Memorandum

To: CHAIR AND COMMISSIONERS **Date:** June 19, 2009

From: BIMLA G. RHINEHART
Executive Director **File:** Book Item 2.2c (4)
Action

Ref: **Final Supplemental Environmental Impact Report for the Silicon Valley Rapid Transit Corridor Project (Resolution E-09-55)**

ISSUE: Should the Commission, as a Responsible Agency, accept the Final Supplemental Environmental Impact Report (FSEIR), Findings, and Statement of Overriding Considerations for the Silicon Valley Rapid Transit Corridor Project (project) and approve the project for consideration of funding?

RECOMMENDATION: Staff recommends that the Commission accept the FSEIR, Findings and Statement of Overriding Considerations and approve the project for consideration of funding.

BACKGROUND: The project begins at the planned BART Warm Springs Station (to be implemented in 2014) in Fremont and proceeds on the former Union Pacific Railroad right of way through Milpitas to near Las Plumas Avenue in San Jose. The extension would then descend into a subway tunnel, continue through downtown San Jose, and terminate at grade in Santa Clara near the Caltrain Station. The total length of the alignment would be 16.1 miles. Six stations are proposed with an additional future station in Milpitas. Passenger service for the BART Extension Project would start in 2016, assuming funding is available.

Santa Clara Valley Transportation Authority (VTA) prepared the FSEIR in accordance with CEQA and the CEQA Guidelines. The FSEIR updates the information presented in the 2004 Final Environmental Impact Report (FEIR) prepared by VTA. The 2004 FEIR analysis was based on 10 percent design plans prepared during the conceptual engineering design phase of the project. The FSEIR describes the design changes and evaluates the associated environmental impacts of the project at the 35 percent design level. The FSEIR is based on a planning horizon to the year 2030 while the FEIR planning horizon was through the year 2025. On June 7, 2007, the VTA Board of Directors certified the FSEIR, and adopted Findings, Facts in Support of Findings, Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Program.

The FSEIR identified significant and unavoidable impacts related to transportation and transit at traffic intersections; energy; noise and vibration at two residences; and traffic, parking and noise during construction. Significant and unavoidable effects identified in the 2004 FEIR were deleted and/or replaced with revised measures in the FSEIR due to design changes and updated information.

The VTA Board of Directors found that the unavoidable significant effects are acceptable based on overriding considerations due to improvements in public transit service and modal options, enhancements to regional connectivity, reduction in congestion on highways and supporting road networks, improvements to regional and sub-regional air quality, improvements to mobility options, maximization of transit usage and ridership, and support for local economic and land use plans.

The project is estimated to cost $7,586,550,000. The project is anticipated to be funded with TCRP ($648,567,000), Local Measure ($6,187,983,000), and Federal Transit Administration Section 5309 ($750,000,000) funds. Construction is anticipated to begin in Fiscal Year 2009/10.

Attachments

1. Resolution E-09-55
2. Project Location
3. Findings, Facts in Support of Findings, Statement of Overriding Considerations

CALIFORNIA TRANSPORTATION COMMISSION

Resolution for Consideration of Funding
03-SAC
Resolution E-09-55

1.1 **WHEREAS,** the Santa Clara Valley Transportation Authority (VTA) has completed a Final Supplemental Environmental Impact Report pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines for the following project:

- Silicon Valley Rapid Transit Corridor

1.2 **WHEREAS,** the VTA Board of Directors has certified that the Final Supplemental Environmental Impact Report has been completed pursuant to CEQA and the State CEQA Guidelines for its implementation; and

1.3 **WHEREAS,** the project would extend the Bay Area Rapid Transit service 16.1 miles from Fremont through Milpitas to near Las Plumas Avenue in San Jose and terminate in Santa Clara; and

1.4 **WHEREAS,** the California Transportation Commission, as a Responsible Agency, has considered the information contained in the Final Supplemental Environmental Impact Report; and

1.5 **WHEREAS,** Findings made pursuant to CEQA guidelines indicate that specific unavoidable significant impacts related to transportation and transit at traffic intersections; energy; noise and vibration at two residences; and traffic, parking and noise during construction make it infeasible to avoid or fully mitigate to a less than significant level the effects associated with the project; and

1.6 **WHEREAS,** the VTA Board of Directors adopted a Statement of Overriding Considerations for the project; and

1.7 **WHEREAS,** the VTA Board of Directors adopted a Mitigation Monitoring and Reporting Program for the project; and

1.8 **WHEREAS,** the above significant effects are acceptable when balanced against the facts as set forth in the Statement of Overriding Considerations.

2.1 **NOW, THEREFORE, BE IT RESOLVED** that the California Transportation Commission does hereby accept the Final Supplemental Environmental Impact Report, Findings and Statement of Overriding Considerations and approve the above referenced project to allow for consideration of funding.

