CHAPTER 2 DESIGN REFINEMENTS

2.1 INTRODUCTION

Since publication of the Draft 2nd Supplemental Environmental Impact Report (SEIR-2), additional design refinements have been identified. Some of these refinements remove elements of Phase 1 considered in the environmental impact report, while others add features that were not part of the Phase 1 project evaluated in SEIR-2. Because the design refinements are within the SEIR-2 study area, the resulting changes to the impact discussions are primarily editorial. In some cases impacts are reduced by the removal of design options under consideration at certain locations along the Phase 1 alignment. This Chapter identifies the design refinement generated changes to the impact discussions, and considers whether the changes introduce any new impacts not considered in the previous environmental documents.

2.2 SUMMARY OF DESIGN REFINEMENTS

Nine design refinements have been identified since publication of the Draft SEIR-2. These refinements are summarized below, with full descriptions provided in **Chapter 3, Phase 1 Recommended Project Description**, of this Final SEIR-2.

- **Design Refinement 1 – Draft SEIR-2 Design Change 3 – Systems Facilities Alternate Location A.** In the Draft SEIR-2, two alternate locations were identified for the High Voltage Substation SRC and Switching Station SRR. Alternate Location B (north of Railroad Court and west of the BART alignment) has been selected as the preferred systems facilities location. After further investigation, Alternate Location A at Warm Springs Court has been determined to be not technically acceptable. UPRR will not permit the routing of the 115 kV lines over the yard tracks and the close proximity of the 115kV line to a radio tower does not provide enough clearance for safety and will not satisfy operating restrictions normally required between a high voltage line and a radio tower. This refinement is shown on Figures B-1 and B-12 of **Appendix B** to this Final SEIR-2.

- **Design Refinement 2 – Draft SEIR-2 Design Change 8 - Dixon Landing Road Alignment.** The Draft SEIR-2 identified two options for the Dixon Landing Road Alignment – at grade and retained cut. The Retained Cut Option has been selected as the preferred alignment for Phase 1. The Retained Cut Option is considered the environmentally superior design option, because it avoids the significant and unavoidable transportation construction impact associated with the At Grade Option. The Draft SEIR-2

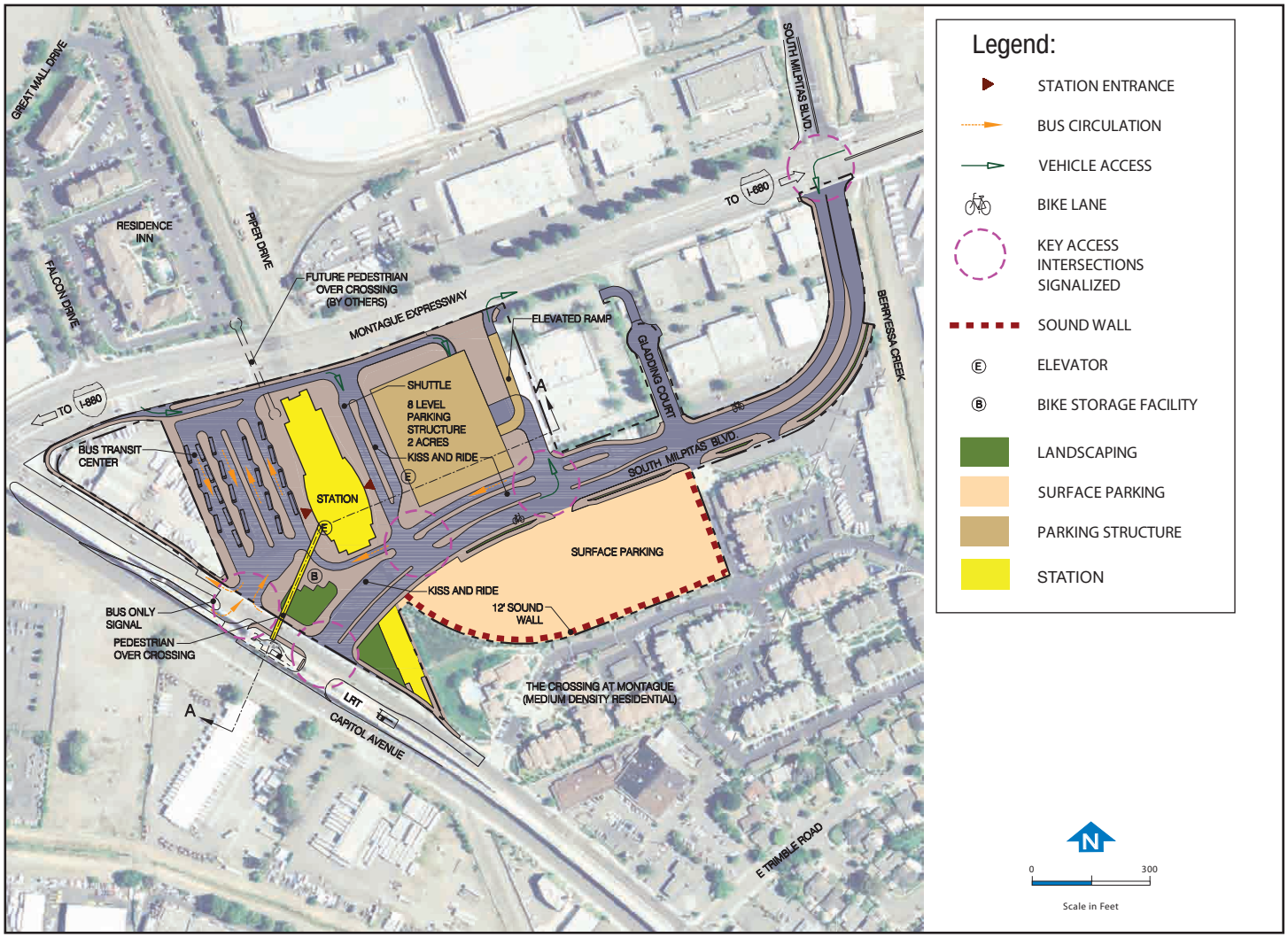
also identified four alternate pump station locations (A, B, C, and D) for the Retained Cut Option. Pump station Alternate Locations A, B, and D were not selected and Alternate Location C, south of Dixon Landing Road and east of the Union Pacific Railroad (UPRR) corridor, has been selected for Phase 1. These refinements are shown on Figures B-6 and B-7 of **Appendix B** to this Final SEIR-2.

- **Design Refinement 3 – New Design – BART Maintenance Access South of Calaveras Boulevard.** The BART maintenance access south of Calaveras Boulevard has been modified to relocate the high rail vehicle access point at Industrial Way approximately 200 feet south. New maintenance facilities have also been identified that include a BART siding track, an approximately 20-by-20 foot maintenance building with restrooms, a graveled parking lot/materials storage area for ballast stockpiles, rail sections, and other maintenance supplies surrounding the maintenance building, and an approximately 20-foot wide asphalt-concrete maintenance access road from Industrial Way. These refinements are shown on Figure B-13 of **Appendix B** to this Final SEIR-2.

- **Design Refinement 4 – New Design – Eliminate Extension of Existing Detention Basin/Private Park.** The extension of the existing detention basin/park to accommodate the water level increase from construction of the sound wall considered in the 2004 Final Environmental Impact Report (FEIR) and the 2007 1st Supplemental Environmental Impact Report (SEIR-1), has been eliminated from Phase 1. The resulting net water level increase in the detention basin/park of about 0.1 feet from installation of the sound wall is not considered substantial in regards to basin design and capacity. This refinement is shown on Figure B-14 of **Appendix B** to this Final SEIR-2.

- **Design Refinement 5 – Draft SEIR -2 Design Change 15 – Milpitas Station.** The Milpitas Station footprint has been reduced from 27 acres to 20 acres by eliminating the surface parking and/or future transit facilities in the northeastern (between South Milpitas Boulevard and Montague Expressway) and northwestern (at the intersection of Montague Expressway and Capitol Avenue) portions of the station site plan. **Figure 2-1** shows the revised Milpitas Station site plan. This refinement is shown on Figures B-16C, B-17, and B-18 of **Appendix B** to this Final SEIR-2.

- **Design Refinement 6 – New Design – High Rail Vehicle Access Point North of Berryessa Road.** A new high rail vehicle access point accessed by a 20-foot wide asphalt-concrete road is proposed north of Berryessa Road. A vehicle turnaround would be constructed at the northern portion of the access road to allow for maintenance vehicles to reverse direction. This refinement is shown on Figure B-22 of **Appendix B** to this Final SEIR-2.



Source: VTA, 2011.

Figure 2-1: Revised Milpitas Station Plan

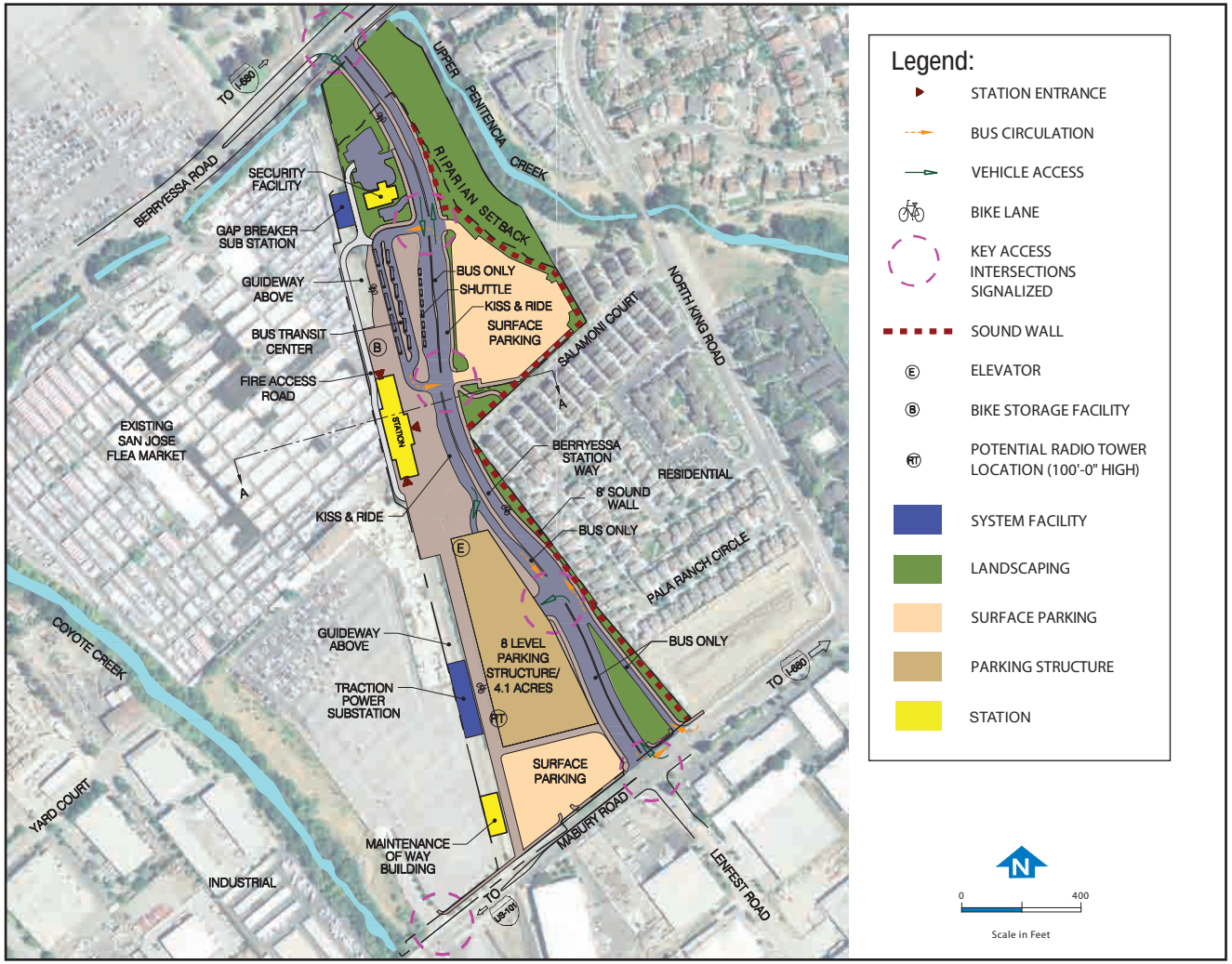
- **Design Refinement 7 – Draft SEIR-2 Design Change 20 – Berryessa Station.** The Berryessa Station footprint has been reduced from 55 acres to 30 acres by eliminating the surface parking and/or future transit facilities on the west side of the UPRR track/proposed BART alignment immediately adjacent to Coyote Creek. **Figure 2-2** shows the revised Berryessa Station site plan. This refinement is shown on Figure B-23 of **Appendix B** to this Final SEIR-2.

- **Design Refinement 8 – Draft SEIR-2 Design Change 23 – Construction Staging Areas.** A new 1.7-acre construction staging area has been established within the former Milpitas Station footprint near the intersection of Montague Expressway and Capitol Avenue. This new Construction Staging Area (CSA) is referred to as the Montague Expressway CSA. **Figure 2-6** of this Final SEIR-2 shows the Montague Expressway CSA. All CSAs relevant to Phase 1 are shown in **Figures 2-3** through **2-10** of this Final SEIR-2.

- **Design Refinement 9 – Draft SEIR-2 Design Change 13 – Milpitas Wye.** The following three alternate locations for the redesigned Milpitas Wye were considered in the Draft SEIR-2: Wye with Spur Connection Option, Wye and Industrial Lead Option, and No Wye/Industrial Lead Only Option. The No Wye/Industrial Lead Only Option has been selected as the preferred option for Phase 1. The preferred option would be located on the least developable parcel of the three options and would not relocate the existing Milpitas Wye onto private property planned for transit oriented development (TOD). Additionally, the No Wye/Industrial Lead Only Option would have the least impact on the future development plans under the Milpitas Transit Area Specific Plan. The length of the retained cut alignment between Curtis Avenue and Trade Zone Boulevard is dependent upon the Milpitas Wye configuration option. With the No Wye/Industrial Lead Only Option, the retained cut alignment would begin at STA 356+00 and end at STA 414+00. This design refinement is shown on Figures B-15A through B-17 of **Appendix B** to this Final SEIR-2.

