Bruno Avenue, and Bayshore Boulevard all intersect. This interchange presents a barrier between the surrounding neighborhoods and limits crossing opportunities, requiring pedestrians, bicyclists, and transit riders to navigate a circuitous maze of high-speed streets and ramps. Both directions of Alemany Boulevard between the I-280 South Off-Ramp/Putnam Street and Bayshore Boulevard are part of San Francisco Bicycle Network. Three travel lanes are provided in each direction and the outside lanes are demarcated with shared lane symbols where bicyclists mix with a high volume of vehicles and trucks that use this roadway for both through-travel and for freeway access and

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egress. The intersections in the project area are wide and complex, many including freeway on- and off-ramps. Alemany Boulevard between Putnam Street/the I-280 South Off-Ramp and Bayshore Boulevard in both directions is on the Vision Zero High Injury Network.

The Alemany Interchange Bike Lanes Project (“Project”) is an effort to make it easier and safer for bicyclists traveling through and connecting to adjacent bikeways. The proposed Project upgrades the existing shared lane bicycle route around the interchange at Alemany Boulevard and I-280 and Highway 101 to protected bikeways. Additionally, the Project proposes bike lanes where there are no existing bicycle facilities on San Bruno Avenue and Putnam Street providing improved connections from the proposed Alemany Boulevard bikeways to nearby bicycle routes.

The bicycle improvements and traffic modifications that SFMTA staff propose are as follows:

Class IV Bikeways

On Alemany Boulevard between I-280 South Off-Ramp/Putnam Street and Bayshore Boulevard, the Project will convert one of the three general travel lanes in each direction to a Class IV protected bikeway. On Alemany Boulevard East between the I-280 South Off-Ramp and San Bruno Avenue, the bikeway will be separated from the adjacent travel lane by a painted buffer with flexible delineators. From San Bruno Avenue to Bayshore Boulevard, the bikeway will vary from having no striped buffer to having a striped buffer with flexible delineators depending on the varying roadway width. In advance of the Bayshore intersection, the protected bikeway would connect to a short, paved, off-street bike path through the grassy plot at the southwest corner of the Alemany Boulevard/Bayshore Boulevard intersection. This new bike path is proposed in Project scope to detour bicycle riders around the curved Alemany Boulevard East intersection approach, and does not require a legislative action by the SFMTA Board. On Alemany Boulevard west, the protected bikeway will be separated from the adjacent travel lane by a 3 foot wide striped buffer with flexible delineators from Bayshore Boulevard to Putnam Street.

Class IV Separated Bikeway Criteria

California State Law (Assembly Bill No. 1193 effective January 1, 2015) authorizes separated bikeways. Section 891 of the Streets and Highways Code provides that agencies responsible for the development or operation of bikeways or roadways where bicycle travel is permitted may utilize minimum safety design criteria other than those established by Section 890.6 if all of the following conditions are met:

1. The alternative criteria are reviewed and approved by a qualified engineer with consideration for the unique characteristics and features of the proposed bikeway and surrounding environs;
2. The alternative criteria, or the description of the project with reference to the alternative criteria, are adopted by resolution at a public meeting, after having provided proper notice of the public meeting and opportunity for public comment; and

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3. The alternative criteria adhere to guidelines established by a national association of public agency transportation officials.

The proposed protected bikeway meets these three conditions. A qualified engineer reviewed and approved the alternative criteria for the bikeway prior to installation. The alternative criteria for the Project are to discourage motor vehicles from encroaching or double parking in the bicycle lane, provide a more inviting environment and greater sense of comfort for bicyclists, and to improve safety for bicyclists. These alternative criteria will be adopted by SFMTA Board as part of this calendar item. Lastly, the Project's alternative criteria adhere to guidelines set by the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide, Federal Highway Administration Separated Bike Lane Planning and Design Guide, and California Department of Transportation Design Bulletin Information Number 89 Class IV Bikeway Guidance. The NACTO guidelines state that parking protected bikeways require the following features:

- A separated bikeway, like a bike lane, is a type of preferential lane as defined by the Manual on Uniform Traffic Control Devices (MUTCD).
- Bicycle lane word, symbol, and/or arrow markings shall be placed at the beginning of a cycle track and at periodic intervals along the facility based on engineering judgment.
- If pavement markings are used to separate motor vehicle parking lanes from the preferential bicycle lane, solid white lane line markings shall be used. Diagonal crosshatch markings may be placed in the neutral area for special emphasis. Raised medians or other barriers can also provide physical separation to the cycle track.