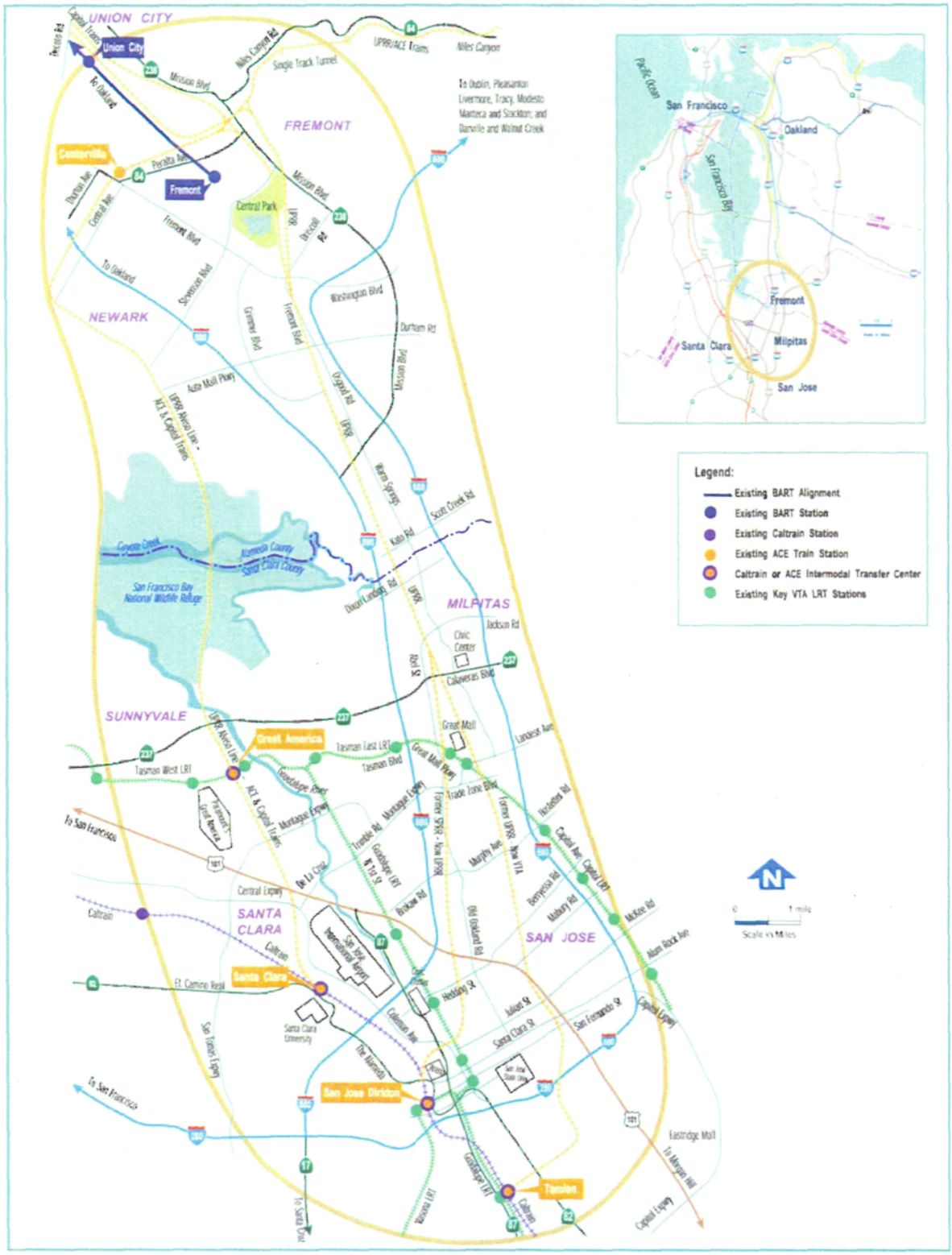

Figure 1.2-1: Silicon Valley Rapid Transit Corridor

Section 3

Findings

3.1 CEQA Requirements

CEQA, PRC 21000 et seq., requires the lead agency to make written findings of project effects whenever it decides to approve a project for which an EIR has been certified (PRC 21081). Regarding these findings, Section 15091 of the State CEQA Guidelines (14 California Code of Regulations) states, in part:

> (a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
>
> (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
>
> (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
>
> (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.
>
> (b) The findings required by subsection (a) shall be supported by substantial evidence in the record.

The "changes or alterations" referred to in the State CEQA Guidelines may be mitigation measures, alternatives to the project, or changes to the project by the project proponent. The Draft SEIR and the 2004 FEIR for the BART Extension Project to Milpitas, San Jose, and Santa Clara identify mitigation measures that will reduce significant effects of the Project or mitigate other potential effects that may not be, strictly speaking, environmental effects under CEQA. These mitigation measures will be incorporated into the design of the Project. An MMRP will also be adopted by the VTA Board of Directors to ensure that the

mitigation measures identified in the Draft SEIR, along with those that remain applicable in the 2004 FEIR, and these findings will be implemented.

The documents and other materials that constitute the record upon which the VTA's decision and these findings are based can be reviewed at the following locations.

VTA Environmental Planning Department
3331 North First Street, Building B
San Jose, CA 95134-1927

3.2 Findings Regarding Independent Review and Judgment

Each member of the VTA Board of Directors was provided a complete copy of the Draft SEIR and the 2004 FEIR for the Project. The VTA Board of Directors hereby finds that the Draft SEIR and 2004 FEIR reflect its independent judgment. The VTA Board of Directors also finds that it has independently reviewed and analyzed the Draft SEIR and 2004 FEIR prior to taking final action with respect to the Project.

3.3 Findings Regarding the Project

Having reviewed and considered the information contained in the Draft SEIR; the following *Findings, Facts in Support of Findings, and Statement of Overriding Considerations*; the MMRP; and the 2004 FEIR, the VTA Board of Directors finds that the Project, as described in the SEIR, is an appropriate transit mode and alignment for the Project.

As discussed in Chapter 1 of these *Findings, Facts in Support of Findings, and Statement of Overriding Considerations*, the changes to the Project made during the PE design phase resulted in changes to the environmental effects that were described in the 2004 FEIR. These findings identify new significant and unavoidable effects and new less-than-significant effects with mitigation resulting from the proposed changes to the approved Project identified in the Draft SEIR.

3.3.1 Findings Regarding Significant and Unavoidable Effects

The VTA Board of Directors determines that for the following significant effects, mitigation measures included in the Draft SEIR and the 2004 FEIR will lessen the effects but will not result in complete mitigation of the effects to a less-than-

significant level. The findings reflect the VTA Board of Directors' decision to adopt the Project.

Note that Section 3.3.2 identifies those effects for which mitigation measures have been adopted and are reduced below the level of significance.