2.3 REVISIONS TO IMPACT DISCUSSIONS

The nine design refinements identified in this Chapter would result in revisions to the environmental impact discussions in the Draft SEIR-2, as shown in **Section 2.4** of this Chapter. The following discussion considers the potential for the design refinements to change the environmental impact conclusions of the previous EIRs for BART Silicon Valley. Because impacts and mitigations from the FEIR were updated, replaced or incorporated into SEIR-1 and because the Draft SEIR-2 includes design changes since SEIR-1, implications of the design refinements to the environmental impact conclusions primarily apply to the Draft SEIR-2 and the SEIR-1.

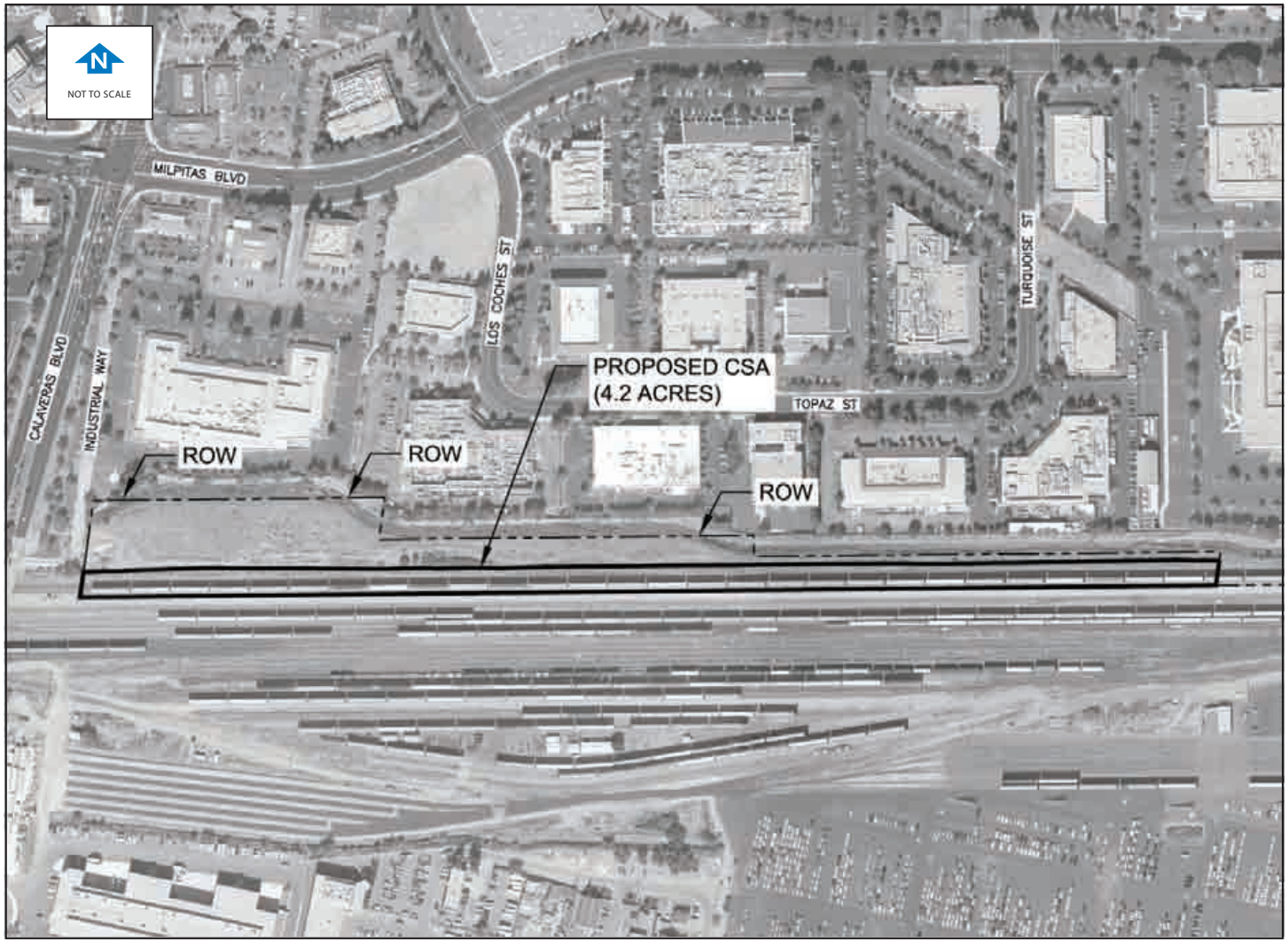


Source: VTA, 2011.

Figure 2-2: Revised Berryessa Station Plan

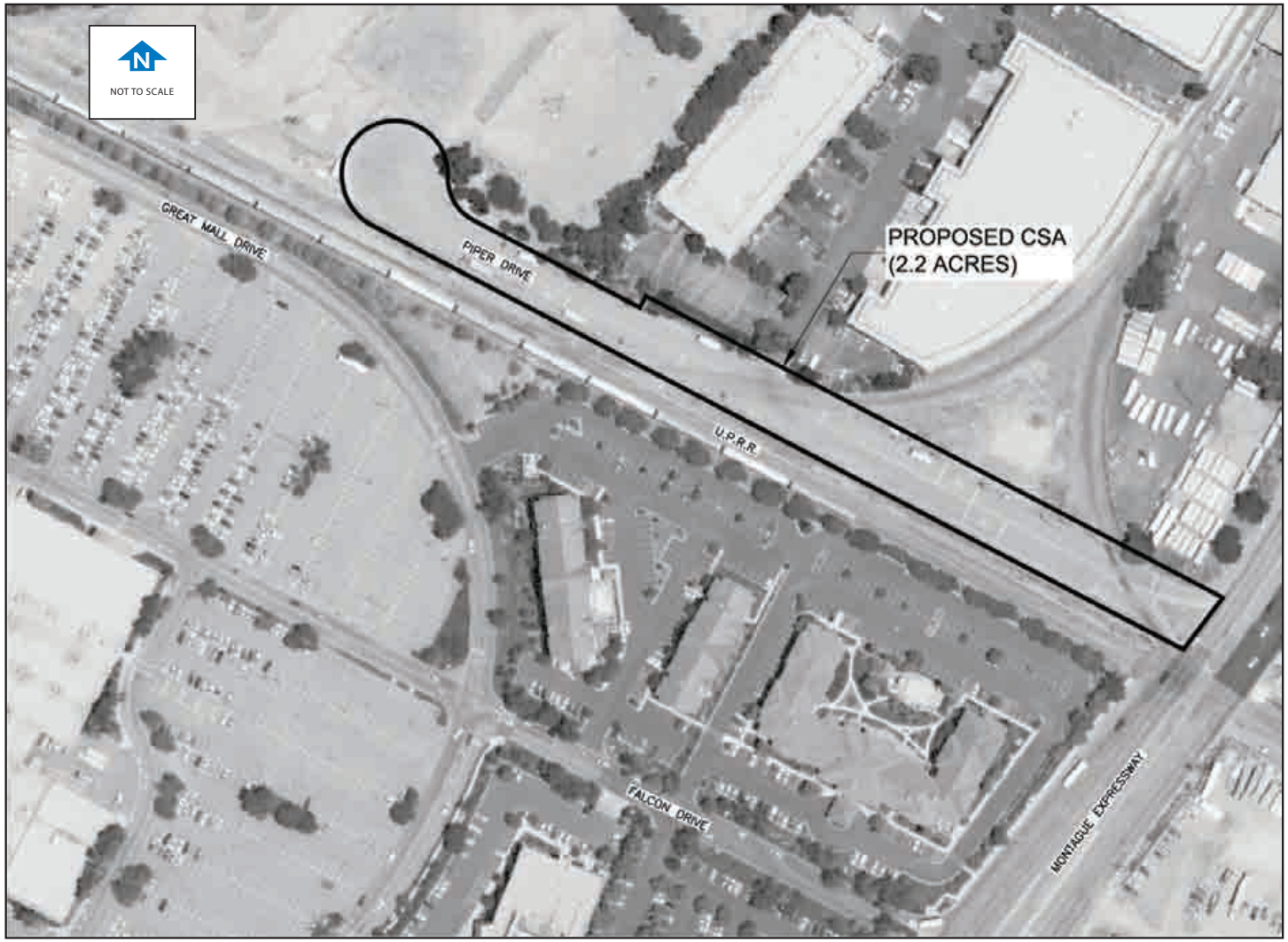
Source: VTA, 2011.

Figure 2-3: Mission Falls Court Construction Staging Areas



Source: VTA, 2011.

Figure 2-4: Calaveras Boulevard Construction Staging Area

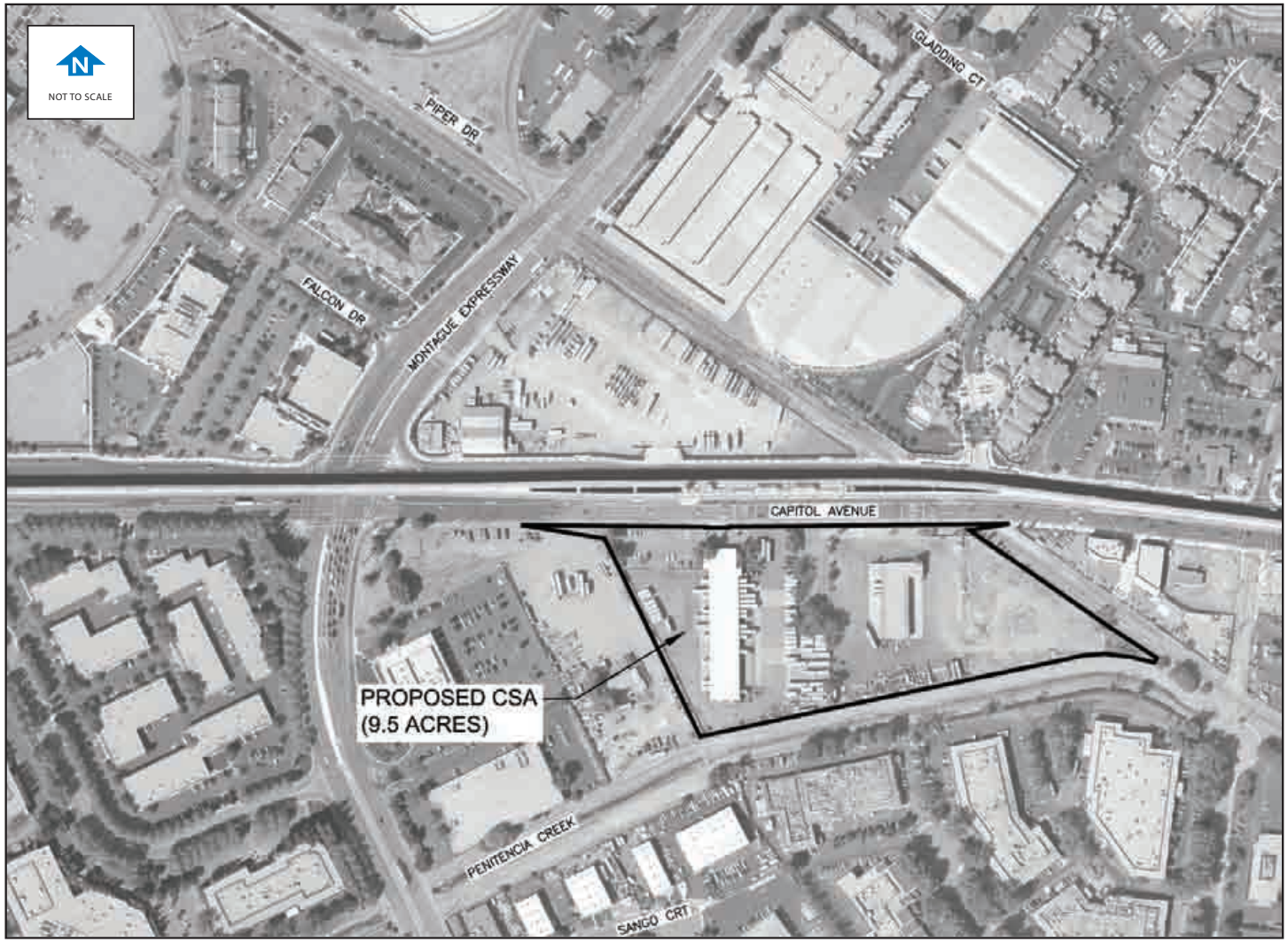


Source: VTA, 2011.

Figure 2-5: Piper Drive Construction Staging Area

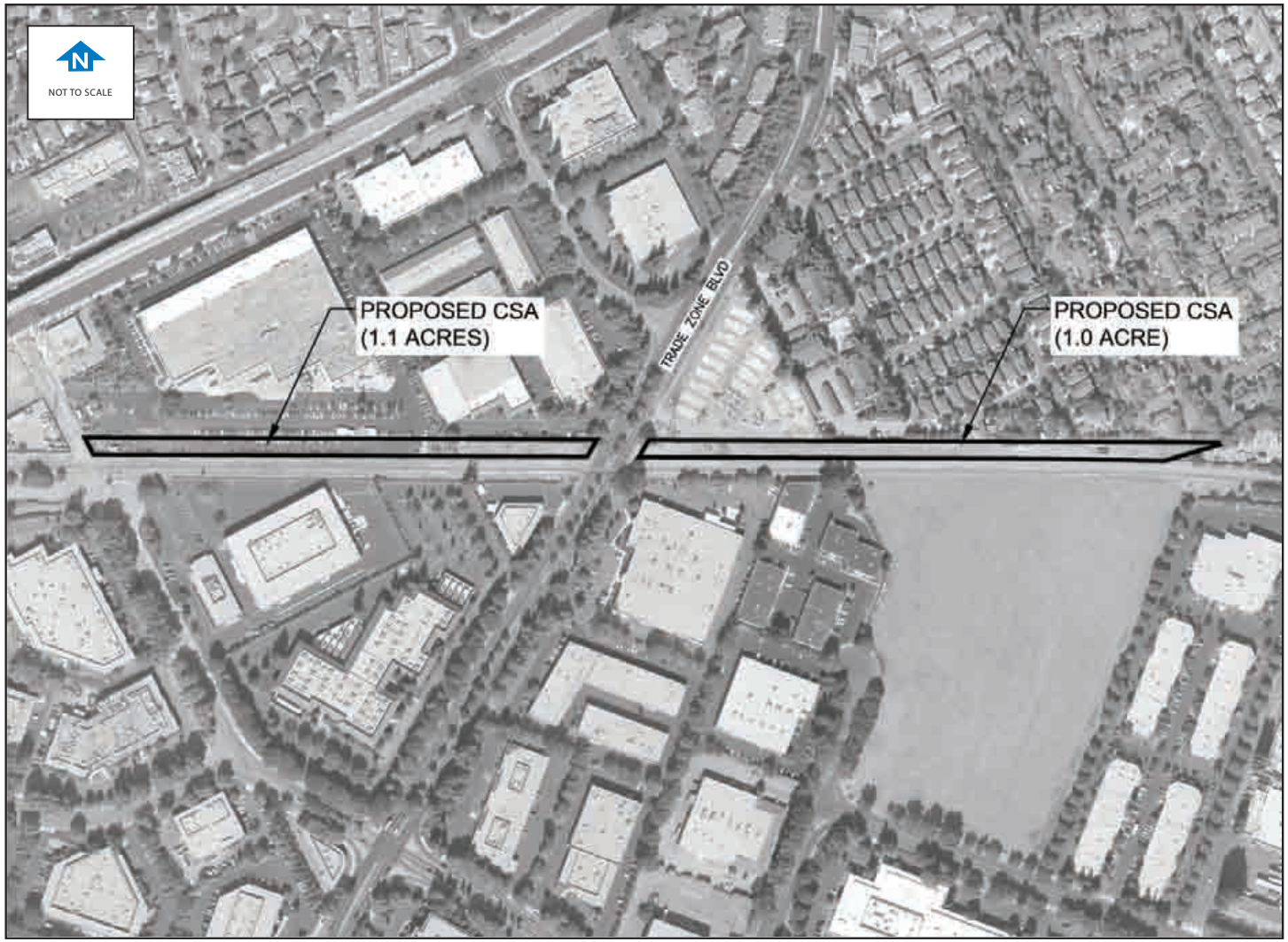
Source: VTA, 2011.

