Additional Resident Suggestions

#4A - 25th Avenue to SR 92

#4B - 25th Avenue to SR 92

#29B - 5th to 9th Avenue
Option 4A: Resident Suggestion

Hayward Park Station

Certainly would not required hundreds of feet of bridge as Caltrain states is needed

~200 feet

Point of max outswing for switch transition, ~13 feet

End of track merging, best case scenario

Notes:
1/ This excludes any information regarding the position of grade separation retaining wall.
2/ Assume that some of the culvert may need to be covered, but should be no more than 50 feet.
Option 4A: Caltrain Assessment

Switch needs 116’ of straight track, placing it in conflict with Hayward Park Station.

Non-compliant use of cross-overs. High potential for train derailment.

Grade separation track alignment

End of track merging, best case scenario

Certainly would not required hundreds of feet of bridge as Caltrain states is needed

Too close to main track

Notes:
1/ This excludes any information regarding the position of grade separation retaining wall.
2/ Assume that some of the culvert may need to be covered, but should be no more than 50 feet.
Option 4A: Caltrain Assessment

- Conflict with existing State Highway bridge columns
- Conflict with OCS Poles
- Require Box Culvert. Enclosure of the channel will present maintenance issues.
- Existing Channel
- New Rail Alignment MT1
- New Rail Alignment MT2
- OCS POLE
- Require Box Culvert.
# Option 4A: Caltrain Assessment

<table>
<thead>
<tr>
<th>Rail Standards</th>
<th>Image Presented by Residents</th>
<th>Result of non-compliant concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum of 18 feet (on center) between a parking track and mainline</td>
<td>Space between parking track and mainline track too close</td>
<td>Trains would collide</td>
</tr>
<tr>
<td>Only one crossover is used (5 degrees), and only used between two parallel tracks. Crossovers need a high degree of maintenance.</td>
<td>4 crossovers, 2 in close proximity to each other creating &gt; 10 degrees</td>
<td>Trains would have high potential of derailment</td>
</tr>
<tr>
<td>Minimum 9.5 feet from columns on curve and 8.5 feet from straight track</td>
<td>Impacts SR-92 columns Impact grade separation (MSE) wall</td>
<td>Trains would collide with SR-92 columns. Trains would collide with the wall.</td>
</tr>
<tr>
<td>116 feet of straight track needed for a switch</td>
<td>116 feet switch requirement is not included; if corrected to rail standard it impacts Hayward Park Station</td>
<td>Conflicts with station signal and platform</td>
</tr>
</tbody>
</table>
Option 4B: Resident Suggestion

- Freeway access
- Maintenance Area access
- Box culvert (if required)
- Pipe under tracks for Borel Creek, not required. Saves $1.5M !!!!

Legend:
- Residential
- Mixed use
- Maintenance Area
- Access Track
Option 4B: Caltrain Assessment

Access road would be further to the east, outside of Caltrain ROW on Pacific Boulevard.

All non-compliant issues from Option 4A apply to Option 4B.

Pipe under tracks for Borel Creek, not required. Saves $1.5M !!!!
Option 4B: Caltrain Assessment

- Require Box Culvert. Enclosure of the channel will present maintenance issues.
- Require modifications to the Borel Creek bridge
- SWITCH from MT1 to Parking Track
- Conflict with OCS Pole.
- Existing Channel
- New Rail Alignment MT1
- New Rail Alignment MT2
- Resident Proposed Parking Track
- Infrastructure
- Caltrain Redesign Effort
- Caltrain Assessment
Option 4A & 4B: Assessment Visualization

1. NEW RAIL ALIGNMENT
2. RESIDENT PROPOSED PARKING TRACK, IF MET MINIMUM CURVE RAIL STANDARDS

Existing Channel

SWITCH

SECTION A - A

Railroad Street
Fence Line
Box Culvert

MT1 HEADING NORTHBOUND
MT2 HEADING SOUTHBOUND

NOT TO SCALE
FOR VISUAL PURPOSES ONLY

NEW RAIL ALIGNMENT

RESIDENT PROPOSED PARKING TRACK, IF MET MINIMUM CURVE RAIL STANDARDS
# Option 4B: Caltrain Assessment