New Significant and Unavoidable Effects Identified in the SEIR

Transportation and Transit—Vehicular Traffic—Intersections

As discussed in Section 4.2.5, Vehicular Traffic, of the SEIR, the following effects, discussed by intersection, would be significant and unavoidable.

Significant Effect: Montague/Capitol Station (with the South Calaveras Future Station) (Design Change 17): Great Mall Parkway and Montague Expressway.

The LOS would be an unacceptable LOS F during both the a.m. and p.m. peak hours under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical movement delay of 4 or more seconds and an increase in the volume-to-capacity ratio (V/C) of .01 or more under 2030 BART Extension Project conditions. This constitutes a significant effect by Congestion Management Program (CMP) standards.

Findings: The VTA hereby makes finding (a)(3) (as described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project improvement includes the addition of an exclusive southbound right-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. The necessary improvement to mitigate the Project effect at this intersection to an acceptable level will require grade separation of the intersection. It should be noted that the grade separation of this intersection is included in the Valley Transportation Plan 2030 (VTP 2030) project list. However, this improvement was not included as part of the year 2030 roadway network, as it was not included in the VTA 2030 (SVRTC) traffic model used for this analysis. Thus, as a conservative approach, the worst-case intersection configuration was assumed. Although the BART Extension Project would affect this intersection, grade separation of this intersection was identified as the needed improvement under 2030 Without Project conditions. Because the Project would contribute to the need for grade separation of the Great Mall Parkway/Montague Expressway intersection, the Project will contribute a fair-share amount toward

the implementation of this traffic improvement. The Project would cause a ~~significant unavoidable effect at this intersection.~~

Significant Effect: Montague/Capitol Station (with the South Calaveras Future Station) (Design Change 17): Milpitas Boulevard and Yosemite Drive.

The LOS would be an unacceptable LOS F and E during the a.m. and p.m. peak hours, respectively, under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C ratio of .01 or more during both ~~peak hours under 2030 BART Extension Project conditions. This constitutes a~~ significant effect by City of Milpitas standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Possible 2030 Without Project improvements include the addition of a second southbound left-turn lane, exclusive northbound and southbound right-turn lanes, and conversion of the eastbound and westbound shared through and left-turn lanes to protected left-turn lanes with an exclusive westbound right-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of these traffic improvements. The necessary improvements to mitigate the Project effect at this intersection to an acceptable level consist of the addition of a second westbound left-turn lane on Yosemite Drive and conversion of the westbound right-turn lane to a free-right-turn lane. However, these improvements would require the widening of both Milpitas Boulevard and Yosemite Drive, which is not feasible because of ROW constraints. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Montague/Capitol Station (with the South Calaveras Future Station) (Design Change 17): Milpitas Boulevard and Montague Expressway.

The LOS would be an unacceptable LOS F under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the p.m. peak hour under 2030 BART Extension Project conditions. This constitutes a significant effect by CMP standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without

Project conditions. The identified 2030 Without Project possible improvements include the addition of a left-turn, a through, and a right-turn lane on the south approach and the addition of a third southbound shared through and left-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of these traffic improvements. Because of the significantly high projected volumes, there are no feasible at-grade improvements to improve operation levels at this intersection with the Project. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Montague/Capitol Station (with the South Calaveras Future Station) (Design Change 17): Dempsey Road and Landess Avenue.

The LOS would be an unacceptable LOS E during the a.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more under 2030 BART Extension Project conditions. This constitutes a significant effect by City of Milpitas standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project possible improvements include the addition of a second northbound through lane and a third westbound through lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The necessary improvement to mitigate the Project effect at this intersection to an acceptable level consists of the addition of a second southbound right-turn lane on Dempsey Road. However, this improvement is not feasible because of ROW constraints. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Montague/Capitol Station (with the South Calaveras Future Station) (Design Change 17): Park Victoria Drive and Landess Avenue.

The LOS would be an unacceptable LOS E and F during the a.m. and the p.m. peak hour, respectively, under 2030 Without Project With Improvements conditions and the intersection would degrade to LOS F during the a.m. peak hour and experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the p.m. peak hour under 2030 Project conditions. This constitutes a significant effect by City of Milpitas standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project possible improvements include the addition of second northbound, southbound, and eastbound left-turn lanes and the addition of an exclusive northbound right-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The necessary improvement to mitigate the Project effect at this intersection to an acceptable level consists of the widening of Park Victoria Drive from four to six lanes and the conversion of the eastbound right-turn lane on Landess Avenue to a free-right-turn lane. However, the widening of Park Victoria Drive to this extent is not feasible because of ROW constraints. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Montague/Capitol Station (with the South Calaveras Future Station) (Design Change 17): Old Oakland/Main Street and Montague Expressway.

The LOS would be an unacceptable LOS F under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in the V/C of .01 or more during the a.m. peak hour under 2030 BART Extension Project conditions. This constitutes a significant effect by CMP standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No other cost-effective feasible improvements can be made at this intersection beyond the currently planned widening of Montague Expressway to four lanes in each direction. The necessary improvements to mitigate the Project effect at this intersection to an acceptable level consist of the addition of third northbound and westbound left-turn lanes, the addition of a third northbound through lane, and the conversion of the southbound right-turn lane to a free-right-turn lane. However, the widening of Old Oakland/Main Street and Montague Expressway to this extent is not feasible because of ROW constraints. The ROW constraints consist of developed land that would need to be purchased and in some cases buildings and landscaping removed. This level of acquisition is not politically acceptable. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Montague/Capitol Station (with the South Calaveras Future Station) (Design Change 17): Milpitas Boulevard and Calaveras Boulevard.