Figure 2-6: Montague Expressway Construction Staging Area



Source: VTA, 2011.

Figure 2-7: Capitol Avenue Construction Staging Area

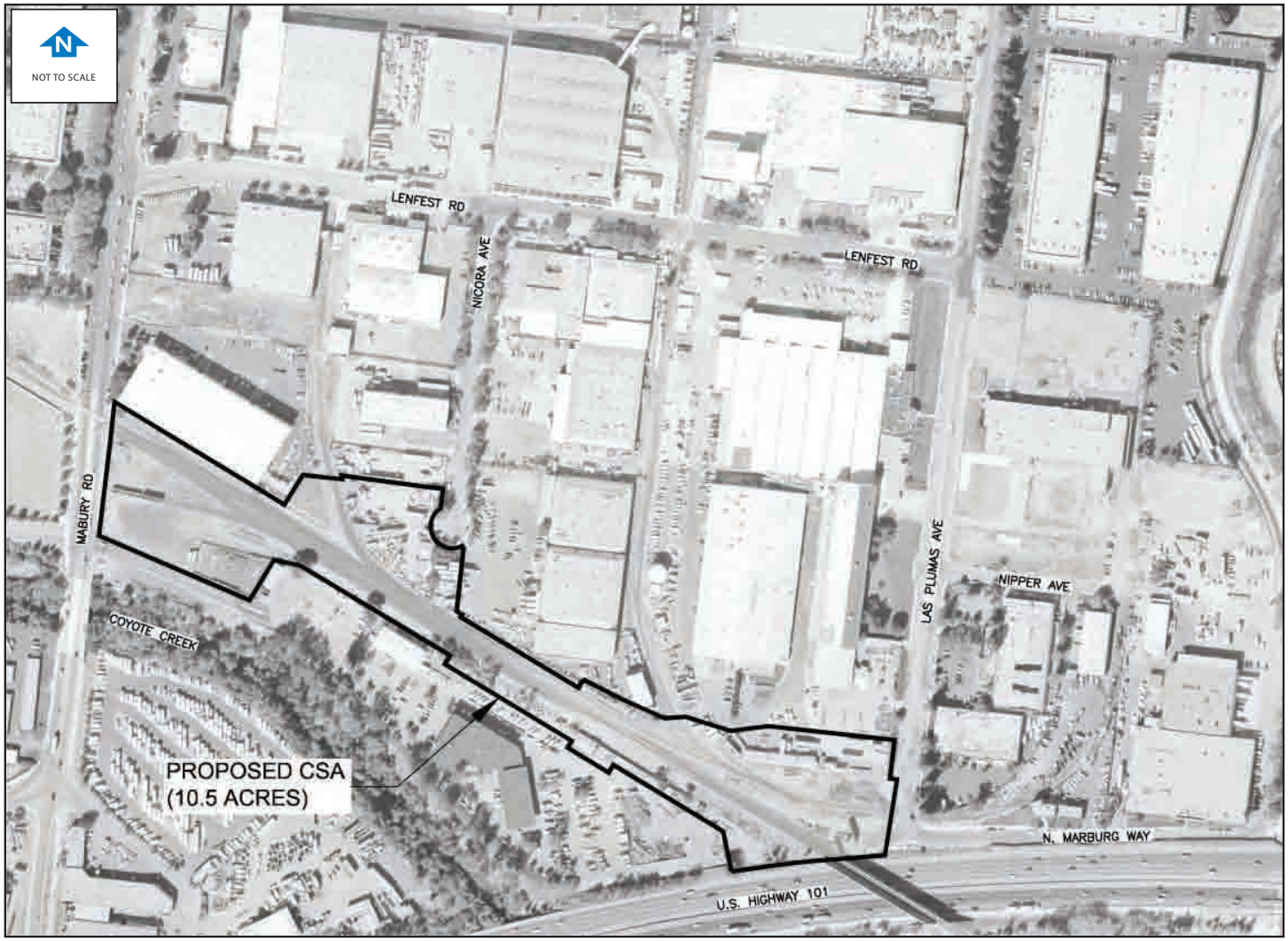


Source: VTA, 2011.

Figure 2-8: Trade Zone Boulevard Construction Staging Area

Source: VTA, 2011.

Figure 2-9: Berryessa Road Construction Staging Area



Source: VTA, 2011.

Figure 2-10: Mabury Road and U.S. 101 Construction Staging Area

Additionally, the Draft SEIR-2 discussions of transportation, air quality, energy, greenhouse gas emissions, and socioeconomics were comprehensively updated for Phase 1 and incorporated all design changes since the SEIR-1. Focused traffic and noise analyses were conducted subsequent to the publication of the Draft SEIR-2 to consider whether the design refinements would introduce any new environmental impacts or require new mitigation for these issue areas.

The following describes the revisions to the applicable environmental impact discussions resulting from each design refinement and considers whether this revision would change the impact conclusion (less than significant, significant, significant and unavoidable) or result in new mitigation measures.

The factors that were considered when evaluating the implications of the design refinements included:

- Did the design refinement occur within the SEIR-1 and Draft SEIR-2 project study area;
- Did the design refinement increase or decrease the level of impact;
- Did the design refinement introduce a new project feature or modify an existing feature, e.g., the elimination of options within a project feature; and
- Did the design refinement remove an existing design feature, e.g, the removal of the extension of the existing detention basin/private park.

Table 2-1 provides a comprehensive list of the design changes from the Draft SEIR-2 and incorporates the revisions as a result of the nine design refinements. **Table 2-1** notes the changes to the recommended project description for each design change using the **bold-underline**/~~strikeout~~ format and defines the environmental analysis topics considered for each design change.

Table 2-1: Design Changes

City	Design Change No.	BART Silicon Valley Feature	Approved Project (FEIR and SEIR-1)	Recommended Project Description (SEIR-2)	Environmental Analysis Section
Fremont, Milpitas, and San Jose	1	Phasing of BART Silicon Valley	No Phasing	Phase 1 would extend the BART alignment 9.9 miles to the Berryessa Station and terminate near Las Plumas Avenue in San Jose. The fleet requirements, operating plans, and ridership and parking forecasts have been updated for Phase 1. The schedule has also been updated, with passenger service to start in 2018 for Phase 1.	All sections
Fremont, Milpitas, and San Jose	2	Access Road from Fremont to San Jose	Not applicable.	Add an access road on the east side the alignment and within the UPRR ROW from Fremont to San Jose. If the BART At Grade Option is selected, add an access road bridge between the BART and UPRR tracks at Dixon Landing Road.	Cultural Resources Hazardous Materials Socioeconomics Water Resources Construction: Air Quality, Cultural Resources, Biological Resources, Hazards, Water Resources
Fremont	~~3~~	Systems Facilities Alternate Location A	Not applicable.	**The Systems Facilities Alternate Location B has been selected as the preferred systems facilities location.** ~~Add an alternate location for High Voltage Substation SRC and Switching Station SRR.~~	Biological Resources Land Use Socioeconomics Visual Quality and Aesthetics Water Resources Construction: Biological Resources, Water Resources

City	Design Change No.	BART Silicon Valley Feature	Approved Project (FEIR and SEIR-1)	Recommended Project Description (SEIR-2)	Environmental Analysis Section
Fremont	~~4~~ **3**	Starting point of Trackwork	The approved project begins at STA 45+00.	Phase 1 trackwork begins at STA 35+00.	Cultural Resources Hazardous Materials Noise and Vibration Socioeconomics Utilities Construction: Biological Resources, Cultural Resources, Energy, Greenhouse Gas Emissions, Hazardous Materials, Noise and Vibration
Fremont	~~5~~ **4**	Drainage Improvements at Toroges Creek (Line C)	Not applicable.	Add a box culvert at Toroges Creek (Line C).	Biological Resources Socioeconomics Water Resources Construction: Air Quality, Biological Resources, Water Resources
Fremont	~~6~~ **5**	Eliminate Drainage Improvements at Unnamed creek	A new box culvert would be constructed by VTA at this unnamed creek.	This improvement is eliminated.	Biological Resources* Water Resources* Construction: Biological Resources, Water Resources*
Fremont	~~7~~ **6**	Eliminate Kato Road Grade Separation	Kato Road would be constructed as a roadway underpass.	This improvement is being constructed by the City of Fremont and has been eliminated from this project.	Hazardous Materials* Socioeconomics* Construction: Hazardous Materials, Water Resources*

City	Design Change No.	BART Silicon Valley Feature	Approved Project (FEIR and SEIR-1)	Recommended Project Description (SEIR-2)	Environmental Analysis Section
Milpitas	~~8~~ **7**	Dixon Landing Road Alignment	BART would be at grade over a new bridge structure over Dixon Landing Road.	There are two options for the alignment in this location: retained cut, or at grade. **The Retained Cut Option has been selected as the preferred alignment.** The Retained Cut Option ~~-~~includes ~~4 alternate locations for~~ **a** pump station~~s~~.	Hazardous Materials Noise and Vibration Socioeconomics Water Resources Construction: Transportation, Hazardous Materials, Noise and Vibration, Water Resources
Milpitas	~~9~~ **8**	Eliminate Drainage Improvements at Berryessa Creek	A new multi-cell box culvert would be implemented.	This improvement is eliminated.	Biological Resources* Socioeconomics* Water Resources* Construction: Biological Resources, Water Resources*
Milpitas	~~10~~ **9**	Systems Facilities Alternate Location B	Not applicable.	Add alternate location for High Voltage Substation SRC and Switching Station SRR	Socioeconomics Visual Quality and Aesthetics Noise and Vibration* Socioeconomics Construction: Noise and Vibration*
Milpitas	**10**	**BART Maintenance Access South of Calaveras Boulevard**	**A high rail vehicle access point would be implemented at Industrial Way (STA 289+00).**	**Relocate high rail vehicle access 200 feet south (STA 295+00). Add new maintenance access facilities, including BART siding track, maintenance building with restrooms, parking/storage area, and a maintenance access road.**	Noise and Vibration Socioeconomics Construction: Noise and Vibration

City	Design Change No.	BART Silicon Valley Feature	Approved Project (FEIR and SEIR-1)	Recommended Project Description (SEIR-2)	Environmental Analysis Section
Milpitas	11	Eliminate South Calaveras Future Station	This station was included in mid-town Milpitas.	This station has been eliminated.	Transportation* Air Quality* Biological Resources* Land Use* Socioeconomics Visual Quality and Aesthetics* Construction: Air Quality, Biological Resources*
Milpitas	12	Curtis Avenue to Trade Zone Boulevard	A retained cut long option was approved.	The length of the retained cut would change based on the Milpitas Wye Relocation Option selected. **The No Wye/Industrial Lead Only Option has been selected as the preferred option.**	Hazardous Materials Noise and Vibration Socioeconomics Water Resources Construction: Hazardous Materials, Noise and Vibration, Water Resources
Milpitas	13	Milpitas Wye	An existing wye would be relocated.	~~There are now three options for the UPRR tracks entering the Wye.~~ **The No Wye/Industrial Lead Only Option has been selected as the preferred option.**	Socioeconomics
Milpitas	14	System Facility North of Montague Expressway	Traction Power Substation Site SME on the east side of the UPRR ROW.	Traction Power Substation Site SME would be located above the BART alignment.	Noise and Vibration Socioeconomics Construction: Noise and Vibration

City	Design Change No.	BART Silicon Valley Feature	Approved Project (FEIR and SEIR-1)	Recommended Project Description (SEIR-2)	Environmental Analysis Section
Milpitas	15	Milpitas Station	Station included a 4-8 level parking structure and 16 bus bays on the east side of the station. A 60-foot-high radio tower would be provided. A pedestrian overcrossing would extend from the east side of Capitol Avenue to the Montague LRT station.	The parking structure was changed to 8 levels, 16 bus bays and four bus layover bays on the west side of the station; bus access from Capitol Avenue and bus only lane on South Milpitas Boulevard; bike path on South Milpitas Boulevard. A radio tower has been eliminated. **The surface parking and/or future transit facilities in the northeastern and northwestern portions of the station site have been eliminated, therefore, the station footprint is now 20 acres.**	Transportation Air Quality Greenhouse Gas Emissions Land Use Noise and Vibration Socioeconomics Visual Quality and Aesthetics Construction: Socioeconomics
Milpitas	16	115 kilovolt Line Relocation at Milpitas Station	The existing 115 kV line at the Milpitas Station would not be relocated.	The existing 115 kV line at the Milpitas Station would be relocated in three locations.	Socioeconomics Utilities Construction: Utilities
San Jose	17	Pump Station Facilities at Trade Zone Boulevard	Pump station was not included within the ROW for this facility.	Pump station north of Trade Zone Boulevard and west of the railroad corridor.	Noise and Vibration Socioeconomics
San Jose	18	Systems Facilities at Hostetter Road	A Train Control Building and Tractor Power Substation Site SMD was proposed.	A traction power substation site is proposed south of Hostetter Road and east of the railroad corridor.	Noise and Vibration Socioeconomics Construction: Noise and Vibration
San Jose	19	Pump Station Facilities at Sierra Road and Lundy Avenue	Pump station within ROW, south of Sierra Road.	Facilities north of Sierra Road and Lundy Avenue intersection and west of the railroad corridor.	Noise and Vibration Socioeconomics