The separated bikeways on Alemany Boulevard will conform to these NACTO design guidelines.

Two-Stage Left-Turn Boxes

Where Alemany Boulevard in the eastbound and westbound directions intersect with Bayshore Boulevard and Industrial Street, this Project proposes prohibiting right turns on red lights at Bayshore Boulevard northbound and Industrial Street westbound to accommodate two-stage left turn bike boxes for bicyclists traveling from eastbound to northbound and northbound to westbound. Two-stage left turn bicycle boxes are waiting areas painted in the intersection to help cyclists perform a left turn in two movements from the right side lane. They are intended to make an intersection more inviting for people riding bicycles, make bicycle turning movements more predictable, reduce bicycle encroachment into the crosswalk, and signal to drivers that the turn box is a permitted location for bicyclists to wait. Restricting right turns on red lights where a two-stage left-turn bike box is present is used to prevent conflicts between bicyclists accessing the box and right-turning vehicle traffic.

Class II Bike Lanes

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The Project will install a Class II striped bike lane to southbound San Bruno Avenue, from Alemany Boulevard East to Hale Street by narrowing the existing travel lanes. This street segment is not currently on the San Francisco Bicycle Network. This bike lane will help connect the proposed improvements on Alemany Boulevard Eastbound to the established Class III bike route on Silver Avenue. Part of this street segment, San Bruno Avenue from Rickard Street to Silver Avenue, is on the Vision Zero High Injury Network.

Similarly, the Project will install a southbound Class II bike lane to Putnam Street, from Crescent Avenue to Alemany Boulevard by narrowing the existing travel lanes and striped median. This one-block street segment is not currently on the San Francisco Bicycle Network. The proposed new bike lane will be designated for bicyclist left-turns onto the new Class IV separated bikeway on Alemany Boulevard East and connects to the Class III bikeway demarcated with shared lane symbols on Putnam Street and the Class III bike route continuing on Crescent Avenue starting at Putnam Street.

Class III Bicycle Routes

The Project will install Class III bicycle shared lane markings on the block of San Bruno Avenue from Hale Street to Silver Avenue southbound to connect the proposed Class II bike lane on San Bruno Avenue north of Hale Street to the existing Class III facility on Silver Avenue without changing the lane widths on this block.

ITEMS FOR APPROVAL TO SUPPORT THE PROJECT

- A. ESTABLISH - CLASS IV PROTECTED BIKEWAY - Alemany Boulevard, westbound, north side, Bayshore Boulevard to Putnam Street; and Alemany Boulevard, eastbound, south side, I-280 South Off-Ramp to Bayshore Boulevard
- B. ESTABLISH - RIGHT LANE MUST TURN RIGHT - Alemany Boulevard, eastbound, at San Bruno Avenue
- C. ESTABLISH - NO TURN ON RED - Bayshore Boulevard, northbound at Industrial Boulevard (for bicycle two-stage turn box); and Industrial Boulevard, westbound at Bayshore Boulevard (for bicycle two-stage turn box)
- D. ESTABLISH – CLASS II BIKEWAY - San Bruno Avenue, southbound, from Alemany Boulevard East to Hale Street ; and Putnam Street, southbound, from Crescent Avenue to Alemany Boulevard East
- E. ESTABLISH – CLASS III BIKEWAY - San Bruno Avenue, southbound, from Hale Street to Silver Avenue

In tandem with these changes, SFMTA staff is coordinating with San Francisco Public Works on the development of a complimentary set of pedestrian improvements that were recommended as part of the Alemany Interchange Improvement Study, the same planning study that recommended and developed the conceptual design for the Project improvements. The pedestrian improvements in development include a new multi-use path through the landscaped median of Alemany Boulevard with new pedestrian crossings and a pedestrian traffic signal to provide a pedestrian

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connection between San Bruno Avenue in the Portola neighborhood to the Alemany Farmer's Market, north of Alemany Boulevard West. The Project improvements will not need to be modified for the potential implementation of the proposed path and traffic signal.