The LOS would be an unacceptable LOS F during both the a.m. and p.m. peak hours under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during both peak hours under 2030 BART Extension Project conditions. This constitutes a significant effect by CMP standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project possible improvement includes the addition of a second westbound left-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The necessary improvements to mitigate the Project effect at this intersection to an acceptable level consist of the addition of third northbound, southbound, and eastbound left-turn lanes and a third westbound through lane. It should be noted that the VTP 2030 project list includes a project that would widen Calaveras Boulevard to six lanes from Abel Street to Milpitas Boulevard. However, because this improvement was not included as part of the year 2030 roadway network used in the VTA 2030 (SVRTC) traffic model used for this analysis, the analysis conservatively assumes that the improvement will not be in place by 2030. In addition, the widening of Milpitas Boulevard to this extent is not feasible because of ROW constraints. The ROW constraints consist of developed land that would need to be purchased and in some cases buildings and landscaping removed. This level of acquisition is not politically acceptable. Although the BART Extension Project would affect this intersection, the widening of Calaveras Boulevard was identified as one of the needed improvements under 2030 Without Project conditions. Because the Project would contribute to the need for the widening of Calaveras Boulevard, the BART Extension Project will contribute a fair-share amount toward the implementation of this improvement. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Montague/Capitol Station (with the South Calaveras Future Station) (Design Change 17): Hillview Drive and Calaveras Boulevard.

The LOS would be LOS D under 2030 Without Project With Improvements conditions, and the intersection would degrade to an unacceptable LOS E during the p.m. peak hour under 2030 BART Extension Project conditions. This constitutes a significant effect by City of Milpitas standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project necessary improvements include the addition of a second northbound left-turn lane and an exclusive right-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The necessary improvements to mitigate the Project effect at this intersection to an acceptable level consist of the addition of a second westbound left-turn lane on Calaveras Boulevard. However, the widening of Hillview Drive and Calaveras Boulevard is not feasible because of ROW constraints. The ROW constraints consist of developed land that would need to be purchased and in some cases buildings and landscaping removed. This level of acquisition is not politically acceptable. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Montague/Capitol Station (with the South Calaveras Future Station) (Design Change 17): Park Victoria Drive and Calaveras Boulevard.

The LOS would be LOS E during the a.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more under 2030 Project conditions. This constitutes a significant effect by City of Milpitas standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project possible improvements include the addition of second exclusive northbound and southbound left-turn lanes, an exclusive westbound right-turn lane, and the provision of protected left-turn phasing in the northbound/southbound direction. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The necessary improvements to mitigate the Project effect at this intersection to an acceptable level consist of the addition of a third westbound through lane on Calaveras. However, the widening of Calaveras Boulevard is not feasible because of ROW constraints. The ROW constraints consist of developed land that would need to be purchased and in some cases buildings and landscaping removed. This level of acquisition is not politically acceptable. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Berryessa Station (Design Change 23): Lundy Avenue and Berryessa Road.

The LOS would be LOS F during both the a.m. and p.m. peak hours under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more under 2030 BART Extension Project conditions. This constitutes a significant effect by CMP standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project possible improvements include the addition of second eastbound and westbound left-turn lanes. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The necessary improvement to mitigate the Project effect at this intersection to an acceptable level consists of the widening of Lundy Road and Berryessa Road to three and four lanes in each direction, respectively. This improvement is not feasible because of ROW constraints along both of these roadways. The ROW constraints consist of developed land that would need to be purchased and in some cases buildings and landscaping removed. This level of acquisition is not politically acceptable. The ROW constraints consist of developed land that would need to be purchased and in some cases buildings, parking, and landscaping removed. This level of acquisition is not politically acceptable. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Berryessa Station (Design Change 23): King Road and Mabury Road.

The LOS would be an unacceptable LOS E during the p.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to LOS F under 2030 Project conditions. This constitutes a significant effect by City of San Jose standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project possible improvement includes the addition of a second westbound left-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The necessary improvement to mitigate the Project effect at this intersection to an acceptable level consists of the addition of third southbound (on King Road) and westbound (on Mabury Road) left-turn lanes. However, this improvement would

require the widening of both King Road and Mabury Road, which is not feasible because of ROW constraints. The ROW constraints consist of developed land that would need to be purchased and in some cases residences, parking, and landscaping removed. This level of acquisition is not politically acceptable. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Alum Rock Station (Design Change 33): 24th Street and Santa Clara Street.

The LOS would be an unacceptable LOS E during the p.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to LOS F under 2030 Project conditions. This constitutes a significant effect by City of San Jose standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: As identified under the 2030 Without Project conditions, no cost-effective feasible improvements can be made at this intersection to mitigate Without Project or Project effects. The necessary improvements to mitigate the effects at this intersection to an acceptable level consist of the widening of 24th Street to provide two through lanes and an exclusive left-turn lane in each direction, in addition to providing protected left-turn phasing on the same approaches. However, these improvements would require reconstruction of the intersection and widening 24th Street to two lanes in each direction, which is not feasible because of ROW constraints. The ROW constraints consist of developed land that would need to be purchased and in some cases buildings, parking, and landscaping removed. This level of acquisition is not politically acceptable. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Alum Rock Station (Design Change 33): US 101 and Santa Clara Street.

The LOS would be an unacceptable LOS E during the p.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to LOS F under 2030 Project conditions. This constitutes a significant effect by CMP standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The necessary improvement to mitigate the Project effect at this intersection to an acceptable level consists of the conversion of the eastbound right-turn lane on Santa Clara Street to a free-right-turn lane. The

unacceptable LOS condition at this intersection is due to the significantly high eastbound traffic volume accessing the US 101 southbound on-ramp. However, the addition of a free-right-turn lane would not be feasible because of its inability to operate as a free-right-turn movement with the ramp metering in operation. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Alum Rock Station (Design Change 33): McLaughlin Avenue and Story Road.