City	Design Change No.	BART Silicon Valley Feature	Approved Project (FEIR and SEIR-1)	Recommended Project Description (SEIR-2)	Environmental Analysis Section
San Jose	**20**	**High Rail Vehicle Access Point North of Berryessa Road**	**Not applicable.**	**Add high rail vehicle access point and maintenance access road north of Berryessa Road.**	Noise and Vibration Socioeconomics Construction: Noise and Vibration
San Jose	~~20~~ **21**	Berryessa Station	A location and layout for Berryessa Station was proposed. The Security Facility was not located at Berryessa Station	The location and layout of Berryessa Station has been altered with new location of station, transit center, access road and parking garage. The Security Facility is now located at Berryessa Station. **The surface parking and/or future transit facilities on the west side of the UPRR tracks has been eliminated. The station footprint is now 30 acres.**	Transportation Air Quality Biological Resources Greenhouse Gas Emissions Land Use Noise and Vibration Socioeconomics Visual Quality and Aesthetics Water Resources Construction: Socioeconomics
San Jose	~~21~~ **22**	Electrical Facilities near Las Plumas Road	Two system facilities sites were identified.	A new site was identified for the Gap Breaker Station, High Voltage Substation and Switching Station. The two previous sites were removed.	Noise and Vibration Socioeconomics Construction: Noise and Vibration, Socioeconomics
San Jose	~~22~~ **23**	Maintenance and Storage of BART Trains for Phase 1	Not applicable.	Configuration for terminus of Phase 1 is described. Storage would be provided near Berryessa Station. Maintenance facilities would be located at the existing BART District Hayward Yard location. (Hayward Main Shop improvements to be environmentally cleared by BART).	Cultural Resources Noise and Vibration Socioeconomics Construction: Cultural Resources, Noise and Vibration

City	Design Change No.	BART Silicon Valley Feature	Approved Project (FEIR and SEIR-1)	Recommended Project Description (SEIR-2)	Environmental Analysis Section
Multiple Cities	~~23~~ **24**	Construction Staging Areas (CSAs)	CSAs adjusted as described in **Table 3-4**.	CSAs adjusted as described in **Table 3-4**. **There are CSAs at Mission Falls Court, Calaveras Boulevard, Piper Drive, Montague Expressway, Capitol Avenue, Trade Zone Boulevard, Berryessa Road, and Mabury Road/US 101.**	Construction: Noise and Vibration, Socioeconomics
Milpitas	**25**	**Remove Extension of Existing Detention Basin/Private Park**	**Extend existing detention basin/private park to accommodate sound wall.**	**The extension of the existing detention basin/private park is removed.**	Socioeconomics Water Resources

Note: * Environmental analysis section has been revised to remove discussion of the eliminated project feature.
Source: VTA, **2011** ~~2010.~~

2.3.1 DESIGN REFINEMENT 1 – DRAFT SEIR-2 DESIGN CHANGE 3, SYSTEMS FACILITIES ALTERNATE LOCATION A

Systems Facilities Alternate Location A has been eliminated from Phase 1.

Impact Areas

- Biological Resources
- Land Use
- Socioeconomics
- Visual Quality and Aesthetics
- Water Resources
- Construction: Biological Resources, Water Resources

Changes to Impact Discussions

No significant impacts related to this design change were identified for biological resources, land use, socioeconomics, visual quality and aesthetics, water resources, or construction – water resources in the Draft SEIR-2. These conclusions would not change as a result of this design refinement.

In regards to biological resource impacts during construction, no potential impacts to burrowing owls would occur and implementation of the burrowing owl mitigation measures from the SEIR-1 would no longer be required at this location.

The description of Phase 1 in **Chapter 3, Phase 1 Recommended Project Description**, of this Final SEIR-2 identifies Systems Facilities Alternate Location B as the preferred systems facilities location. **Section 2.4** of this Chapter shows the text revisions to the Draft SEIR-2 related to the selection of Systems Facilities Alternate Location B as the preferred systems facilities location.

Conclusion

No new impacts generating the need for new mitigation measures would result from implementing the design refinement.

2.3.2 DESIGN REFINEMENT 2 – DRAFT SEIR-2 DESIGN CHANGE 8, DIXON LANDING ROAD ALIGNMENT

The Dixon Landing Road Retained Cut Option has been selected as the preferred alignment for Phase 1. The pump station Alternate Locations A, B, and D were not selected and Alternate Location C has been selected as the pump station location.

Impact Areas

- Hazardous Materials
- Noise and Vibration
- Socioeconomics
- Water Resources
- Construction: Transportation, Hazardous Materials, Noise and Vibration, Water Resources

Changes to Impact Discussions

The hazardous materials mitigation measures identified in the SEIR-1 and the Draft SEIR-2 during Phase 1 operation and construction would remain applicable to the Retained Cut Option and the pump station Alternative Location C due to the potential for contaminated groundwater at this location. A significant impact to hazardous materials would remain with implementation of the retained cut design and pump station Alternate Location C; however, this impact would be reduced to a less-than-significant level with mitigation.

The noise and vibration mitigation measures identified in the Draft SEIR-2 for operation and construction would remain applicable to the Retained Cut Option and the pump station Alternate Location C. No changes to the noise or vibration impact conclusions would be required, as the Phase 1 noise at this location only considered implementation of one of the four pump station locations included in the Draft SEIR-2. While the impact conclusions would not change as a result of this design refinement, the noise and vibration mitigation measures have been updated based on refined engineering and noise analyses since the Draft SEIR-2. An additional noise mitigation option has also been introduced. Refer to **Chapter 5, Draft SEIR-2 Errata**, of this Final SEIR-2 for an explanation of the noise mitigation updates.

No new impacts relative to socioeconomics or water resources would occur as a result of the selection of the Dixon Landing Road Retained Cut Option as the preferred alignment option and pump station Alternate Location C.

Selection of the Dixon Landing Road Retained Cut Options would avoid a significant and unavoidable transportation construction impact. The At Grade Option would result in significant and unavoidable impacts to vehicular traffic due to required roadway closures during construction and the infeasibility of mitigation measures due to ROW constraints. No significant transportation construction impacts would occur with the Retained Cut Option. **Mitigation Measure CNST-TR-1**, which would require VTA to develop a Traffic Management Plan in coordination with the City of Milpitas, would not be required with the Retained Cut Option.

In regards to water resources construction impacts, the Best Management Practices to reduce construction impacts to water resources would remain applicable to the Retained Cut Option and pump station Alternate Location C.

The description of Phase 1 in **Chapter 3, Phase 1 Recommended Project Description**, of this Final SEIR-2 identifies the Retained Cut Option as the preferred alignment and the pump station Alternate Location C only. **Section 2.4** of this Chapter shows the text revisions to the Draft SEIR-2 related to the selection of the Retained Cut Option as the preferred alignment. **Section 2.4** of this Chapter shows the text revisions to the Draft SEIR-2 related to the selection of the pump station Alternate Location C.

Conclusion

Selection of the Retained Cut Alignment as the preferred alignment at Dixon Landing Road would avoid a significant and unavoidable impact related to vehicular traffic curing construction and the associated mitigation measure identified in the Draft SEIR-2 would not be required. Elimination of the pump station Alternate Locations A, B, and D do not result in additional impacts beyond those identified in the SEIR-1 and the Draft SEIR-2. No new impacts generating the need for new mitigation measures would result from implementing the design refinement.

2.3.3 DESIGN REFINEMENT 3 – NEW DESIGN: BART MAINTENANCE ACCESS SOUTH OF CALAVERAS BOULEVARD

The high rail vehicle access point new maintenance access facilities would be shifted south of Calaveras Boulevard, including a BART siding track, maintenance building with restrooms, gravel parking lot/materials storage area, and maintenance access road from Industrial Way.

Impact Areas

- Noise and Vibration
- Socioeconomics
- Construction: Noise and Vibration

Changes to Impact Discussions

In regards to noise and vibration, the addition of the BART siding track and associated maintenance facilities would result in noise from maintenance activities or equipment. The BART siding track could also result in noise in the event two operational trains are utilizing the alignment and the siding track simultaneously. In this event, the train on the siding train would typically be stationary while it allows the second train to pass along the main rail alignment.

The BART siding track would also be utilized to temporarily store non-operational trains, which would not result in any increased noise levels. The noise levels associated with these maintenance facilities would be minimal and would not substantially increase the noise levels already considered in the Draft SEIR-2. These facilities would also not result in substantial increases in vibration, as only one BART train (in each direction) would be in motion on the rail alignment at any given time. No new operational noise or vibration impacts would occur and no new mitigation would be required. The operational noise and vibration evaluation in the Draft SEIR-2 would remain unchanged.

In regards to socioeconomics, the BART Maintenance Facilities South of Calaveras Boulevard would not result in any business or residential displacements. Therefore, impacts to socioeconomics would be less than significant and no new mitigation would be required.

The construction activities associated with the BART siding track and maintenance facilities would be similar in scope and location as those described in the SEIR-1. The construction noise and vibration evaluation in the SEIR-1 would remain unchanged and the mitigation measures from the SEIR-1 would remain applicable to this design refinement.

A discussion of the BART Maintenance Access south of Calaveras Boulevard relative to noise and vibration and socioeconomics has been added to the Draft SEIR-2. These additions are shown in **Section 2.4** of this Chapter. The description of Phase 1 in **Chapter 3, Phase 1 Recommended Project Description**, of this Final SEIR-2 includes these maintenance facilities.

Conclusion

Moving the new maintenance access facilities south of Calaveras Boulevard does not change the conclusions of the impact discussions. No new impacts generating the need for new mitigation measures would result from implementing the design refinement.

2.3.4 DESIGN REFINEMENT 4 – NEW DESIGN: EXTENSION OF EXISTING DETENTION BASIN/PRIVATE PARK

The extension of the existing detention basin/park to accommodate the water level increase from construction of the sound wall considered in the FEIR and SEIR-1 has been removed.

Impact Areas

- Socioeconomics
- Water Resources

Changes to Impact Discussions

In regards to socioeconomics, the removal of the extension of the existing detention basin/private park would not result in any business or residential displacements. Therefore, impacts to socioeconomics would be less than significant and no new mitigation would be required.

The FEIR and SEIR-1 included the extension of this detention basin/private park to address the potential water level increase in the detention basin with the installation of a sound wall for BART Silicon Valley. Based on refined engineering since the Draft SEIR-2, installation of the sound wall is anticipated to result in a 0.1-foot net increase in water level within the detention basin. This increase in the net water level would not exceed the design capacity of the existing detention basin and the extension of the detention basin/private park is no longer required as part of Phase 1. No new impacts relative to water resources would occur as a result of this design refinement.

A discussion of the removal of the detention basin/private park extension relative to water resources has been added to the Draft SEIR-2. These additions are shown in **Section 2.4** of this Chapter. The description of Phase 1 in **Chapter 3, Phase 1 Recommended Project Description**, of this Final SEIR-2 incorporates the removal of this design.

Conclusion

Eliminating the extension of the existing detention basin/private park updates the conclusions of the previous documents based on refined engineering. No new impacts generating the need for new mitigation measures would result from implementing the design refinement.

2.3.5 DESIGN REFINEMENT 5 – DRAFT SEIR-2 DESIGN CHANGE 15, MILPITAS STATION

The Milpitas Station footprint has been reduced by eliminating the surface parking and/or future transit facilities in the northeastern and northwestern portions of the station site plan. The station footprint is now 20 acres.

Impact Areas

- Transportation
- Air Quality
- Greenhouse Gas Emissions
- Land Use
- Noise and Vibration
- Socioeconomics
- Visual Quality and Aesthetics
- Construction: Socioeconomics

Changes to Impact Discussions

In regards to transportation, Design Refinement 5 at the Milpitas Station would not significantly alter traffic patterns at the local intersections and would not result in any new traffic impacts within the station vicinity.[1] The station site access point would remain unchanged and no new impacts relative to access or circulation would occur. The Draft SEIR-2 impact conclusions provide a conservative estimate of the traffic impacts at the Milpitas Station and no changes would be required.

In regards to air quality, the reduced footprint would not result in any changes to Phase 1's consistency with air quality plans and thresholds. The parking structure at the Milpitas Station would remain and no changes to the anticipated carbon monoxide concentrations would occur and emission levels would remain below the established thresholds.

The reduced Milpitas Station footprint would not alter the vehicle miles traveled (VMT) for Phase 1 and no related changes to greenhouse gas emissions would occur.

In regards to land use, the location of the Milpitas Station would not change and the station would continue to be compatible with the existing land uses in the vicinity, consistent with local and regional plans, and would not disrupt community cohesion.

In regards to noise and vibration, the elimination of the future surface parking areas could result in a slight decrease in vehicle traffic noise at the Milpitas Station. Noise and vibration impacts would remain less than significant and no changes to the Draft SEIR-2 conclusions are required.

In regards to socioeconomics, the modification to Milpitas Station footprint would reduce the number of business displacements. Approximately 15 businesses would still be displaced as a result of the Milpitas Station and VTA would continue to provide financial assistance and relocation services to owners of businesses as part of the VTA Relocation Assistance Program. Although the Milpitas Station footprint has been reduced, some of the parcels previously identified as part of the station footprint require permanent easements. Refer to **Chapter 5, Draft SEIR-2 Errata**, of this Final SEIR-2 for of the revised list of all permanent easements required for Phase 1. No significant impacts would occur and no changes to the Draft SEIR-2 conclusions are required.

[1] Kimley-Horn and Associates, Inc, Traffic Operations Comparison for the Proposed Milpitas SVRT Station Memorandum, December 16, 2010.

Eliminating the proposed surface parking areas would not alter the visual quality of the site, as the station building and parking structures would remain the primary visual features on the site and visual impacts would remain less-than-significant.

In regards to socioeconomics impacts during construction, the reduced footprint at Milpitas Station would not result in any modifications to the number of business displacements. Although the Milpitas Station footprint has been reduced, some of the parcels previously identified as part of the station footprint require temporary easements. Refer to **Chapter 5, Draft SEIR-2 Errata**, of this Final SEIR-2 for of the revised list of all temporary easements required for Phase 1. However, the design refinements to Milpitas Station would not change the Draft SEIR-2 impact conclusions and construction related socioeconomic impacts at this location would remain less than significant.