STAKEHOLDER ENGAGEMENT

The stakeholder engagement process for the Project was targeted and thorough, building on previous, in-depth community engagement processes primarily via the \$100,000 Alemany Interchange Improvement Study process. The Interchange Improvement Study was recommended by prior District 9 Supervisor David Campos for Proposition K local transportation sales tax funds from the San Francisco County Transportation Authority's Neighborhood Transportation Improvement Program (NTIP) in 2015. The NTIP is intended to strengthen project pipelines and advance the delivery of community-supported neighborhood-scale projects, especially in Communities of Concern and other underserved neighborhoods and areas with at-risk populations (e.g., seniors, children, and/or people with disabilities).

In April 2017, the San Francisco Transportation Authority adopted the Alemany Interchange Improvement Study. Through the planning and outreach processes of this Study, the Project team performed an initial feasibility assessment, developed traffic analysis, and conducted community outreach through presenting at community and stakeholder meetings and other events such as the Alemany Market and neighborhood services organizations in the Portola neighborhood. The outreach work was led by the Portola Neighborhood Association which helped the Project team develop specific proposals that would improve multimodal connectivity and safety through the Alemany interchange by providing pedestrian and bicycle connections. During the planning process, the Project team made a number of presentations to community groups or at public meetings:

- Alemany Market – March and November 2016
- Portola Family Connections – March and November 2016
- Portola Neighborhood Association Open Houses – June and October 2016
- Portola Neighborhood Association Steering Committee Meetings – March and September 2016
- San Francisco Community Empowerment Center – May 2016

In addition to presenting the Project to neighborhood groups, the following elected officials, advocacy and community organizations were involved:

- San Francisco Bicycle Coalition
- Walk SF
- The Greenhouse Project
- A Living Library
- San Francisco Supervisor of District 9 David Campos, and Hillary Ronen
- California Assemblymember, David Chiu

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The outreach and Project analysis informed the development of a conceptual design, preliminary cost estimate, and funding and implementation strategies for the Project improvements.

Lastly, this Project went to the SFMTA Engineering Public Hearing on March 16, 2018. At the Public Hearing, no members of the public spoke about the Project. Staff received approximately four emails supporting the proposed traffic changes and bicycle improvements.

SFMTA staff conducted additional outreach to solicit community input on the addition of the southbound San Bruno Avenue bike lane. An SFMTA Public Hearing was held on May 25, 2018 on the addition of the San Bruno Avenue bike lane to the Project. Staff received responses to outreach in support of the addition of the San Bruno Avenue bike lane from Portola Family Connections and four residents along San Bruno Avenue. Staff received responses opposing the San Bruno bike lane from two neighborhood residents who cited a perceived increase in traffic congestion and low bicycle volumes.

ALTERNATIVES CONSIDERED

A no-build option was considered that would maintain shared lane markings on Alemany Boulevard and leave conditions as-is on Putnam Street and Crescent Avenue. Because separating motor vehicles from bicycles can make this route more comfortable for bicyclists, and due to the relatively low cost and no impacts to parking and minimal impacts to traffic, staff concluded that the recommendation to implement these improvements was the best way to proceed.

FUNDING IMPACT

Proposition K, District 9 Addback, and Public Works revenues funded the planning (\$200,000) phase and Proposition K funded the design (\$71,500) phase of the Project. The Project construction cost of \$442,000 is planned to be funded by a combination of Proposition K (\$205,100) and 2017 Proposition B General Fund (\$236,900) revenues.

ENVIRONMENTAL REVIEW

The proposed Project is subject to the California Environmental Quality Act (CEQA). CEQA provides a categorical exemption from environmental review for operation, repair, maintenance, or minor alteration of existing facilities as defined in Title 14 of the California Code of Regulations Section 15301.

On July 16, 2018, the Planning Department determined that the proposed Alemany Interchange Bike Lanes Project is categorically exempt from environmental review under CEQA (Planning Case No. 2017-007810ENV) pursuant to Title 14 of the California Code of Regulations Section 15301.

The proposed action is the Approval Action as defined by the S.F. Administrative Code Chapter

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A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors, may be found in the records of the Planning Department at 1650 Mission Street in San Francisco, and is incorporated herein by reference.

OTHER APPROVALS RECEIVED OR STILL REQUIRED

The City Attorney's Office has reviewed this calendar item.