The LOS would be an unacceptable LOS E under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the a.m. peak hour under 2030 BART Extension Project conditions. This constitutes a significant effect by City of San Jose standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project possible improvements include the addition of second northbound and southbound left-turn lanes and an exclusive eastbound right-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The necessary improvement to mitigate the Project effect at this intersection to an acceptable level consists of the widening of McLaughlin Avenue to three lanes in each direction. This improvement would require the removal of various businesses, parking areas, and residences along McLaughlin Avenue to widen McLaughlin Avenue to the required three lanes in each direction. This street width and level of acquisition is not politically acceptable. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Alum Rock Station (Design Change 33): King Road and Mabury Road.

The LOS would be an unacceptable LOS E during the p.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to LOS F under 2030 BART Extension Project conditions. This constitutes a significant effect by City of San Jose standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project possible improvement includes the addition of a second westbound left-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The necessary improvements to mitigate the Project effect at this intersection to an acceptable level consist of the addition of a third southbound left-turn lane, a third eastbound through lane, and a second eastbound right-turn lane. These improvements would require the widening of Mabury Road, which is not feasible because of ROW constraints. The ROW constraints consist of developed land that would need to be purchased and in some cases residences, parking, and landscaping removed. This level of acquisition is not politically acceptable. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Santa Clara Station (Design Change 52): San Tomas Expressway and El Camino Real.

The LOS would be an unacceptable LOS F under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the p.m. peak hour under 2030 BART Extension Project conditions. This constitutes a significant effect by CMP standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project possible improvements include the addition of second left-turn lanes on all approaches. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The necessary improvement to improve intersection operations to acceptable levels would require grade separation of the intersection. This is not feasible due to ROW constraints. The ROW constraints consist of developed land that would need to be purchased, buildings and landscaping that would need to be removed, and the loss of street access by a number of commercial uses. This level of acquisition is not politically acceptable. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Santa Clara Station (Design Change 52): De La Cruz Boulevard and Central Expressway.

The LOS would be LOS F under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C ratio of .01 or more during the p.m. peak hour under 2030 BART Extension Project conditions. This constitutes a significant effect by CMP standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The identified 2030 Without Project possible improvements include the addition of a third eastbound left-turn lane and a second eastbound right-turn lane. While these improvements would upgrade operations to acceptable levels, they may not be feasible because of ROW constraints on Central Expressway. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of these traffic improvements. No cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions to mitigate Project effects. The necessary improvement to mitigate the Project effect at this intersection consists of the addition of third northbound left-turn lane, a third southbound through lane, and a free southbound right-turn lane, on De La Cruz Boulevard. However, these improvements would require the widening of both De La Cruz Boulevard and Central Expressway, which is not feasible because of ROW constraints. The ROW constraints consist of developed land that would need to be purchased and in some cases buildings and landscaping removed. A further constraint to widening De La Cruz Boulevard is the adjoining Norman Mineta International Airport. This level of acquisition is not politically acceptable. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Significant Effect: Santa Clara Station (Design Change 52): De La Cruz Boulevard and Martin Avenue.

The LOS would be an unacceptable LOS E during the p.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more under 2030 Project conditions. This constitutes a significant effect by City of Santa Clara standards.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project possible improvements include the addition of a second northbound and eastbound left-turn lanes and the addition of exclusive southbound and westbound right-turn lanes. Because the

Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of these traffic improvements. ROW constraints along De La Cruz Boulevard, including structures, landscaping, and the adjoining Norman Mineta International Airport property prohibit the widening of De La Cruz Boulevard to the necessary four lanes in the southbound direction to mitigate Project effects. Should a feasible improvement be determined, a fair-share contribution will be evaluated at that time. The Project would cause a significant unavoidable effect at this intersection.

Energy

Significant Effect: Since the FEIR was approved, the slow to flat growth in the demand for electricity that occurred after the 2000–2001 energy crisis has changed. In addition to population and economic growth, higher-than-average summer temperatures and decreased consumer conservation efforts have increased electricity consumption in California from 250,241 gigawatt hours (GWh) in 2001 to 270,927 GWh in 2004. The California Energy Commission forecasts that consumption will grow between 1.2 to 1.5% annually, from 270,927 GWh in 2004 to between 310,716 and 323,372 GWh by the end of 2016.

At the same time, the electricity generation and transmission network in California is under increasing strain to meet the growing demand, especially during peak periods. Peak period demand can be significantly higher than off-peak demand. The retirement of aging power plants, the slow pace of new plant construction, the limitations of the transmission network to supply surplus electricity from other regions, and inadequate infrastructure for the delivery and storage of natural gas, which provides 40% of the fuel for California's power plants, may affect the ability of California's energy infrastructure to generate and deliver electricity to where it is needed.

In general, the Project will have a beneficial effect on overall energy use by reducing vehicle miles traveled (VMT) and generating a relatively small increase in total electricity demand. However, new information from the California Energy Commission seems to suggest that any project that will increase the demand for electricity will have a significant energy effect due to constraints on electricity supply, especially during peak periods.

The Project would increase demand for electricity. Since forecasts indicate that existing and planned resources will not meet demand, surplus energy will need to be imported from other generators, particularly in the southwest and Pacific Northwest. Due to the availability of imported energy from neighboring states, the effect of the Project on the electrical power generation system would not be significant.

However, according to the 2005 Integrated Energy Report, congestion and bottlenecks along the state's transmission lines has worsened causing serious disruptions in service, especially on hot summer days. Until the recommended improvements in transmission infrastructure are implemented, reliability cannot

be assured. Since the Project will increase demand on the statewide electrical transmission grid, the effect is potentially significant.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The required mitigation would be to implement recommended improvements in the statewide transmission infrastructure. Since the Project has no control over these improvements and there is no guarantee that these improvements will be implemented, electricity demand by the Project, especially during peak periods, is considered significant and unavoidable.