Clarifying text has been added to the Draft SEIR-2 regarding the Milpitas Station design refinements relative to transportation and socioeconomics. These revisions are shown in **Section 2.4** of this Chapter. The description of Phase 1 in **Chapter 3, Phase 1 Recommended Project Description**, of this Final SEIR-2 incorporates the design refinements at the Milpitas Station.

Conclusion

Reducing the footprint of the Milpitas Station does not change the conclusions of the impact discussions. No new impacts generating the need for new mitigation measures would result from implementing the design refinement.

2.3.6 DESIGN REFINEMENT 6 – NEW DESIGN: HIGH RAIL VEHICLE ACCESS POINT NORTH OF BERRYESSA ROAD

This design refinement would add a high rail vehicle access point and access road just north of Berryessa Road.

Impact Areas

- Noise and Vibration
- Socioeconomics
- Construction: Noise and Vibration

Changes to Impact Discussions

In regards to noise and vibration, the high rail vehicle access point and access road would result in noise associated with maintenance activities and equipment. The increased noise levels associated with these maintenance facilities would be minimal and would not substantially increase the noise and vibration levels

already considered in the Draft SEIR-2. No new noise or vibration impacts would occur and no new mitigation would be required. The noise and vibration evaluation in the Draft SEIR-2 would remain unchanged.

In regards to socioeconomics, the new high rail vehicle access point and associated maintenance facilities would not result in any business or residential displacements. Therefore, impact to socioeconomics would be less than significant and no new mitigation would be required.

The construction activities associated with the high rail vehicle access point would be similar in scope and location as those described in the SEIR-1. The construction noise and vibration evaluation in the SEIR-1 would remain unchanged and the mitigation measures from the SEIR-1 would remain applicable to this design refinement.

A discussion of the high rail vehicle access point and access road just north of Berryessa Road has been added to the Draft SEIR-2 relative to noise and vibration and socioeconomics. These additions are shown in **Section 2.4** of this Chapter. The description of Phase 1 in **Chapter 3, Phase 1 Recommended Project Description**, of this Final SEIR-2 includes this new high rail vehicle access point.

Conclusion

Adding a new high rail vehicle access point and access road just north of Berryessa Road does not change the conclusions of the impact discussions in SEIR-1 and the Draft SEIR-2. No new impacts generating the need for new mitigation measures would result from implementing design refinement 6.

2.3.7 DESIGN REFINEMENT 7 – DRAFT SEIR-2 DESIGN CHANGE 20, BERRYESSA STATION

The Berryessa Station footprint has been reduced by eliminating the surface parking and/or future transit facilities west of the UPRR tracks.

Impact Areas

- Transportation
- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Land Use
- Noise and Vibration
- Socioeconomics
- Visual Quality and Aesthetics

- Water Resources
- Construction: Socioeconomics

Changes to Impact Discussions

In regards to transportation, the elimination of the future transit and/or surface parking area would not result in any changes to the transportation impact conclusions in the Draft SEIR-2. Berryessa Station Way would continue to provide access to all station facilities. Access to Berryessa Station way would continue to be provided via Mabury Road to the south and Berryessa Road to the north. Given that all station facilities would remain accessible from both Mabury and Berryessa roads and that travel paths within the station site have not be altered, the refined Berryessa Station site plan would not result in any new traffic circulation impacts at any local intersections. The transportation conclusions in the Draft SEIR-2 remain applicable.[2]

In regards to air quality, the reduced station footprint would not result in any changes to Phase 1's consistency with air quality plans and thresholds. The parking structure at the Berryessa Station would remain and no changes to the anticipated carbon monoxide concentrations would occur and emission levels would remain below the established thresholds.

In regards to biological resources, the refinements to the Berryessa Station would not result in any changes to the biological resources impact conclusions in the Draft SEIR-2. Setbacks from Upper Penitencia and Coyote creeks would still be implemented and Mitigation Measure BIO-1 would remain applicable to reduce impacts to riparian habitats to a less-than-significant level.

The reduced Milpitas Station footprint would not alter the vehicle miles traveled (VMT) for Phase 1 and no related changes to greenhouse gas emissions would occur.

In regards to land use, the location of the Berryessa Station would not change and the station would continue to be compatible with the existing land uses in the vicinity, consistent with local and regional plans, and would not disrupt community cohesion.

In regards to noise and vibration, the elimination of the future surface parking area could result in a slight decrease in vehicle traffic noise at the Berryessa Station. Noise and vibration impacts would remain less than significant with mitigation and no changes to the Draft SEIR-2 conclusions are required.

[2] Kimley-Horn and Associates, Inc, Traffic Operations Comparison for the Proposed Berryessa SVRT Station Memorandum, December 16, 2010.

In regards to socioeconomics, the reduced footprint at the Berryessa Station would not result in any modifications to the number of business displacements. Although the Berryessa Station footprint has been reduced, some of the parcels previously identified as part of the station footprint require permanent easements. Refer to **Chapter 5, Draft SEIR-2 Errata**, of this Final SEIR-2 for the revised list of all permanent easements required for Phase 1. However, the design refinements to the Berryessa Station would not change the Draft SEIR-2 impact conclusions and socioeconomic impacts at this location would remain less than significant.

In regards to visual quality and aesthetics, the elimination of the proposed surface parking areas would not alter the visual quality of the site, as the station building and parking structures would remain as the primary visual features on the site. Therefore, visual impacts would remain less than significant.

In regards to water resources, since the location of the Berryessa Station would not change, the potential for flooding in the station area would remain. However, the flood protection measures from the proposed Upper Penitencia Creek Flood Control Project (anticipated for completion in 2012) would reduce the significant flooding impacts and no changes to the Draft SEIR-2 impact conclusions are required.

In regards to socioeconomics impacts during construction, the reduced footprint at Berryessa Station would not result in any modifications to the number of business displacements. Although the Berryessa Station footprint has been reduced, some of the parcels previously identified as part of the station footprint require temporary easements. Refer to **Chapter 5, Draft SEIR-2 Errata**, of this Final SEIR-2 for the revised list of all temporary easements required for Phase 1. The design refinements to Berryessa Station would not change the Draft SEIR-2 impact conclusions and construction related socioeconomic impacts at this location would remain less than significant.

Clarifying text relative to the design refinements at the Berryessa Station have been added to the Draft SEIR-2 relative to transportation and socioeconomics. These revisions are shown in **Section 2.4** of this Chapter. The description of Phase 1 in **Chapter 3, Phase 1 Recommended Project Description**, of this Final SEIR-2 incorporates the design refinements to the Berryessa Station.

Conclusion

Reducing the Berryessa Station footprint does not change the conclusions of the impact discussions. No new impacts generating the need for new mitigation measures would result from implementing the design refinement.

2.3.8 DESIGN REFINEMENT 8 – DRAFT SEIR-2 DESIGN CHANGE 23, CONSTRUCTION STAGING AREAS

The Montague Expressway CSA would be added as part of this design refinement. No other changes to the CSAs would occur.

Impact Areas

- Construction: Noise and Vibration,
- Construction: Socioeconomics

Changes to Impact Discussions

The construction noise and vibration associated with the development of the Milpitas Station was already considered in the FEIR and SEIR-1 and mitigation measures were incorporated to reduce construction noise and vibration to a less-than-significant level. Since the new Montague Expressway CSA would be located within a former footprint of the Milpitas Station, the construction noise and vibration impacts to the nearby sensitive receptors has already been considered and no new impacts would occur. The same mitigation measures identified in the FEIR and SEIR-1, such as temporary sound walls, noise control curtains, or other measures to comply with FTA noise guidelines, would be applied to the Montague Expressway CSA. No new mitigation would be required and the construction noise and vibration impact conclusions would not change. Construction noise impacts were considered significant and unavoidable, while construction vibration impacts were found to be less than significant with mitigation.

In regards to construction related socioeconomics impacts this CSA would be located in the former footprint of the surface parking and/or future transit facilities in the northwestern portion of the Milpitas Station (see Design Refinement 5), in the area of disturbance already considered in the Draft SEIR-2. No new socioeconomics impacts would result than previously described when this area was analyzed as a permanent part of Milpitas Station and therefore, the Draft SEIR-2 socioeconomics conclusions would not change.

A discussion of the Montague Expressway CSA has been added to the Draft SEIR-2 relative to construction. These additions are shown in **Section 2.4** of this Chapter.

Conclusion

Adding the Montague Expressway CSA does not change the conclusions of the impact discussions. No new impacts generating the need for new mitigation measures would result from implementing the design refinement.

2.3.9 DESIGN REFINEMENT 9 – DRAFT SEIR-2 DESIGN CHANGE 13, MILPITAS WYE

The No Wye/Industrial Lead Only Option has been selected as the preferred configuration for Phase 1.

Impact Areas

- Socioeconomics

Changes to Impact Discussions

No new impacts relative to socioeconomics would occur as a result of the selection of the No Wye/Industrial Lead Only Option as the preferred configuration for Phase 1.

The description of Phase 1 in **Chapter 3, Phase 1 Recommended Project Description**, of this Final SEIR-2 incorporates the selection of the No Wye/Industrial Lead Only Option as the preferred configuration for Phase 1.

Conclusion

Selection of the No Wye/Industrial Lead Only Option as the preferred option would not result in additional impacts beyond those identified in the SEIR-1 and the Draft SEIR-2. No new significant impacts generating the need for new mitigation measures would result from implementing the design refinement.

2.4 REVISIONS TO DRAFT SEIR-2 ENVIRONMENTAL ANALYSIS

The revisions to **Section 4.1** through **4.21** in **Chapter 4, Environmental Analysis**, of the Draft SEIR-2 as a result of the design refinements are identified below. The revisions to the Draft SEIR-2 environmental analysis are organized by design refinement. Additions to the Draft SEIR-2 text are shown in **bold-underline** and deletions are shown in ~~strikeout~~.

As shown in **Table 2-1**, the nine design refinements would result in changes to the numbering sequence of the design changes considered in the Draft SEIR-2. **Table 2-1** reflects the revised design change number sequence. Due to the extent of the design change references throughout the Draft SEIR-2, the specific text changes showing the revisions to the Draft SEIR-2 design change numbers are not shown in this Final SEIR-2. While not specifically shown in the **bold-underline**/~~strikeout~~ format, the revisions to the design change numbering shown in **Table 2-1** have been carried forward throughout this Final SEIR-2.

2.4.1 DESIGN REFINEMENT 1 – DRAFT SEIR-2 DESIGN CHANGE 3 – SYSTEMS FACILITIES ALTERNATE LOCATION A

Subsection 4.4.4.4 on page 4.4-8 of the Draft SEIR-2 has been revised as follows:

4.4.4.4 Design Change 3. Systems Facilities Alternate Location~~s~~ A (STA 28+00)

During preliminary engineering, an alternate location **(Alternate Location A)** to that described above for the High Voltage Substation SRC and Switching Station SRR was identified in a vacant lot in Fremont between Warm Springs Court and the UPRR ROW. The site provides potential habitat for two special-status species known to occur in the project area: burrowing owl and Congdon's tarplant. These species were not identified at the site during the field survey or have been known to occur at the site. **The Systems Facilities Alternate Location B has been selected as the preferred systems facilities location.**

Subsection 4.12.4.1 under the heading "Design Change 3. Systems Facilities Alternate Location A (STA 28+00) on page 4.12-8 of the Draft SEIR-2 has been revised as follows:

Design Change 3. Systems Facilities Alternate Location A (STA 28+00)

The Systems Facilities Alternate Location A for the High Voltage Substation SRC and Switching Station SRR would be located on a vacant lot in an area surrounded by industrial land uses. Alternate Location A would be compatible with the existing land uses due to the similar types of use. Alternate Location A would have a less-than-significant impact with respect to compatibility with surrounding land uses, and no mitigation is required. **The Systems Facilities Alternate Location B has been selected as the preferred systems facilities location.**

Subsection 4.15.4.1, under the heading "City of Fremont" and subheading "Design Change 3. Systems Facilities Alternate Location A (STA 28+00)" on page 4.15-6 of the Draft SEIR-2 has been revised as follows:

Design Change 3. Systems Facilities Alternate Location A (STA 28+00)

The proposed High Voltage Substation SRC and Switching Station SRR Alternate Location A (STA 28+00) are located within a vacant field. This Phase 1 feature would not cause the displacement of any residence or

business; therefore the impact would be less than significant. **The Systems Facilities Alternate Location B has been selected as the preferred systems facilities location.**

Subsection 4.17.4.2 on pages 4.17-6 and 4.17-7 of the Draft SEIR-2 has been revised to include an additional sentence at the end of the subsection as follows:

The Systems Facilities Alternate Location B has been selected as the preferred systems facilities location.

Subsection 4.18.4.2 on pages 4.18-3 and 4.18-4 of the Draft SEIR-2 has been revised to include an additional sentence at the end of the subsection as follows:

The Systems Facilities Alternate Location B has been selected as the preferred systems facilities location.

Subsection 4.19.4.3, paragraph 1, on page 4.19-21 of the Draft SEIR-2 has been revised as follows:

The discussion in subsection 4.19.5.1 of the FEIR related to temporary impacts to Congdon's tarplant, wetlands and waters of the United States, riparian habitat, nonnative grasslands, and several bat species remains applicable in the SEIR-2. Updated information provided in the SEIR-1, subsection 4.18.5.3, including mitigation measures that further clarify requirements to avoid, minimize, or compensate for impacts to nesting raptors, steelhead and other aquatic species, and western burrowing owls, remains applicable in this SEIR-2. Note that the mitigation measure applicable to burrowing owls for preconstruction surveys, avoidance of occupied burrows, passive relocation and, if necessary, habitat preservation is also applicable if burrowing owls are found to occupy the vacant lot identified as an alternate location for High Voltage Substation SRC and Switching Station SRR (see Design Change 3, System Facilities Alternate Location A, in **subsection 4.4.4**). Congdon's tarplant is discussed is **Section 4.4, Biological Resources**. **The Systems Facilities Alternate Location B has been selected as the preferred systems facilities location.**

2.4.2 DESIGN REFINEMENT 2 – DRAFT SEIR-2 DESIGN CHANGE 8. DIXON LANDING ROAD ALIGNMENT

Subsection 4.2.2.2, paragraphs 1 and 2, on page 4.2-2 of the Draft SEIR-2 have been revised as follows:

Phase 1 does not include any changes to local streets or intersections that could create a design hazard. All roadway geometrics and BART alignment features have been designed to conform with applicable city, county, or Caltrans standards and would therefore meet the necessary

design safety requirements. Further, any modifications to the existing Union Pacific Railroad (UPRR) freight crossings with local roadways have been designed in accordance with the California Public Utilities Commission (CPUC) standards and will be subject to CPUC approval prior to construction. There are three existing at grade UPRR crossings with local roadways along the Phase 1 alignment: Mission Boulevard **(State Route 262)**, Kato Road, and Dixon Landing Road. The Mission Boulevard **(State Route 262)** and Kato Road **UPRR** crossings will be grade separated by other agencies. Depending on the option selected for the Dixon Landing Road Alignment per Design Change ~~8~~ **7**, the existing UPRR crossing **at Dixon Landing Road** would either remain at grade or would be grade separated. **The Retained Cut Option has been selected as the preferred alignment where the UPRR crossing at Dixon Landing Road would remain at grade.** ~~Therefore,~~ Phase 1 would not substantially increase hazards due to a design feature. No mitigation is required.