RECOMMENDATION

SFMTA staff recommends approval of various various bicycle improvements and traffic modifications, as set forth in Items A through E above, on Alemany Boulevard between Putnam Street and Bayshore Boulevard, on Putnam Street from Crescent Avenue to Alemany Boulevard East, and on San Bruno Avenue from Alemany Boulevard East to Silver Avenue to improve safety for bicyclists, pedestrians and motorists by installing bikeways on Alemany Boulevard, Putnam Street and southbound San Bruno Avenue.

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
BOARD OF DIRECTORS

RESOLUTION No. _____

WHEREAS, The San Francisco Municipal Transportation Agency has identified a need for improved comfort and safety for people on bicycles and other roadway users on Alemany Boulevard through the U.S. 101 and I-280 freeway interchange; and,

WHEREAS, The Alemany Interchange Improvement Study was a community-focused, interagency process that recommended various capital improvements to achieve the same goals, including extending the existing protected bikeways on Alemany Boulevard west of Putnam Street through the interchange by removing one general travel lane from each direction of Alemany Boulevard; and,

WHEREAS, SFMTA staff additionally recommend adding bicycle facilities to segments of Putnam Street and San Bruno Avenue to improve connections between Alemany Boulevard and nearby San Francisco Bicycle Network routes; and

WHEREAS, SFMTA staff propose the following bicycle improvements and traffic modifications associated with the Alemany Interchange Bike Lanes Project:

- A. ESTABLISH - CLASS IV PROTECTED BIKEWAY - Alemany Boulevard, westbound, north side, Bayshore Boulevard to Putnam Street; and Alemany Boulevard, eastbound, south side, I-280 South Off-Ramp to Bayshore Boulevard
- B. ESTABLISH - RIGHT LANE MUST TURN RIGHT - Alemany Boulevard, eastbound, at San Bruno Avenue
- C. ESTABLISH - NO TURN ON RED - Bayshore Boulevard, northbound at Industrial Boulevard (for bicycle two-stage turn box); and Industrial Boulevard, westbound at Bayshore Boulevard (for bicycle two-stage turn box)
- D. ESTABLISH – CLASS II BIKEWAY - San Bruno Avenue, southbound, from Alemany Boulevard East to Hale Street ; and Putnam Street, southbound, from Crescent Avenue to Alemany Boulevard East
- E. ESTABLISH – CLASS III BIKEWAY - San Bruno Avenue, southbound, from Hale Street to Silver Avenue

WHEREAS, Section 891 of the Streets and Highways Code provides that agencies responsible for the development or operation of bikeways or roadways where bicycle travel is permitted may utilize minimum safety design criteria other than those established by Section 890.6 if the following conditions are met: the alternative criteria are reviewed and approved by a qualified engineer, the alternative criteria is adopted by resolution at a public meeting after public comment and proper notice, and the alternative criteria adheres to the guidelines established by a national association of public agency transportation officials; and

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WHEREAS, The protected bikeways proposed as part of the project meet these three requirements; and

WHEREAS, The protected bikeway has been reviewed and approved by a qualified engineer prior to installation; and,

WHEREAS, The alternative criteria for the project are to discourage motor vehicles from encroaching or double parking in the bicycle facility, provide a more inviting and greater sense of comfort for bicyclists, and to provide a greater perception of safety for bicyclists; and,

WHEREAS, The project's alternative criteria adhere to guidelines set by the National Association of City Transportation Officials; and,

WHEREAS, The proposed Alemany Interchange Bike Lanes Project is subject to the California Environmental Quality Act (CEQA); CEQA provides an exemption from environmental review for existing facilities as defined in Title 14 of the California Code of Regulations Section 15301; and,

WHEREAS, On July 16, 2018, the Planning Department determined that the proposed Alemany Interchange Bike Lanes Project is categorically exempt from CEQA (Planning Case No. 2017-007810ENV) pursuant to Title 14 of the California Code of Regulations Section 15301; and,

WHEREAS, The proposed action is the Approval Action as defined by the S.F. Administrative Code Chapter 31; and,

WHEREAS, A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors, may be found in the records of the Planning Department at 1650 Mission Street in San Francisco, and is incorporated herein by reference; and

WHEREAS, The public has been notified about the proposed modifications and has been given the opportunity to comment on those modifications through the public hearing process; now, therefore, be it

RESOLVED, That the San Francisco Municipal Transportation Agency Board of Directors approves the bicycle improvements and traffic modifications, as set forth in Items A-E above, on Alemany Boulevard between Putnam Street and Bayshore Boulevard, on Putnam Street from Crescent Avenue to Alemany Boulevard East, and on San Bruno Avenue from Alemany Boulevard East to Silver Avenue.