Noise and Vibration

Significant Effect: Line Portion north of U.S. 101.

Operation of BART in the portion north of U.S. 101 would result in vibration impacts to 172 single family and 40 multi-family buildings (an estimated 171 residences). With mitigation, 2 residences would continue to experience vibration impacts.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Floating slab track with a design frequency of 8 Hz is the most effective, proven mitigation approach to sufficiently reduce vibration impacts generated by BART trains to below Federal Transit Administration (FTA) criteria. Approximately 14,500 feet of floating slab and tire derived aggregate would reduce vibration impacts to all but two residences. While vibration impacts would be reduced for the remaining 2 residences at the Terrace Gardens Senior Housing complex, the impacts would exceed the FTA criteria by 1 VdB. Since floating track slab is considered the recommended mitigation to reduce substantial vibration impacts, further mitigation is infeasible. The Project would cause a significant unavoidable effect at these 2 residences.

Construction—Transportation and Transit—Vehicular Traffic

Significant Effect: Kato Road Underpass (Design Change 5): Dixon Landing Road/North Milpitas Boulevard.

Construction of the Kato Road underpass would cause full closure of Kato Road for approximately 6 months in the area near the BART alignment. This closure would affect traffic at the Dixon Landing Road/North Milpitas Boulevard intersection.

Currently, the southbound right-turn volume increases considerably in the morning peak and the eastbound left-turn volume increases in the evening peak. The southbound approach (north leg) is currently striped with a wide shoulder that is used as a bike land and right turn lane, two through lanes, and one left turn lane. The eastbound approach (west leg) is currently striped with one left-turn lane, one through lane, and one shared through-right lane.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: During construction, the southbound approach will be modified to two right turn lanes, a bike pocket, one through lane, and one left turn lane. Temporary warning signs will be provided for bicyclists entering the bike pocket and southbound drivers turning right to yield to pedestrians. The eastbound approach will be modified to one left-turn lane, one shared left-through lane, and one through-right lane, and the traffic signal phasing will be modified to an east/west "split" phasing to accommodate the shared left-through lane. The combined effect of re-striping and traffic signal phase sequence modifications results in an LOS E operation. To achieve LOS D, road widening would be required, which would not be feasible since it would add additional Project cost and would permanently, adversely affect adjacent private property by removal of structures and landscaping in order to mitigate a temporary impact.

Significant Effect: Kato Road Underpass (Design Change 5): Kato Road-Scott Creek Road/Warm Springs Boulevard.

Construction of the Kato Road underpass would cause full closure of Kato Road for approximately 6 months in the area near the BART alignment. This closure would affect traffic at the Kato Road-Scott Creek Road/Warm Springs Boulevard intersection.

Currently, the northbound right-turn volume and the westbound left-turn volumes increase considerably in the morning peak. The northbound approach (south leg) is currently striped for two left-turn lanes, two through lanes, and one right-turn lane. The westbound approach (east leg) is currently striped for one left-turn lane, two through lanes, and one right-turn lane. The combined effect of re-striping results in an LOS E operation. Both measures can be implemented within the existing street ROW.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: During construction, the northbound approach will be modified to one left-turn lane, two through lanes, and two right-turn lanes. During construction, the westbound approach will be modified to two left-turn lanes, one through lane, and one right-turn lane. The combined effect of re-striping and traffic signal phase sequence modifications results in an LOS E operation. To achieve LOS D, road widening would be required, which would

not be feasible since it would add additional Project cost and would permanently, adversely affect adjacent private property by removal of structures and landscaping in order to mitigate a temporary impact.

Significant Effect: Dixon Landing Road Alignment (Design Change 8): Dixon Landing Road/Milmont Drive.

Construction of the Dixon Landing Road crossing would require either an 18 month schedule, with full closure of Dixon Landing Road for approximately 6 months in the area near the BART alignment, or a 30 month schedule, with partial closure of Dixon Landing Road. Both construction approaches would affect traffic at the Dixon Landing Road/Milmont Drive intersection.

Roadway excavation at this intersection would allow for only one northbound and one southbound land on Milmont Drive. Adequate intersection levels of service would not be provided given the traffic levels and roadway constraints.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The necessary improvement to provide acceptable levels of service for the At Grade Option consist of road widening, which is not feasible since it would add additional Project cost and would permanently adversely affect adjacent private property by removal of structures and landscaping in order to mitigate a temporary impact. VTA has committed to work with the City Milpitas on a construction phasing plan for this location.

Significant Effect: Dixon Landing Road Alignment (Design Change 8): Kato Road/Milmont Drive.

Construction of the Dixon Landing Road crossing would require either an 18 month schedule, with full closure of Dixon Landing Road for approximately 6 months in the area near the BART alignment, or a 30 month schedule, with partial closure of Dixon Landing Road. Both construction approaches would affect traffic at the Kato Road/Milmont Drive intersection.

The northbound right-turn volume increases considerably in both the morning and evening peaks. The northbound approach (south leg) is currently striped for one left turn lane and one shared through-right lane.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: During construction, the northbound approach will be modified to one shared through-left lane and one right turn lane. The southbound approach will be modified to one shared left-through-right lane. In addition, traffic signal phasing will be modified to allow the northbound right-turn movement to overlap with the westbound left turn movement. This

mitigation measure will be implemented within existing street ROW to reduce effects on adjacent properties. Further mitigation outside the ROW is infeasible in that it would require permanent, adverse changes in order to mitigate a temporary construction impact. VTA has committed to work with the City Milpitas on a construction phasing plan for this location.

Significant Effect: Dixon Landing Road Alignment (Design Change 8): Kato Road-Scott Creek Road/Warm Springs Boulevard.