In regards to emergency access along the Phase 1 portion of the BART alignment, Phase 1 includes a maintenance access road along most of the BART alignment. Emergency vehicles can access this road in the event of an emergency along the Phase 1 alignment. Depending on the option selected for the Dixon Land Road Alignment per Design Change ~~8~~ **7**, emergency access would either continue as per existing conditions or would be improved with a grade separated UPRR crossing. **The Retained Cut Option has been selected as the preferred alignment where the UPRR crossing at Dixon Landing Road would remain at grade.** Phase 1 would not require changes to the local street system that would significantly impact emergency access. Phase 1 would not result in inadequate emergency access and no mitigation is required.

Subsection 4.11.4, paragraph 1, on page 4.11-4 of the Draft SEIR-2 has been revised as follows:

New or updated information has become available since certification of the SEIR-1 for 5 of the ~~23~~ **25** design changes, including the access road from Fremont to San Jose, the modified starting point of BART Silicon Valley, the elimination of the Kato Road grade separation, ~~the~~ **a** pump station**,** ~~alternate locations~~ **located within the UPRR corridor south of Dixon Landing Road, on the east side of the BART tracks** for the Dixon Landing Road BART Retained Cut Option, and the retained cut alternate locations from Curtis Avenue and Trade Zone Boulevard. **The Dixon Landing Road Retained Cut Option has been selected as the preferred alignment**. The hazardous materials impacts resulting from these five design changes are discussed below.

Subsection 4.11.4.4 on page 4.11-5 of the Draft SEIR-2 has been revised as follows:

> In the SEIR-1, two options were analyzed for the configuration of the BART alignment as it crossed Dixon Landing Road: at grade and retained cut. The VTA Board of Directors selected the BART At Grade Option as part of the approved project. This SEIR-2 also considers both at grade and retained cut options and~~, but~~ includes ~~four alternate locations for~~ a pump station **located within the UPRR corridor south of Dixon Landing Road with** ~~under~~ the Dixon Landing Road BART Retained Cut Option. **The Dixon Landing Road Retained Cut Option has been selected as the preferred alignment**. ~~Alternate Location A is north of Dixon Landing Road on the west side of the railroad corridor. Alternate Location B is south of Dixon Landing Road on the east side of the railroad corridor. Alternate Locations C and D are within the railroad corridor south of Dixon Landing Road, on the east and west sides of the BART tracks, respectively.~~
>
> As described in the FEIR and SEIR-1, accumulated water (including potentially contaminated water) would be pumped out on a regular basis. During the construction phase, the groundwater at this location would be tested for contaminants. If contaminants were shown to be present, an NPDES permit **and/or a Statewide Construction General Storm Water permit** would be required for pumping activities during the operational phase, and the pump station would be equipped with a properly designed, operated, maintained, and monitored treatment system appropriate for the contaminants detected. No additional hazardous materials impacts are anticipated at the ~~alternate~~ pump station location~~s~~ for the Dixon Landing Road BART Retained Cut Option**, which has been selected as the preferred alignment**.

Subsection 4.11.4.5, paragraph 3, on page 4.11-6 of the Draft SEIR-2 has been revised as follows:

> The impacts, design requirements, and BMPs included in the FEIR and SEIR-1 related to maintenance procedures during the operational phase (including dewatering activities where existing soil and groundwater contamination and/or contaminated surface water runoff may be present) remains applicable in the SEIR-2. The discharge of any water from dewatering activities would comply with NPDES and/or ~~municipal storm sewer system (MS4)~~ **Statewide Construction General Storm Water** permit requirements, if applicable. Development and implementation of a worker health and safety plan and, if required, HAZWOPER training also remain applicable. As mentioned under Design Change ~~8~~ **7**, Dixon Landing Road Alignment, **the** pump station~~s~~ in **the** retained cuts would be equipped with properly designed, operated, maintained, and monitored treatment systems appropriate for the contaminants detected at specific

locations. No additional hazardous materials impacts are anticipated due to the retained cut configurations from Curtis Avenue to Trade Zone Boulevard under this design change.

Subsection 4.13.4.1 under the heading "Phase 1 Noise Impacts", paragraph 1, on page 4.13-8 of the Draft SEIR-2 has been revised as follows:

Table 4.13-2 summarizes potentially significant noise impacts to ground-level sensitive receptors. The total number of impacted ground-level sensitive receptors affected before mitigation would vary from 80 to 82 depending on whether the Retained Cut **Option** or At Grade Option at Dixon Landing Road is chosen. **The Dixon Landing Road Retained Cut Option has been selected as the preferred alignment**. After mitigation, the number of noise receptors impacted would total 39 regardless of the option selected. However, none of the impacts are considered severe.

Table 4.13-2 on page 4.13-9 of the Draft SEIR-2 has been revised as follows.

Table 4.13-2: Phase 1 Summary of Noise Impacts to Ground-Floor Residential Units Before and After Mitigation

Alignment Features	No. of *Severe Impacts* to Sensitive Receptors Before Mitigation	No. of *Moderate Impacts*[(a)] to Sensitive Receptors Before Mitigation	No. of *Severe Impacts* to Sensitive Receptors After Mitigation	No. of *Moderate Impacts*[(a)] to Sensitive Receptors After Mitigation
Total Phase 1 Alignment Excluding Options	66	130	0	39
At Grade Option at Dixon Landing[(b)]	16	0	0	0
Retained Cut Option at Dixon Landing[(b)]	14	0	0	0
Total	**80 to 82 depending on option[(b)]**	**130**	**0**	**39**

[(a)] Where the projected increase in noise level due to the project is greater than 5 dBA**.**
[(b)] The Retained Cut Option has been selected as the Preferred Alternative.
Source: Wilson, Ihrig & Associates, Inc., **2011** ~~2008a~~

Subsection 4.13.4.1 under the heading "Phase 1 Alignment Impacts", paragraph 1, on page 4.13-20 of the Draft SEIR-2 has been revised as follows:

> Six single-family residences located on Berryessa Street and two multi-family buildings located at the Parc Metropolitan Condominium complex would be expected to experience increases in noise levels resulting in a *Severe Impact*. The area of effect due to UPRR trains and warning horns at the Dixon Landing Road crossing currently includes residences at the Spinnaker Apartments and at the Friendly Village Mobile Home Park. Eliminating warning horns from trains **at the at grade UPRR crossing at Dixon Landing Road as part of the At Grade Option** would limit the area of effect to within the UPRR ROW. **The Retained Cut Option has been selected as the preferred alignment where the existing at grade UPRR crossing would remain.**

Subsection 4.13.4.2 under the heading "Options at Dixon Landing Road" on page 4.13-34 of the Draft SEIR-2 has been revised as follows:

> **~~Options at~~ Dixon Landing Road**
>
> A total of 60 residences ~~are~~ **would be** affected **by the Dixon Landing Road** ~~with the~~ At Grade Option ~~at Dixon Landing Road~~ as compared to 24 residences with the Retained Cut Option at Dixon Landing Road. **The Retained Cut Option has been selected as the preferred alignment.** With the recommended mitigation, there would be no remaining vibration impacts for the either option.

Subsection 4.13.5, paragraph 1, on page 4.13-48 of the Draft SEIR-2 has been revised as follows:

> **Table 4.13-2** summarizes potentially significant noise impacts to ground-level sensitive receptors. The total number of impacted ground-level sensitive receptors affected before mitigation would vary from 80 to 82 depending on whether the Retained Cut or At Grade option at Dixon Landing Road is chosen. **The Retained Cut Option has been selected as the preferred alignment.** After mitigation, the noise impacts would total 39. However, none of the impacts are considered severe. Mitigation for noise impacts have been added as part of this SEIR-2 to reduce noise impacts associated with the design changes since certification of the SEIR-1.

Subsection 4.15.4.1, under the heading "City of Fremont" and subheading "Design Change 8. Dixon Landing Road Alignment (STA 182+00 to STA 201+00)", on pages 4.15-7 and 4.15-8 of the Draft SEIR-2 has been revised as follows:

South of the Alameda/Santa Clara county and Fremont/Milpitas city lines (STA 182+00), there are two options for the BART alignment at Dixon Landing Road. The At Grade Option was selected as the preferred option in the approved project in the SEIR 1**. The Retained Cut Option has been selected as the preferred alignment as part of this SEIR-2.** ~~;~~ ~~however, i~~**I**mpacts from both options are discussed below for consideration.

- Retained Cut Option. Under this option, BART would transition into a retained cut at the county and city lines to south of Dixon Landing Road (STA 182+00 to 201+00). Dixon Landing Road would remain at grade, but be supported over the BART retained cut on a new roadway bridge structure. The Union Pacific Railroad (UPRR) crossing would also remain at grade. **The Dixon Landing Road BART Retained Cut Option includes a pump station, located within the UPRR corridor south of Dixon Landing Road, on the east side of the BART tracks.** ~~There are four alternate locations for a pump station under this option~~:

  - ~~Alternate Location A is located north of Dixon Landing Road on the west side of the alignment. This facility would displace some landscaping adjacent to Dixon Landing Road, but would not displace any residences or businesses.~~

  - ~~Alternate Location B is located south of Dixon Landing Road on the east side of the alignment. This facility would displace landscaping, but would not displace a residence or business.~~

  - ~~Alternate Location C is located south of Dixon Landing Road on the east side of the alignment. No displacements would result from this alternate location.~~

  - ~~Alternate Location D is located south of Dixon Landing Road on the west side of the alignment. No displacements would result from this alternate location.~~

Because no displacements of residences or businesses would result from this option, the construction of the ~~r~~**R**etained ~~c~~**C**ut Option would result in a less-than-significant impact.

- At Grade Option. Under this option, BART would continue at grade and cross on a new bridge structure over Dixon Landing Road (STA 191+00), which would be reconstructed as a roadway underpass by VTA. VTA would also construct a new bridge for the UPRR to cross over the roadway. An adjacent cross street to the west of the UPRR ROW, Milmont Drive, would also be lowered due to the new slope of Dixon Landing Road. Access to two existing driveways on the west

side of the alignment, one on the north side of Dixon Landing Road and the other on the south side, would be eliminated. However, each property would have multiple access points remaining. In addition, three driveways would be lowered - two driveways on the north side of Dixon Landing Road east of the alignment and one on the east side of Milmont Drive south of Dixon Landing Road. Because no residences or businesses would be displaced as a result of this option; the At Grade Option would result in a less-than-significant impact.

Subsection 4.18.4.5, paragraph 1, on page 4.18-5 of the Draft SEIR-2 has been revised as follows:

In the FEIR, three options were analyzed for the alignment at Dixon Landing Road: at grade, retained cut, and aerial. The retained cut and at grade designs were also analyzed in the SEIR-1; however, there were no updates related to water resources, water quality, or floodplains in the latter document. This SEIR-2 again considers both at grade and retained cut designs. **The Retained Cut Option has been selected as the preferred alignment.**

Subsection 4.19.4.1 under the heading "Vehicular Traffic" and subheading "Road Crossings" on pages 4.19-12 and 4.19-13 of the Draft SEIR-2 has been revised as follows:

The construction methodology of Dixon Landing Road was more defined since approval of the SEIR-1. There are two alignment options at Dixon Landing Road: BART At Grade and BART Retained Cut, as described in the Project Description. **The Retained Cut Option has been selected as the preferred alignment.**

Under the BART At Grade Option, there are two options for construction methodology: full road closure and partial closure of Dixon Landing Road. The construction durations of the options are listed below:

- **BART Retained Cut Option:** entire construction period of 30 months, with a few nighttime and weekend full closures,
- **BART At Grade Option, with full road closure:** entire construction period of 30 months, 12 of which would involve full closure of Dixon Landing Road, the remaining 18 months would require occasional nighttime and weekend closures,
- **BART At Grade Option, with partial road closure:** entire construction period of 48 months, 30 months of which there would be long-term partial closure of Dixon Landing Road with occasional

nighttime and weekend full closures. The other 18 months would require minimal intermittent traffic restrictions, with occasional nighttime and weekend full closures.

Construction of the BART Retained Cut Option would result in a less-than-significant impact to traffic during construction **and no mitigation would be required**.

Construction of the BART At Grade Option, whether full or partial closure, would result in a significant impact to traffic during construction. Mitigation measures to reduce these impacts are not feasible due to ROW constraints. However, the following mitigation measure would help reduce the severity of this impact:

Mitigation Measure CNST-TR-1: Mitigation measures to reduce these impacts are not feasible due to ROW constraints. VTA will work with the City of Milpitas to develop a Traffic Management Plan for construction of the Dixon Landing Road Crossing. This impact remains significant and unavoidable.

Construction of the Montague Expressway, Capitol Avenue, Trade Zone Boulevard, Hostetter Road, Sierra Road/Lundy Avenue, Berryessa Road, and Mabury Road Crossings would have less-than-significant impacts to traffic; therefore, no mitigation is required.