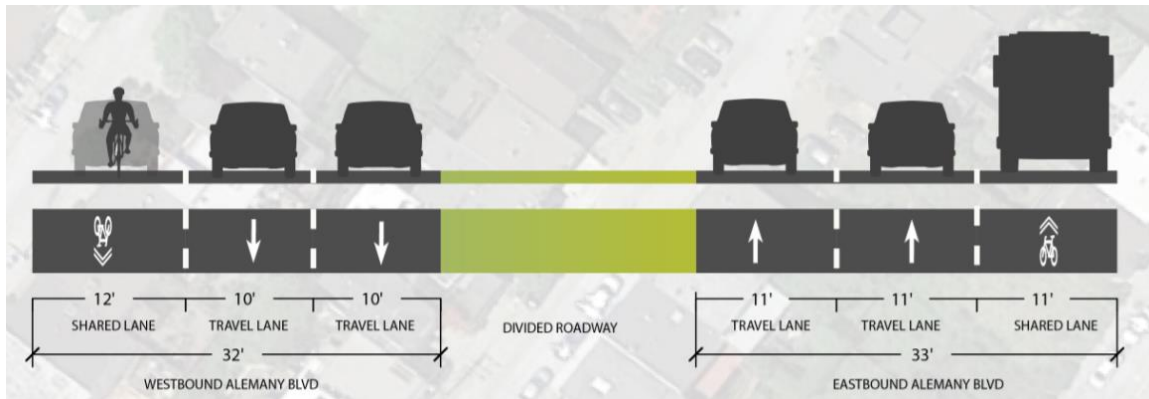
I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of August 21, 2018.

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Secretary to the Board of Directors
San Francisco Municipal Transportation Agency

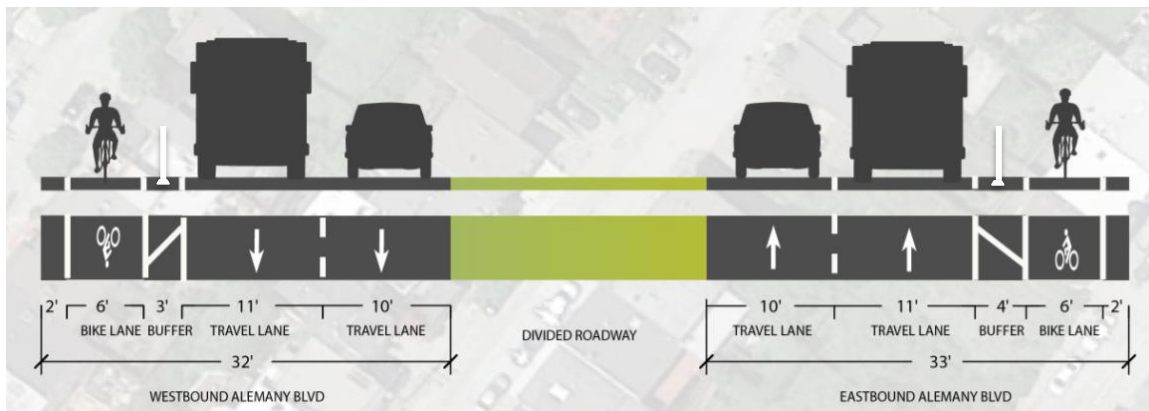
ENCLOSURE A
PLAN VIEW AND CROSS SECTIONS OF PROPOSAL

Figure 1: Typical Cross Section of Alemany Boulevard between Putnam Street and San Bruno Avenue under Existing Conditions