Construction of the Dixon Landing Road crossing would require either an 18 month schedule, with full closure of Dixon Landing Road for approximately 6 months in the area near the BART alignment, or a 30 month schedule, with partial closure of Dixon Landing Road. Both construction approaches would affect traffic at the Kato Road-Scott Creek Road/Warm Springs Boulevard intersection.

The eastbound right-turn volume increases considerably in both the morning and evening peaks. The potential mitigation includes temporary re-striping, resulting in LOS E and LOS D operation during the a.m. and p.m. peak hours, respectively. The eastbound approach (west leg) is currently striped for one left-turn lane, two through lanes, and one shared through right-turn lane.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: During construction, the eastbound approach will be modified to one left turn lane, one through lane, one shared through right-turn lane, and one right turn lane. This mitigation measure will be implemented within existing street ROW to reduce effects on adjacent properties. Further mitigation outside the ROW is infeasible in that it would require permanent, adverse changes in order to mitigate a temporary construction impact. VTA has committed to work with the City Milpitas on a construction phasing plan for this location.

Significant Effect: Downtown San Jose Station (Design Change 40).

The construction of the Downtown San Jose Station would require long-term lane or street closures on East Santa Clara Street between 4th Street and San Pedro Street over the planned 1-year utility relocation period and the 3-year construction period. During the initial 7 months of station construction, the installation of temporary support walls and street decking would require that certain lanes be closed for one block at a time for less than 1 month at each location, and this may occur more than one time in any one location. Intermittent short-term lane or street closures (i.e., a matter of days at a time), may also be required at any time during the utility relocation and station construction period.

Construction of the Downtown San Jose Stations would cause the degradation of the following intersections to below LOS D during construction:

- Santa Clara Street and 3rd Street
- Santa Clara Street and 4th Street
- Saint James Street and 5th Street

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The necessary improvements to reduce effects to less-than-significant levels are not feasible due to ROW constraints and additional Project cost. Further mitigation is infeasible in that it would require permanent, adverse changes in order to mitigate a temporary construction impact.

Significant Effect: Diridon/Arena Station (Design Change 42).

The construction of the Diridon/Arena Station would require the long-term street closures of Autumn and Montgomery streets. Autumn Street south of Santa Clara Street around the station footprint would be closed for less than 1 month, while Montgomery Street would be closed for about 2 months.

Construction of the Diridon/Arena Station would cause the degradation of the following intersection to below LOS D during construction:

- West Santa Clara Street and Autumn Street

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The necessary improvements to reduce effects to less-than-significant levels are not feasible due to ROW constraints and additional Project cost. Further mitigation is infeasible in that it would require permanent, adverse changes in order to mitigate a temporary construction impact.

Construction—Transportation and Transit—Parking

Significant Effect: Construction Staging Areas (Design Change 53): Trade Zone Boulevard.

Twenty-five to 30% of the parking for one office located south of Trade Zone Boulevard and east of the railroad ROW would be displaced for two to three years due to the construction staging area. No readily available feasible alternate parking sites are in the vicinity. This loss of parking for this office would be considered a significant unavoidable effect.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The VTA will work with the business owner to minimize parking effects on the extent feasible. However, the temporary loss of parking for the office would cause a significant unavoidable effect. Further mitigation is infeasible in that there is not sufficient other parking in the area to mitigate this temporary construction impact.

~~**Significant Effect:** Construction Staging Areas (Design Change 53):~~ Downtown San Jose.

Approximately 360 off-street parking spaces would be displaced for more than 3 months due to the construction staging area near the Downtown San Jose Station. Parking spaces are very limited in this area and demand is high due to the use by local businesses. No readily available feasible alternate parking sites are in the vicinity. This loss of parking would be considered a significant unavoidable effect.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The VTA will work with business owners to minimize parking effects on the extent feasible. Further mitigation is infeasible in that there is not sufficient other parking in the area to mitigate this temporary construction impact.

Significant Effect: Diridon Arena Station (Design Change 42) and Construction Staging Areas (Design Change 53): Diridon/Arena Station.

Up to 450 off-street parking spaces and up to 24 on-street parking spaces located south of West Santa Clara Street would be displaced for more than three months due construction of the station and the construction staging area. The property located north of San Fernando Street between Cahill and Montgomery streets would be used as a temporary bus transit center during construction of the permanent transit center, and would cause the displacement of approximately 90 parking spaces for more than 3 months. Parking demand is high from area uses such as the HP Pavilion, Caltrain, and other local businesses. No readily available feasible alternate parking sites are in the vicinity. This loss of parking would be considered a significant unavoidable effect.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The VTA will continue to work with the City of San Jose, JPB, and HP Pavilion to minimize parking effects, such as providing shuttles to remote parking lots. However, further mitigation is infeasible in that

there is not sufficient other parking in the area to mitigate this temporary construction impact.

Construction—Noise and Vibration

Significant Effect: Construction noise effects would occur during site clearing, preparation of subgrade, retaining wall and aerial construction, layout of sub-ballast, and track installation for the line portion and during tunnel portal, station vent shaft, and auxiliary facility construction.

Findings: The VTA hereby makes finding (a)(3) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: A combination of temporary sound walls, noise control curtains, restriction on work hours, or temporary relocation of affected residents have been identified to achieve the construction noise criteria. Similar measures are identified to minimize noise effects where it may not be feasible to reduce noise effects to acceptable levels. Further mitigation is infeasible in that it would be cost prohibitive relative to this temporary construction impact.

Significant and Unavoidable Effects Identified in the 2004 FEIR that Remain Unchanged

There are no significant and unavoidable effects in the 2004 FEIR that remain. They have been deleted and/or replaced with revised measures in the SEIR due to design changes and updated information.

3.3.2 Findings Regarding Significant Effects Mitigated to Less-Than-Significant Levels

Significant Effects Mitigated to Less-Than-Significant Levels Identified in the SEIR

VTA has determined that, for the following effects, mitigation measures included in the SEIR will mitigate the effects of the Project to a less-than-significant level.