<table>
<thead>
<tr>
<th>Rail Standards</th>
<th>Image Presented by Residents</th>
<th>Result of non-compliant concept</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Same issues as 4A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum of 18 (on center) feet between a parking track and mainline</td>
<td>Space between parking track and mainline track too close</td>
<td>Trains would collide</td>
</tr>
<tr>
<td>Only one crossover is used (5 degrees), and only used between two parallel tracks. Crossovers need a high degree of maintenance.</td>
<td>4 crossovers, 2 in close proximity to each other creating &gt; 10 degrees</td>
<td>Trains would have high potential of derailment</td>
</tr>
<tr>
<td>Minimum 9.5 feet from columns on curve and 8.5 feet from straight track</td>
<td>Impacts SR-92 columns Impact grade separation (MSE) wall</td>
<td>Trains would collide with SR-92 columns. Trains would collide with the wall.</td>
</tr>
<tr>
<td>116 feet of straight track needed for a switch.</td>
<td>116 feet switch requirement is not included, if corrected to rail standard it impacts Hayward Park Station</td>
<td>Conflicts with station signal and platform</td>
</tr>
<tr>
<td><strong>4B</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An access road is part of a parking track</td>
<td>Point of access is shown from the north outside of Caltrain ROW on Pacific Boulevard</td>
<td>Access road conflicts with canal/existing street</td>
</tr>
</tbody>
</table>
Option 29B: Resident Suggestion

Maintenance Area / Set-out Track (1075 feet available)  Crossing  Switch Section ~300 feet
Option 29B: Caltrain Assessment

- Not enough ROW
- Not sufficient length for parking track
- Minimum distance needed to safely activate gates
- Adding a third track to at-grade crossing may not be approved by CPUC

Maintenance Area / Set-out Track (1075 feet available)  Crossing  Switch Section ~300 feet
Option 29B: Resident Suggestion

- Insufficient length for parking track
- Not enough ROW
- 200’-300’ Remaining for Parking Track
- 700’-800’ Dedicated For Gate Activation Zone
- Need to relocate Signal Equipment
- Additional at-Grade Crossing
- Insufficient length for parking track
- Not enough ROW
- 200’-300’ Remaining for Parking Track
- 700’-800’ Dedicated For Gate Activation Zone
- Need to relocate Signal Equipment
- Additional at-Grade Crossing

Infrastructure
Caltrain Redesign Effort
Caltrain Assessment
## Option 29B: Assessment

<table>
<thead>
<tr>
<th>Rail Standards</th>
<th>Image Presented by Residents</th>
<th>Result of non-compliant concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gate down time in advance of approaching train = 20 seconds + time it takes pedestrian to cross and train to accelerate</td>
<td>No gate activation/down time zone shown</td>
<td>Cross-traffic collision or less than ~300 feet for parking track</td>
</tr>
<tr>
<td>950 feet for parking track</td>
<td>If corrected for gate activation zone, would be less than 300 feet</td>
<td>Non-functional parking track</td>
</tr>
<tr>
<td>Grade crossing safety</td>
<td>Adds an additional rail through 9th Avenue</td>
<td>Increased risk of cross-traffic collision, may not be approved by CPUC</td>
</tr>
</tbody>
</table>
Caltrain Correspondence

PARKING TRACK TIMELINE

February 28, 2020
Start of Final Design

MAY 2020
Completion of Final Design

AUGUST 2020
Award Contract

January 17, 2020
The Honorable Joe Goethals, Mayor
City of San Mateo
330 West 20th Avenue
San Mateo, CA 94080

Dear Mayor Goethals and Councilmembers,

The Peninsula Corridor Joint Powers Board (Caltrain) is in receipt of a request that Caltrain reconsider the parking track. Parking tracks are an integral part of railroad infrastructure limited work windows to keep the railroad functioning along. 60,000+ daily passengers, parking tracks are needed approval parking tracks are distributed in both residential and commuter parking. Caltrain parking track was in existence prior to Caltrain's location in the Bay Meadows area (between 21st and 25th A) until the city-approved 25th Avenue Grade Separation Project in 2019. In the future, the San Mateo replacement parking track will include the corridor and would primarily be used if an entire contact system would also be part of large equipment materials at the parking track. Caltrain will be purchasing new that will not be included in the mechanical issues that are not a distinct feature. The tracks, ballast, and rails near the San Mateo and 25th Ave Grade Separation project, which will also be cut in this future. The anticipated use of approximately one acre to a temporary stage rail maintenance equipment used for Caltrain staff has ventured with close collaboration with the Caltrain review of the different parking track alternatives, feedback from requesting, retesting, and analyzing suggested when channels and efforts to host six events (84 community members) since July 2019, Caltrain along with the City staff, have taken:

1. Caltrain staff a staff Working Group on the City of San Mateo and any other Caltrain parking track alternatives (www.Caltrain.com/56ParkingTrack). Caltrain posted process transparent to the community by announcing the review for the staff Working Group.