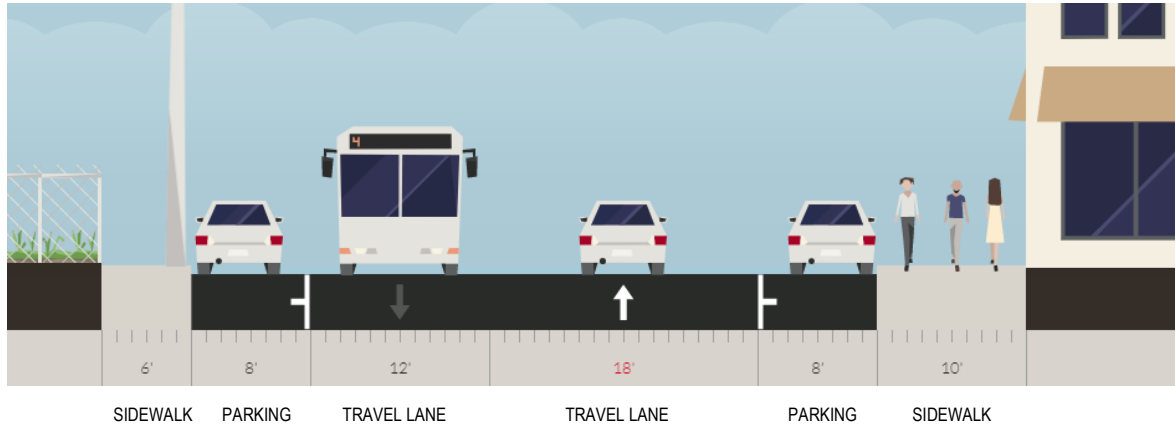
Source: Alemany Interchange Improvement Study, SFCTA

Figure 2: Typical Cross Section of Alemany Boulevard between Putnam Street and San Bruno Avenue under Proposal



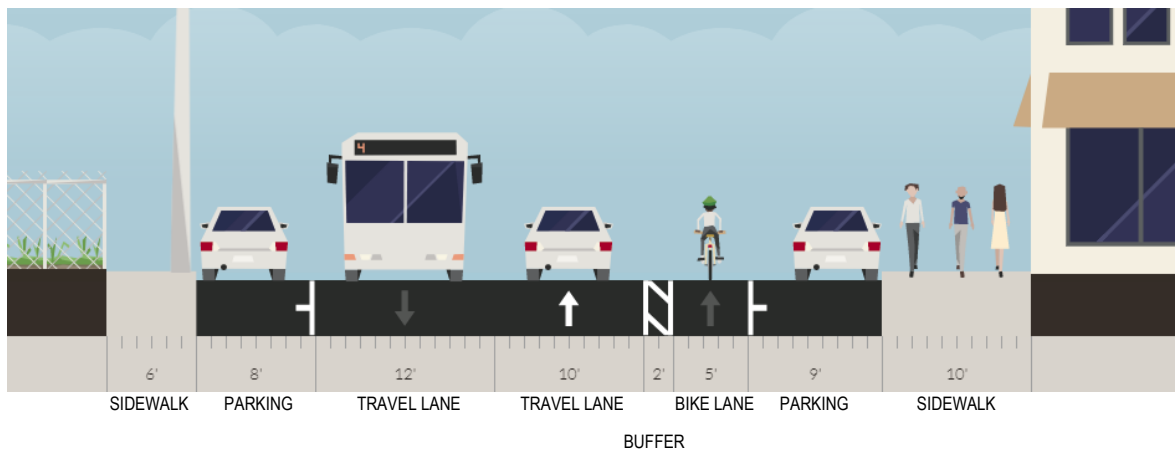
Source: Alemany Interchange Improvement Study, SFCTA

Figure 3: Typical Cross Section of San Bruno Avenue between Alemany Boulevard and Silver Avenue Under Existing Conditions