Subsection 4.19.4.1 under the heading "Conclusion" on page 4.19-14 of the Draft SEIR-2 has been revised as follows:

The transportation construction impacts **relative to transportation and safety, transit systems, pedestrians and bicyclists, and truck haul routes** have not changed since certification of the SEIR-1. Construction of Phase 1 would not have significant impacts to **transportation and safety, transit systems, and pedestrians and bicyclists. Impacts to truck haul routes would be less than significant due to the low volume of peak hour trucks.**

Construction of Phase 1 would result in significant vehicular traffic impacts at Dixon Landing Road under the At Grade Option, for full closure or partial closure of Dixon Landing Road, during construction. While Mitigation Measure CNST-TR-1 would reduce such impacts, the constrained ROW availability at Dixon Landing Road would render construction impacts at this location significant and unavoidable. **The selection of the Retained Cut Option as the preferred alignment would avoid this significant and unavoidable impact during construction.** ~~Impacts to truck haul routes would be less than significant due to the low volume of peak hour trucks.~~

2.4.3 DESIGN REFINEMENT 3 – NEW DESIGN – BART MAINTENANCE ACCESS SOUTH OF CALAVERAS BOULEVARD

Subsection 4.13.4 on page 4.13-43 of the Draft SEIR-2 has been revised as follows to include a new subsection that discusses the noise and vibration impacts relative to the BART Maintenance Access South of Calaveras Boulevard:

4.13.4.3 Design Change 10. BART Maintenance Access South of Calaveras Boulevard (STA 295+00 to STA 309+00)

Design Change 10, BART Maintenance Access South of Calaveras Boulevard, would introduce a new BART siding track, maintenance building and parking/storage area, and a maintenance access road approximately 900 feet from the nearest noise-sensitive land uses on Beresford Court, north of Calaveras Boulevard. The addition of the BART siding track and associated maintenance facilities would result in noise from maintenance activities and equipment during isolated periods of maintenance. The BART siding track could also result in increased noise in the event that two operational BART trains are utilizing the alignment and the siding track simultaneously. In this event, the BART train on the siding track would be stationary while it allows the second train to pass along the main rail alignment. This would not result in substantial increases in train noise on the alignment. The BART siding track would also be utilized to temporarily store non-operational trains, which would not result in any additional noise levels. Due to the distance from the nearest noise sensitive receptor, the potential increased noise levels during maintenance activities would not be significant. No new noise impact is projected for Design Change 10, BART Maintenance Access South of Calaveras Boulevard, and no mitigation is required.

Incorporation of this new subsection in the Draft SEIR-2 would result in the re-numbering of the subsequent subsections. The revisions to the subsection numbering is shown under **subsection 2.4.5** of this Final SEIR-2, since an additional subsection relative to Design Refinement 5, High Rail Vehicle Access Point North of Berryessa Road, would also be added to **subsection 4.13.4** of the Draft SEIR-2.

Subsection 4.15.4.1, under the subheading “City of Milpitas”, on page 4.15-8 has been revised as follows to include a discussion of socioeconomic impacts relative to the BART Maintenance Access South of Calaveras Boulevard:

Design Change 10. BART Maintenance Access South of Calaveras Boulevard (STA 295+00 to STA 309+00)

The relocation of the high rail vehicle access point and the new maintenance facilities south of Calaveras Boulevard would be located within the same area evaluated in the SEIR-1. These maintenance facilities would not result in the displacement of any businesses or residences, representing a less-than-significant impact.

2.4.4 DESIGN REFINEMENT 4 – NEW DESIGN – ELIMINATE EXTENSION OF EXISTING DETENTION BASIN/PRIVATE PARK

Subsection 4.18.4.9 has been added to **subsection 4.18.4** of the Draft SEIR-2 to include a discussion of this design refinement shown below:

4.18.4.9 Design Change 25. Eliminate Extension of Existing Detention Basin/Private Park

Under the approved project, VTA would extend an existing detention basin/private park at the Parc Metropolitan Condominium development on Great Mall Drive to accommodate the installation of a sound wall. Based on refined engineering since the FEIR and SEIR-1, installation of the sound wall is anticipated to result in a 0.1-foot net increase in water level within the detention basin. This increase in the net water level would not exceed the design capacity of the existing detention basin and the extension of the detention basin would no longer be required as part of Phase 1. No new impacts to water resources or water quality would occur as a result of this design change and no new mitigation would be required.

2.4.5 DESIGN REFINMENT 5 – DRAFT SEIR-2 DESIGN CHANGE 15. MILPITAS STATION

Subsection 4.2.3.2, paragraphs 5 and 6, on pages 4.2-4 through 4.2-5 of the Draft SEIR-2 has been revised as follows:[3]

Parking demand for the Milpitas Station would be approximately 2,300 spaces under unconstrained 2030 conditions. This demand would be accommodated with a**n** ~~two- to~~ eight- level parking structure and ~~future transit facility/~~surface parking in the station area. Parking demand for the Berryessa Station would be approximately 4,800 spaces. This demand

[3] This revision is also shown in **subsection 2.5.2.3**.

would be accommodated with a**n** ~~four- to~~ eight-level parking structure and ~~future transit facility/~~surface parking in the station area. The ~~unconstrained~~ parking demand reflects ridership of 46,458 for Phase 1.

Opening year parking demand of approximately **1,300** ~~1,260~~ spaces at Milpitas Station and **2,500** ~~2,505~~ spaces at Berryessa Station (**3,800** ~~3,765~~ spaces combined) would be accommodated in proposed surface parking lots and parking structures. **Parking structures may be constructed in phases.** ~~Parking for up to 1,880 vehicles at Milpitas Station and up to 3,750 vehicles at Berryessa Station would be provided.~~ The **parking structures** ~~garages~~ would initially be sized to provide capacity for several years of parking growth **beyond opening day** at each **station** ~~location~~. ~~With an 8-level parking garage and surface parking at the Milpitas Station, Phase 1 is designed to accommodate up to 2,260 parking spaces to meet the 2030 demand. With an 8-level parking garage and surface parking at the Berryessa Station, Phase 1 is designed to accommodate up to 4,835 parking spaces to meet the 2030 demand.~~ **Following opening day, actual parking demand would be monitored and additional parking facilities would be constructed as needed within the station area.**

Table 4.15-4 on page 4.15-6 of the Draft SEIR-2 has been revised as follows:

Table 4.15-4: Phase 1 – Summary of Displacements

Location	Residential Unit	Light Industrial Business	~~Office~~	Community Facility[a]	Flea Market Vendor	Storage Tenant
DC# ~~10~~ **9**: Systems Facilities Alternate Location B	0	0	~~0~~	0	0	25
DC# 15: Milpitas Station	1	**15** ~~18~~	~~2~~	0	0	875
DC# ~~20~~ **21**: Berryessa Station	0	23	~~0~~	0	0-80	0
DC# ~~21~~ **22**: Electrical Facilities near Las Plumas Road	0	4	~~0~~	2	0	0
Total	**1**	**42** ~~45~~	~~2~~	**2**	**0-80**	**900**

[a] Community Facility: family center, training center

Source: VTA, **2011** ~~2010~~.

Subsection 4.15.4.1, under the heading “City of Milpitas”, on page 4.15-10 of the Draft SEIR-2 has been revised as follows to include a new subsection that discusses the socioeconomic impacts relative to the refined Milpitas Station:

Design Change 15. Milpitas Station (STA 372+00)

The Milpitas Station footprint has been reduced from 27 acres to 20 acres. Modification of the station footprint reduced the number of displacements from 20 businesses (under the approved project in the FEIR and SEIR-1) to 15 businesses. VTA will provide financial assistance and relocation services to owners and occupants of businesses displaced by Phase 1 as part of VTA's Relocation Assistance Program. VTA's Relocation Program is consistent with all federal and State laws applicable to business and residential relocations. Therefore, impacts would be less than significant and no further mitigation would be required.

2.4.6 DESIGN REFINEMENT 6 – NEW DESIGN: HIGH RAIL VEHICLE ACCESS NORTH OF BERRYESSA ROAD

Subsection 4.13.4 on page 4.13-47 of the Draft SEIR-2 has been revised as follows to include a new subsection that discusses the noise and vibration impacts relative to the High Rail Vehicle Access North of Berryessa Road:

4.13.4.11 Design Change 20. High Rail Vehicle Access North of Berryessa Road (STA 508+00 to STA 521+00)

Design Change 20, High Rail Vehicle Access North of Berryessa Road, would locate a high rail maintenance access point and access road approximately 40 feet from the nearest noise sensitive receptor on Aschaver Court. The noise associated with these maintenance facilities would be limited to the maintenance vehicles using the access road to access the high rail vehicle access point. The noise levels associated with the maintenance vehicles on the access road would be similar to the vehicle traffic noise on the suburban streets immediately adjacent to this design feature and would not exceed noise thresholds for residential uses. Mitigation Measure NV-1 would also require the placement of sound walls in this location, which would further reduce noise levels associated with the maintenance access road. Thus, noise impacts associated with Design Change 20, High Rail Vehicle Access North of Berryessa Road, would be less-than-significant. The maintenance facilities would not introduce any vibration and no new impacts would occur.

With the addition of **subsection 4.13.4.3** to incorporate the discussion of the new Design Change 10, BART Maintenance Access South of Calaveras Boulevard, (discussed under **subsection 2.5.3** above) and **subsection 4.13. 4.11** to discuss the new Design Change 20, High Rail Vehicle Access North of Berryessa Road,

into **subsection 4.13.4** of the Draft SEIR-2, the following subsection numbering sequencing and titles in **subsection 4.13.4** of the Draft SEIR-2 have been revised:

- Page 4.13-43: 4.13.4.~~3~~**4** Design Change ~~10~~**9**. System Facilities Alternate Location B (STA 260+00)
- Page 4.13-44: 4.13.4.~~4~~**5** Design Change 13. Milpitas Wye (STA 355+00)
- Page 4.13-45: 4.13.4.~~5~~**6** Design Change 14. System Facility North of Montague Expressway (STA 366+00)
- Page 4.13-45: 4.13.4.~~6~~**7** Design Change 15. Milpitas Station (STA 372+00)
- Page 4.13-46: 4.13.4.~~7~~**8** Design Change 17. Pump Station Facilities at Trade Zone Boulevard (STA 401+00)
- Page 4.13-46: 4.13.4.~~8~~**9** Design Change 18. Systems Facilities at Hostetter Road (STA 460+00)
- Page 4.13-47: 4.13.4.~~9~~**10** Design Change 19. Pump Station Facilities at Sierra Road and Lundy Avenue (STA 488+00)
- Page 4.13-47: 4.13.4.~~10~~**12** Design Change ~~20~~**21**. Berryessa Station (STA 533+00)
- Page 4.13-48: 4.13.4.~~11~~**13** Design Change ~~21~~**22**. Electrical Facilities near Las Plumas Road (STA 525+00)
- Page 4.13-48: 4.13.4.~~12~~**14** Design Change ~~22~~**23**. Maintenance Storage of BART Trains for Phase 1

Subsection 4.15.4.1, under the subheading "City of San Jose", on page 4.15-10 has been revised as follows to include a discussion of socioeconomic impacts relative to the High Rail Vehicle Access North of Berryessa Road:

Design Change 20. High Rail Vehicle Access North of Berryessa Road (STA 508+00 to STA 521+00)

The new high rail vehicle access point and the associated maintenance facilities north of Berryessa Road would be located within the same area evaluated in the SEIR-1. These maintenance facilities would not result in the displacement of any businesses or residences, representing a less-than-significant impact.

2.4.7 DESIGN REFINEMENT 7 – DRAFT SEIR-2 DESIGN CHANGE 20. BERRYESSA STATION

Subsection 4.2.3.2, paragraph 5, on pages 4.2-4 and 4.2-5 of the Draft SEIR-2 has been revised as follows:[4]

> Parking demand for the Milpitas Station would be approximately 2,300 spaces under unconstrained 2030 conditions. This demand would be accommodated with a**n** ~~two- to~~ eight- level parking structure and ~~future transit facility/~~surface parking in the station area. Parking demand for the Berryessa Station would be approximately 4,800 spaces. This demand would be accommodated with a**n** ~~four- to~~ eight-level parking structure and ~~future transit facility/~~surface parking in the station area. The ~~unconstrained~~ parking demand reflects ridership of 46,458 for Phase 1.
>
> Opening year parking demand of approximately **1,300** ~~1,260~~ spaces at Milpitas Station and **2,500** ~~2,505~~ spaces at Berryessa Station (**3,800** ~~3,765~~ spaces combined) would be accommodated in proposed surface parking lots and parking structures. **Parking structures may be constructed in phases.** ~~Parking for up to 1,880 vehicles at Milpitas Station and up to 3,750 vehicles at Berryessa Station would be provided.~~ The **parking structures** ~~garages~~ would initially be sized to provide capacity for several years of parking growth **beyond opening day** at each **station** ~~location~~. ~~With an 8-level parking garage and surface parking at the Milpitas Station, Phase 1 is designed to accommodate up to 2,260 parking spaces to meet the 2030 demand. With an 8-level parking garage and surface parking at the Berryessa Station, Phase 1 is designed to accommodate up to 4,835 parking spaces to meet the 2030 demand.~~ **Following opening day, actual parking demand would be monitored and additional parking facilities would be constructed as needed within the station area.**

Subsection 4.2.7.3, paragraph 8, on page 4.2-59 of the Draft SEIR-2 has been revised as follows:

> The design of the parking facilities has been modified to include an eight-level parking structure on 4.3 acres on the southern half of the site and to the east of the UPRR ROW. ~~Additional surface parking and/or future transit facilities would be located as needed within the station area.~~

Subsection 4.15.4.1, under the heading "City of San Jose" and subheading "Design Change 20. Berryessa Station (STA 533+00)", on page 4.15-11 of the Draft SEIR-2 has been revised as follows:

[4] This revision is also shown in **subsection 2.5.2.1**.

The number of displaced light industrial businesses at Berryessa Station has not changed since the approved project. However, modification of the station design would cause the displacement of 35 fewer vendor stalls at the San Jose Flea Market since the approved project, (Figures D-4 through D-6 in **Appendix D).** South of Mabury Road, Lenfest Road would be re-aligned to line up with Berryessa Station Way, which would displace landscaping and up to 3 parking spaces, but would not displace any businesses or residences. **The Berryessa Station footprint has been reduced from 55 acres to 30 acres. Modification of the station footprint would not change the number of displacements caused by the construction of this station.** This design change therefore results in a less-than-significant impact.

2.4.8 DESIGN REFINEMENT 8 – DRAFT SEIR-2 DESIGN CHANGE 23. CONSTRUCTION STAGING AREAS

Subsection 4.19.4.11, paragraph 1, on page 4.19-4 of the Draft SEIR-2 has been revised as follows:

> **Subsection 3.2.5** of this SEIR-2 discusses the changes to the construction staging areas (CSAs) since publication of the SEIR-1. **Figures 4.19-2** through ~~**4.19-8**~~ **4.19-9** show the CSAs needed for Phase 1.