2. Caltrain created a dedicated webpage for (www.Caltrain.com/56ParkingTrack). Caltrain posted transparent to the community by announcing the review with the staff Working Group.

3. The staff Working Group compiled all 28 suggestions from the community and after hundreds of group meetings was finalized all as operational or not operationally feasible. The staff Works with engineers of Caltrain to finalize all options under consideration and identify feasibility matrix.

4. Working with engineers provided by the staff Working Group, Caltrain determined that of the 28 proposed alternatives, only two were operationally feasible. The originally planned location (with mitigation/size alternate location between 25th Avenue and Howard Park Station on the eastern side of the Peninsula Corridor Joint Powers Board (Caltrain) project is to questions related to each option's viability.

5. Caltrain issued a press release to media to promote a follow-up on Oct. 8, 2020 and provide an online link to the feasibility assessment distributed a printed notice to a wider address list in the newspaper information.

6. Held a second community meeting on October 8, 2020 to present the options to the community, highlighting the two feasible options and present Section 40 on Oct. 21, 2020.

7. After further design refinement, Caltrain found a potential problem with one option, as it conflicts with a preschool and other local businesses. The City Council decision was cancelled while the issue was further discussed.

8. Caltrain responded to a large number of follow-up emails from the additional information.

9. Met with councilmembers on site to review the feasible alternative maintenance yard (OSMF in San Jose) with a parking track.

10. Met three times in November/December 2019 with a neighborhood focus. All community members were asked questions, and no one responded if it would have no additional alternatives. As an additional option to the 20th A further examined to the matrix. Many City and Caltrain staff focus on operational needs as well as alternatives. In addition to mitigation, discussed environmental communication efforts for the community related track.

12. Caltrain published updates of the above items online, along with responses to questions and supporting documentation.
The TA adopted policy has already committed to programming the remaining Measure A funds in the Grade Separation category for the following pipeline projects on a first come first served basis that are currently in the pre-construction phases: Broadway in Burlingame, Ravenswood in Menlo Park, Scott/Linden in San Bruno and South San Francisco. There is also a commitment in the Measure A Grade Separation category of up to $5M for planning other grade separation projects in San Mateo County.

The current amount of TA funding available for grade separation projects in Measure A is $230M, and for Measure W $70M (per the newest Strategic Plan). The collective need for funding in San Mateo County for these projects greatly exceed the funding available.

There are over 20 at-grade crossings still to be considered in San Mateo County, and Measure W funds will not be available immediately. Future calls for projects with Measure W funds are anticipated to occur after Caltrain completes a study that will help prioritize Caltrain grade separation projects.
Enhancement / Mitigation

Current

Potential Enhancement

Staff Recommendation / Request for Feedback

- Mitigation: Yes
- Cost not to exceed (note budget estimate dependent on parking tracking installation occurring during grade separation time frame): $1.1M
- Feedback on Type: Wall, tree, bush etc
Project Contact Information

City of San Mateo

- Phone: 650.522.7300
- Email: publicworks@cityofsanmateo.org

Caltrain

- Customer Service: 1.800.660.4287
- Email: construction@Caltrain.com
- Website: www.caltrain.com/SMParkingTrack
Background Slides from Previous Meetings
25th Grade Separation Project

Citywide Improvements to:

- Motorists and pedestrians
  - Reduce local traffic congestion in San Mateo
  - Increase safety at 25th Avenue grade crossing
    - No. 8 on California Public Utilities Commission railroad crossing safety priority list
  - Increase safety for all stakeholders
    - Emergency vehicles have faster access on 28th and 31st Avenues
- Traffic Congestion
  - Long-awaited improvement to East-West connectivity, lessening congestion on Hillsdale Boulevard for all commuters
- Opportunities
  - Reduce train horn noise