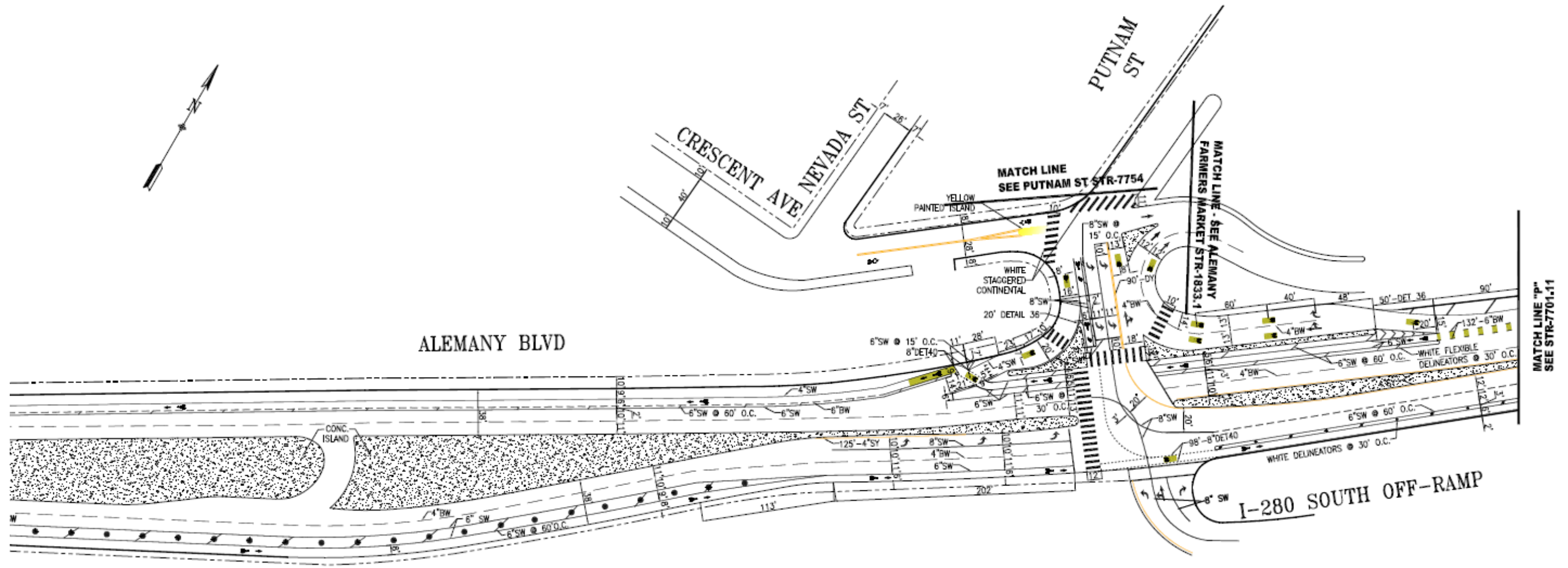
Source: SFMTA, Streetmix.net

Figure 4: Typical Cross Section of San Bruno Avenue between Alemany Boulevard and Silver Avenue Under Proposal