A new **Figure 4.19-5** has been added to the Draft SEIR-2 to show the Montague Expressway CSA. A figure showing the Capitol Expressway CSA has also been added; this figure was incorrectly omitted from the Draft SEIR-2.[5] The ordering of **Figures 4.19-2** through **4.19-9** has also been revised to correct an error in the Draft SEIR-2. The revised figure numbering sequence is as follows:

- **Figure 4.19-2**: Mission Falls Court Construction Staging Area (no change since Draft SEIR-2)
- **Figure 4.19-3**: Calaveras Boulevard Construction Staging Area (former **Figure 4.19-6** in the Draft SEIR-2)
- **Figure 4.19-4**: Piper Drive Construction Staging Area (former **Figure 4.19-3** in the Draft SEIR-2)
- **Figure 4.19-5**: Montague Expressway Construction Staging Area (new figure added to Draft SEIR-2)

[5] The Capitol Expressway CSA was included as **Figure 4.19-4** in the electronic versions of the Draft SEIR-2, but incorrectly omitted from the print versions of the Draft SEIR-2. These revisions correct the print version of the Draft SEIR-2.

- **Figure 4.19-6**: Capitol Avenue Construction Staging Area (a new figure added to the Draft SEIR-2)
- **Figure 4.19-7**: Trade Zone Boulevard Construction Staging Area (former **Figure 4.19-5** of the Draft SEIR-2)
- **Figure 4.19-8**: Berryessa Road Construction Staging Area (former **Figure 4.19-7** of the Draft SEIR-2)
- **Figure 4.19-9**: Mabury Road and US 101 Construction Staging Area (former **Figure 4.19-8** of the Draft SEIR-2)

These revised figures are included as **Figures 2-3** through **2-10** of this Final SEIR-2.

Subsection 4.19.3, under the heading "Construction Staging Areas", on page 4.19-37 of the Draft SEIR-2 has been revised as follows:

A variety of construction activities would take place in the construction staging areas, such as many of the major activities described in **subsection 4.19.3** of this SEIR-2. Since certification of the SEIR-1, ~~a~~ **two** new CSA**s** ~~was~~ **were** included as part of Phase 1~~.~~**: the new Montague Expressway CSA and the new Piper Drive CSA.**

Montague Expressway CSA

The new Montague Expressway CSA would include 1.7 acres at the intersection of Montague Expressway and Capitol Avenue. There are no residential uses immediately adjacent to the Montague Expressway CSA. The closest residential uses are approximately 600 feet south of the CSA. The construction noise and vibration associated with the development of the Milpitas Station was already considered in the FEIR and SEIR-1 and mitigation measures were incorporated to reduce construction noise and vibration to a less-than-significant level. Since the new Montague Expressway CSA would be located within a former footprint of the Milpitas Station, the construction noise and vibration impacts to the nearby sensitive receptors has already been considered and no new impacts would occur.

Piper Drive CSA

The new Piper Drive CSA would include 2.2 acres of the Piper Drive cul-de-sac north of Montague Expressway and east of the UPRR ROW to accommodate the staged construction of the freight tracks for the Milpitas Wye (regardless of the option selected). Noise sensitive receptors near the Piper Drive CSA include the Residence Inn at Marriot and the Town

Place Suites to the west. These hotels are approximately 90 to 190 feet west of the Piper Drive CSA and would experience a noise level of about 80 dBA at the closest distance. While this projected noise level meets the FTA noise impact criteria of 80 dBA, noise impacts during construction at the Piper Drive CSA would be significant based on the uncertainty in the assumptions used in the noise modeling.

Conclusion

~~While the Piper Drive CSA was not evaluated in the FEIR or SEIR-1, t~~**T**he same mitigation measures identified in **the FEIR and SEIR-1** ~~these previous documents~~, such as temporary sound walls, noise control curtains, or other measures to comply with FTA noise guidelines, would be applied to the **Montague Expressway CSA and the** Piper Drive CSA to reduce impacts to a less-than-significant level. These mitigation measures would also continue to apply to the other six CSAs associated with Phase 1, thereby reducing significant impacts to a less-than-significant level. No new mitigation would be required.

No vibration impacts are projected for the CSAs and no mitigation would be required.

Subsection 4.19.4.13 on page 4.19-38 of the Draft SEIR-2 has been revised as follows to include a discussion of construction socioeconomic impacts relative to the Montague Expressway CSA:

Montague Expressway: There would be no displacement of businesses or residences.

2.4.9 DESIGN REFINEMENT 9 – DRAFT SEIR-2 DESIGN CHANGE 13, MILPITAS WYE

Subsection 4.11.4.5 on page 4.11-6 of the Draft SEIR-2 has been revised as follows:

BART would transition into a retained cut from south of Curtis Avenue, continue past the Milpitas/San Jose city lines, and return to an at grade configuration south of Trade Zone Boulevard. Under the approved project, the retained cut began at STA 337+00 and ended at STA 411+00. Under Phase 1, the starting point of the retained cut would now vary depending on which Milpitas Wye Relocation Option is selected. The existing locomotive wye in Milpitas would be modified to one of the three configuration options described in Design Change 13, Milpitas Wye, (see **subsection 3.2.3** of the SEIR-2). **The No Wye/Industrial Lead Only Option has been selected as the preferred option.** For the Milpitas Wye with Spur Connection Option and the Wye and Industrial Lead Option, the BART retained cut would begin at STA 344+00 and end at

approximately STA 414+00. For the No Wye/Industrial Lead Only Option **(the preferred option)**, the BART retained cut would begin at STA 356+00 and end at STA 414+00. The length and depth of the retained cut would enable the freight track to cross over the BART retained cut to access the locomotive wye on the east side of the ROW.

For the Milpitas Wye with Spur Connection Option and Wye and Industrial Lead Option, soils within the alignment of the BART retained cut have been impacted by residual petroleum hydrocarbons from the former Ford Automobile Assembly Plant site (STA 337+00 to STA 348+00) and by chlorinated solvents from the Jones Chemical and North American Transformer sites (STA 350+00 to STA 360+00). For the No Wye/Industrial Lead Only Option **(the preferred option)**, the alignment of the BART retained cut would avoid the former Ford Automobile Assembly Plant site, but soils and groundwater within the alignment have been impacted by contamination at the Jones Chemical and North American Transformer sites.

Subsection 4.12.4.1, under the heading "Design Change 13, Milpitas Wye (STA 355+00)" on page 4.12-9 of the Draft SEIR-2 has been revised as follows:

The three alternative locations for the redesigned Milpitas Wye—the Wye with Spur Connection Option, the Wye and Industrial Lead Option, and the No Wye/Industrial Lead Only Option would be adjacent to the rail corridor ROW and within areas of existing commercial and industrial land uses. **The No Wye/Industrial Lead Only Option has been selected as the preferred option.** The realignment of the Milpitas Wye under any of the three options would not introduce a new type of use to the area due to the proximity of the existing UPRR tracks and existing wye just north of Montague Expressway. Thus, the three alternative locations for the redesigned Milpitas Wye would not be incompatible with the surrounding land uses, and no significant impact would occur. No mitigation is required.

Subsection 4.13.4.4, paragraph 1, on pages 4.13-44 and 4.13-45 of the Draft SEIR-2 has been revised as follows:

Phase 1 includes three alternative locations for the redesigned Milpitas Wye: Wye with Spur Connection option; Wye and Industrial Lead option; and No Wye/Industrial Lead Only option. **The No Wye/Industrial Lead Only Option has been selected as the preferred option.** All three options propose changes to the existing Milpitas Wye on the east side of the SVRT alignment, where no existing noise-sensitive land uses are located. The Wye and Industrial Lead and No Wye/Industrial Lead Only options also proposed changes on the west side of the alignment that would move the freight track west of the location of the current railroad tracks. There are two noise-sensitive receptors on the west side of the

alignment that could be affected by this change: the Residence Inn at Marriott and the Towne Place Suites. For the options with the Industrial Lead, the nearest noise-sensitive land use would be 105 feet from the Towne Place Suites, approximately 20 feet closer than the westernmost existing railroad track.

Subsection 4.15.4.1, under the heading "City of Milpitas" and subheading "Design Change 12. Curtis Avenue to Trade Zone Boulevard (STA 344+00 to STA 414+00)" on page 4.15-8 of the Draft SEIR-2 has been revised as follows:

Impacts resulting from this design change are dependent upon the Milpitas Wye Option selected. Refer to the following discussion under Design Change 13, Milpitas Wye, for impacts related to this design change. **The No Wye/Industrial Lead Only Option has been selected as the preferred option.**

Subsection 4.15.4.1, under the heading "City of Milpitas" and subheading "Design Change 13. Milpitas Wye (STA 355+00)" on pages 4.15-9 and 4.15-10 of the Draft SEIR-2 has been revised as follows:

Impacts resulting from this design change are dependent upon the option selected, as described below. **The No Wye/Industrial Lead Only Option has been selected as the preferred option.**

Wye with Spur Connection Option. Under this option, due to the redesign of the wye to modify the angle of the UPRR tracks as they enter the wye, the curve of the wye is now shallower than that of the approved project. Therefore, as compared to the 2,200 feet of ROW extension impacts associated with the approved project, this option would require an additional 250 feet of ROW extension between Great Mall Drive and the alignment (approximately STA 351+00 to 354+00). This total of 2,450 feet of ROW extension between Great Mall Drive and the alignment (STA 329+00 to STA 354+00) would displace approximately 110 landscaping trees. The landscaping trees were planted since the approval of the previous Wye design in 2007. Refer to **Section 4.17, Visual Quality and Aesthetics**, of this SEIR-2, for a discussion on the visual impact of the loss of this landscaping. This option would cause the removal of approximately 20 parking spaces and the displacement of a trash enclosure on the light industrial business east of the alignment and north of this proposed wye option. The redesign of the wye also impacts Piper Drive. Piper Drive would be modified so that the cul de sac is shifted to the south and the street would be narrowed away from the UPRR track to allow for trains to operate on the wye without impacting access to the properties along Piper Drive. The redesigned location of the cul de sac of Piper Drive would displace landscaping on one currently vacant parcel located at the end of Piper Drive. Shipper's access will be maintained with

the spur track connection at the existing wye location. Because no displacements of residences or businesses would result from this option, the impact would be less than significant.

Wye and Industrial Lead Option. Under this option, the wye has been redesigned to modify the curve of the wye as described in the previous option. The design of the wye was also shifted west under this option to avoid impacts to Piper Drive caused by the previous option. Therefore, as compared to the 2,200 feet of ROW extension impacts associated with the approved project, this option would cause an additional 1,350 feet of ROW extension between Great Mall Drive and the alignment (approximately STA 351+00 to 365+00) for a total of 3,550 feet of ROW extension starting at STA 329+00 and ending at STA 365+00. The 3,550 feet of ROW extension between Great Mall Drive and the alignment would displace approximately 160 landscaping trees. The landscaping trees were planted since the approval of the previous Wye design in 2007. Refer to **Section 4.17, Visual Quality and Aesthetics**, of this SEIR-2, for a discussion on the visual impact of the loss of this landscaping. This option would cause the removal of approximately 20 parking spaces and the displacement of a trash enclosure on the light industrial business east of the alignment and north of this proposed wye option. Shipper's access will be maintained with the construction of a new industrial lead track. Because no displacements of residences or businesses would result from this option, the impact would be less than significant.

No Wye/Industrial Lead <u>Only</u> Option <u>(Preferred Option).</u> Under this option, there is a connection of the UPRR rail from the tail track/yard lead to the northern leg of the existing Milpitas Wye. As compared to the impacts associated with the approved project, this option would cause an additional 1,350 feet of ROW extension between Great Mall Drive and the alignment (approximately STA 351+00 to 365+00) for a total of 3,550 feet of ROW extension starting at STA 329+00 and ending at STA 365+00, similar to the Wye and Industrial Lead Option described above. The 3,550 feet of ROW extension between Great Mall Drive and the alignment also would displace approximately 160 landscaping trees. These landscaping trees were planted since the approval of the previous Wye design in 2007. Refer to **Section 4.17, Visual Quality and Aesthetics**, of this SEIR-2, for a discussion on the visual impact of the loss of this landscaping. Unlike the previous two options, this option would not impact the 20 parking spaces and trash enclosure at the existing light industrial business north of Piper Drive. Shipper's access would be maintained with the construction of a new industrial lead track. Because no displacements of residences or businesses would result from the selection of this option, the impact would be less than significant.

Subsection 4.16.4.6 on page 4.16-5 of the Draft SEIR-2 has been revised as follows:

> Phase 1 includes three alternative locations for the redesigned Milpitas Wye. **The No Wye/Industrial Lead Only Option has been selected as the preferred alignment.** Utility lines in the approved project area have been previously identified, and design guidelines and BMPs of the FEIR and SEIR-1 related to utilities would remain applicable. No additional impacts to utilities would occur under implementation of any of the three alternative locations for the Milpitas Wye.

Subsection 4.18.4.7, paragraph 1, on pages 4.18-7 and 4.18-8 of the Draft SEIR-2 have been revised as follows:

> In the FEIR, a "long" retained cut was analyzed as the only design configuration for the alignment from south of Curtis Avenue to Trade Zone Boulevard (STA 337+00 to 411+00). In the SEIR-1, there were four options for the alignment: Retained Cut Long Option, Retained Cut Short Option, Aerial Long Option, and Aerial Short Option. In 2007, the VTA Board of Directors selected the Retained Cut Long Option as part of the approved project (STA 337+00 to 411+00). As a result of preliminary engineering design, the retained cut has been changed under Phase 1 such that the starting point of the retained cut would vary depending on which Milpitas Wye Relocation Option is selected. The existing locomotive wye in Milpitas would be modified to one of the three configuration options described in Design Change 12, Curtis Avenue to Trade Zone Boulevard (see **subsection 3.2.3** of this SEIR-2). For the Milpitas Wye with Spur Connection Option and Wye and Industrial Lead Option, the BART retained cut would begin at STA 344+00 and end at approximately STA 414+00. For the No Wye/Industrial Lead Only Option, the BART retained cut would begin at STA 356+00 and end at STA 414+00. **The No Wye/Industrial Lead Only Option has been selected as the preferred option.** The length and depth of the retained cut enables the freight track to cross over the BART retained cut to access the locomotive wye on the east side of the ROW.

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