Project Funding

![Project Funding Chart]

- SMCTA: $74
- CAHSRA: $84
- CPUC: $10
- CITY: $12

25th Avenue GS Funding Sources
Traffic Impact Fee

Developer wants to develop in the City of San Mateo

Developer pays a Traffic Impact Fee to mitigate the traffic impact caused by the development

City uses the Traffic Impact Fee to deliver projects that will alleviate the traffic impacts by the development

25TH GRADE SEPARATION

US 101 PENINSULA INTERCHANGE

BIKE AND PED IMPROVEMENTS
General Fund

Current Unfunded Projects exceed $200M:

- Central Park
- Hillsdale Boulevard/Hwy 101 Bike & Pedestrian Overpass
- US 101 Peninsula Avenue Interchange
- 19th Avenue Congestion Relief Improvements (Fashion Island Boulevard)
- Hillsdale Avenue Congestion Relief Improvements
- Corporation Yard Facility

Current Funded Projects:

- ★ Smooth Streets (Measure S) $6M/year
- ★ Road Rehabilitation $2M/year
- ★ High-Voltage Street Light Conversion $1.5M/year
Community Conversations

1. May 12, 2019 resident’s NextDoor post
2. June 11, 2019 Community Meeting
3. July 2019 Caltrain project webpage, matrix posted, email distribution list created
4. October 8, 2019 Community Meeting
5. October 21, 2019 Study Session Canceled
6. November 6, 2019 Focus Group Meeting
7. November 20, 2019 Focus Group Meeting
8. December 6, 2019 Focus Group Meeting
9. January 13, 2020 Community Meeting
10. January 21, 2020 City Council Study Session
Why at all in San Mateo?

- Ensures reliable commuter rail service
- San Mateo Parking Track used by Caltrain for 25 years (in existence prior to Caltrain becoming operator of passenger service)
- Parking Tracks needed approximately every three to four miles along corridor, allow for efficient use of limited work windows to keep railroad functioning properly
- To construct city-sponsored San Mateo 25th Avenue Grade Separation Project, removal of existing San Mateo Parking Track required and replacement location needed
- Also, used to provide emergency train pull out in case of emergency
- Caltrain requires a replacement parking track, no build not an option
How Will It Be Used in SM?

1. Use as emergency train relief (for broken electrified trains in the future)
2. Park caltrain equipment (rare)

WILL NOT BE USED FOR
- Ingress/Egress of 40 Foot Trucks
- Site for 24/7 Heavy Equipment
- No Maintenance Activity on this Parking Track
Upgrades Prompt Relocations
# Parking Track Is Not a Maintenance Yard

<table>
<thead>
<tr>
<th></th>
<th>Parking Track</th>
<th>Maintenance Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td>Spur of track (approx. 1,000 feet) and access road</td>
<td>20 acre facility with multiple tracks and structures, including maintenance pits, cranes, train washing equipment, waste oil/water storage, fuel farms, control facilities</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Temporary storage of train equipment</td>
<td>To perform mechanical maintenance on trains and to clean interior and exterior of rail vehicles</td>
</tr>
<tr>
<td><strong>Activity Occurs</strong></td>
<td>On corridor tracks Not on site</td>
<td>At facility On site</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>Possibly 1-2x a month</td>
<td>Daily - Day and Night Hours</td>
</tr>
</tbody>
</table>
Existing Parking Tracks

Current parking track examples, locations, and photos at www.caltrain.com/SMParkingTrack.

Video timelapse of parking track at https://youtu.be/NES6sLfn4-4
Existing Parking Tracks

Current parking track examples, locations, and photos at www.caltrain.com/SMParkingTrack.
Video timelapse of parking track at https://youtu.be/NEStsIfny-4
Existing Parking Tracks

Current parking track examples, locations, and photos at www.caltrain.com/SMParkingTrack.

Video timelapse of parking track at https://youtu.be/NEStsIfny-4
Operational Use

- In the future, the San Mateo Parking Track will be the only electrified parking track in the area and will primarily be used if a train breaks down.

- Anticipated use for temporary storage, maybe 1 a month.
  - Need to mostly remain clear in case a train breaks down.
  - Will not be loading with large equipment because new overhead contact system (no heavy truck traffic)