Source: SFMTA, Streetmix.net

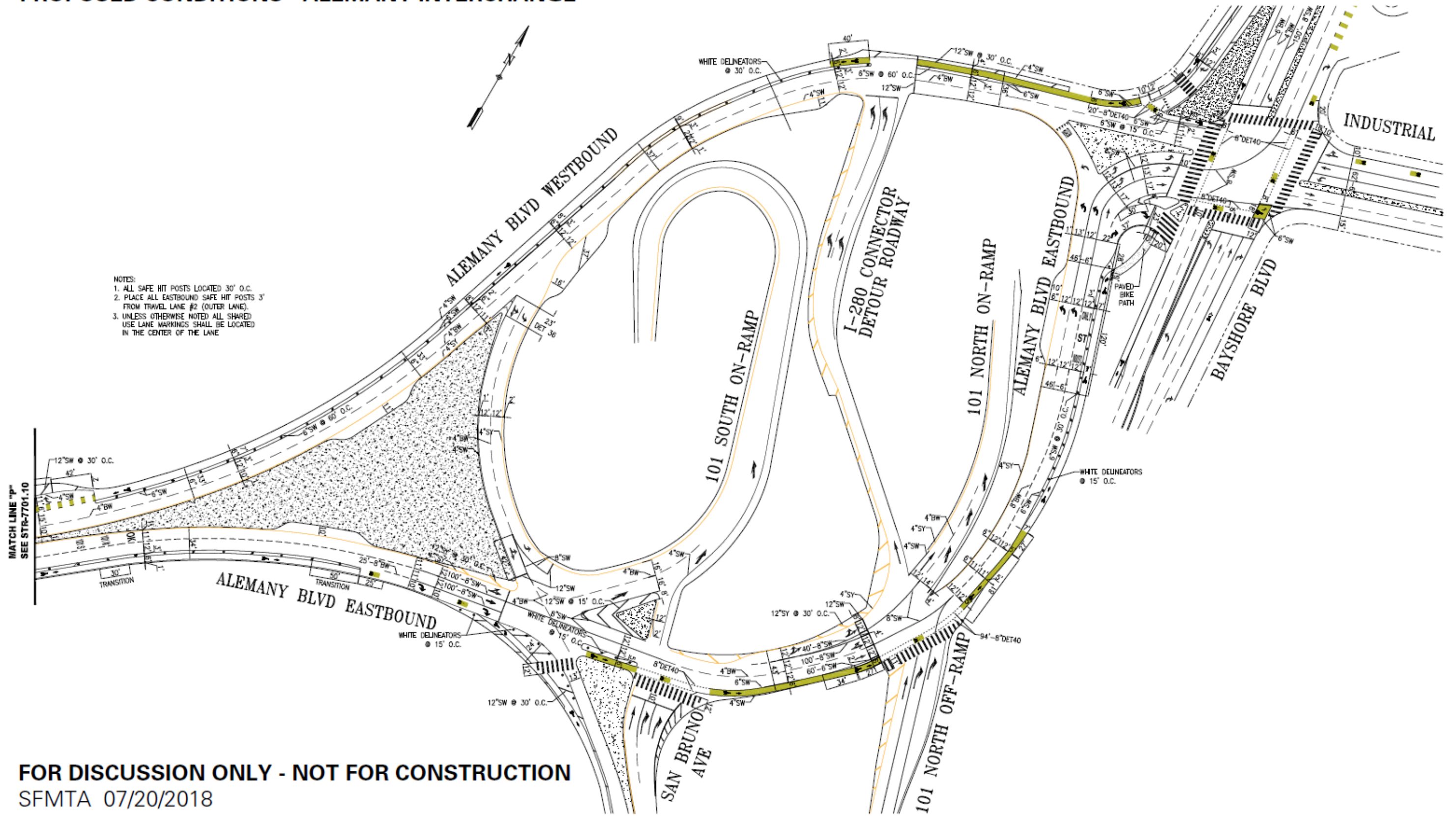
PROPOSED CONDITIONS – ALEMANY INTERCHANGE



- NOTES:
1. ALL SAFE HIT POSTS LOCATED 30' O.C.
2. PLACE ALL EASTBOUND SAFE HIT POSTS 3'
FROM TRAVEL LANE #2 (OUTER LANE).

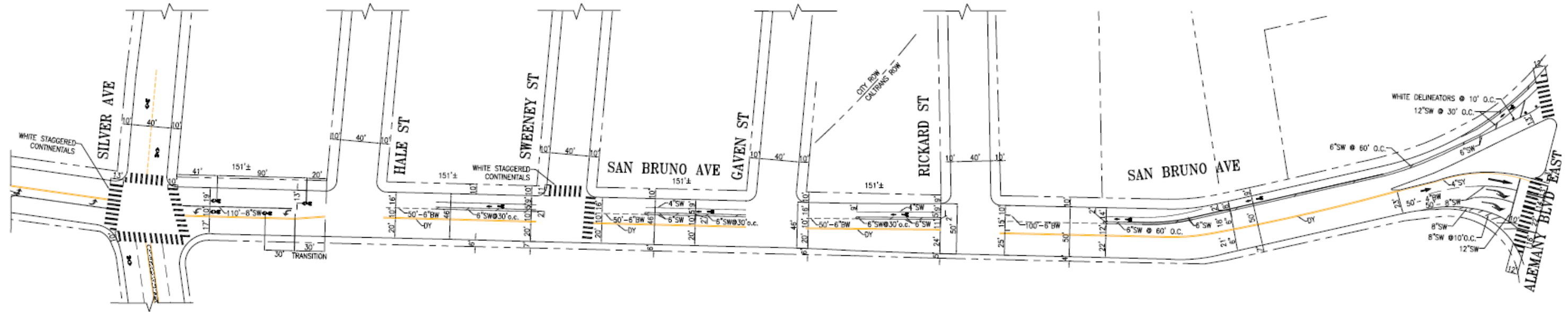
FOR DISCUSSION ONLY – NOT FOR CONSTRUCTION
SFMTA 7/20/2018

PROPOSED CONDITIONS - ALEMANY INTERCHANGE



FOR DISCUSSION ONLY - NOT FOR CONSTRUCTION
SFMTA 07/20/2018

PROPOSED CONDITIONS - SAN BRUNO AVENUE



FOR DISCUSSION ONLY - NOT FOR CONSTRUCTION

SFMTA 5/22/18