Transportation and Transit—Vehicular Traffic—Intersections

As discussed in Section 4.2.5, Vehicular Traffic, of the SEIR, the following effects, discussed by intersection, would be mitigated to less-than-significant levels.

Significant Effect: Montague/Capitol Station (With the South Calaveras Future Station) (Design Change 17): Milpitas Boulevard and Los Coches Street.

The LOS would be LOS C during the p.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant effect by City of Milpitas standards.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The necessary improvement to mitigate the Project effect at this intersection consist of the modification of the east and west legs of the intersection (Los Coches Street) to provide two left-turn lanes and one shared through/right-turn lane in the eastbound direction; and one left-turn lane, one through lane, and one right-turn lane in the west-bound direction. This improvement will upgrade the intersection LOS to an acceptable LOS D during the p.m. peak hour. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant effect.

Significant Effect: Montague/Capitol Station (With the South Calaveras Future Station) (Design Change 17): Milpitas Boulevard and Escuela Drive.

The LOS would be LOS D during the a.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant effect by City of Milpitas standards.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The necessary improvements to mitigate the Project effect at the intersection consist of the addition of an exclusive northbound right-turn lane on Milpitas Boulevard. The implementation of this improvement will improve intersection LOS to an acceptable LOS D during the a.m. peak hour. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the

implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant effect.

Significant Effect: Berryessa Station (Design Change 23): Flickinger Avenue and Berryessa Road.

The LOS would be LOS D during the a.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant effect by City of San Jose standards.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The necessary improvements to mitigate the Project effect at the intersection consist of the addition of a second eastbound left-turn lane on Berryessa Road. The implementation of this improvement will improve intersection LOS to an acceptable LOS D during the a.m. peak hour. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant effect.

Significant Effect: Alum Rock Station (Design Change 33): US 101 and Julian Street.

The LOS would be LOS D during the a.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant effect by City of San Jose standards.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The necessary improvements to mitigate the Project effect at the intersection consist of the addition of an exclusive eastbound right-turn lane on Julian Street. The implementation of this improvement will improve intersection LOS to an acceptable LOS D during the a.m. peak hour. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The implementation of this improvement would improve intersection LOS to an acceptable LOS C.

Significant Effect: Alum Rock Station (Design Change 33): US 101 and McKee Road.

The LOS would be LOS D during the a.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant effect by City of San Jose standards.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The necessary improvements to mitigate the Project effect at the intersection to an acceptable level consists of the conversion of the northbound shared right and through lane on the US 101 off-ramp to an all-movement lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. The implementation of this improvement would improve intersection LOS to an acceptable LOS D.

Significant Effect: Santa Clara Station (Design Change 52): Lafayette Street and Benton Street.

The LOS would be an acceptable LOS D during the p.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant effect by City of Santa Clara standards.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The identified 2030 Without Project possible improvements include the addition of an exclusive left-turn lane on the northbound direction, second through lanes on the northbound and southbound approaches, additions of an exclusive eastbound right-turn lane, and providing protected left-turn phasing on all approaches to the intersection. While these improvements would upgrade operations to acceptable levels, they may not be feasible because of ROW constraints and the current reversible lane on Lafayette Street. The necessary improvement, to mitigate the Project effect at this intersection beyond the Without Project condition, consists of the addition of an exclusive southbound right-turn lane on Lafayette Street. The implementation of this improvement would improve intersection level of served to an acceptable LOS D. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant effect.

Significant Effect: Santa Clara Station (Design Change 52): Coleman Avenue and Brokaw Road.

The LOS would be an acceptable LOS D during the p.m. peak hour under 2030 Without Project With Improvements conditions, and the intersection would degrade to an unacceptable LOS F under 2030 Project conditions. This constitutes a significant effect by City of Santa Clara standards.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The identified 2030 Without Project possible improvements include the addition of a third southbound through lane. The necessary improvement to mitigate the Project effect at this intersection consists of the addition of a second eastbound left-turn lane on Brokaw Road. The implementation of this improvement would improve intersection level of served to an acceptable LOS D. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant effect.

Significant Effect: Santa Clara Station (Design Change 52): Monroe Street and Benton Street.

The LOS would be an unacceptable LOS E and F during the a.m. and the p.m. peak hour, respectively, under 2030 Without Project With Improvements conditions, and the intersection would degrade to an unacceptable LOS F during the a.m. peak hour and experience an increase in critical-movement delay of four or more seconds and an increase in the V/C of .01 or more during the p.m. peak hour under 2030 Project conditions. This constitutes a significant effect by City of Santa Clara standards.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Possible improvements include the addition of exclusive northbound and southbound right-turn lanes on Monroe Street. This improvement may be challenging because of ROW constraints along Monroe Street, but it is included as possible improvement. Although intersection operation levels will improve with the implementation of these improvements to conditions better than Without Project, the intersection LOS would remain at an unacceptable LOS F during the p.m. peak hour. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a fair-share amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant effect.

Biological Resources and Wetlands

Significant Effect: Effects on Congdon's tarplant may be greater than that described in the 2004 FEIR due to the difference in the number of living plants identified in the 2002 and 2005 surveys (12 and 100, respectively). Mitigation will be implemented to reduce any temporary or permanent effects on Congdon's tarplant.

Finding: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: VTA will design all facilities to avoid temporary and permanent effects on Congdon's tarplant to the maximum extent practicable. If avoidance is not feasible, a focused botanical survey will be conducted by a qualified plant biologist to ascertain the presence or absence of the species in the Project area during the initial blooming period (August) that occurs prior to the construction. VTA will mitigate the permanent loss of Congdon's tarplants at a minimum ratio of 1:1 (replacement plants: lost plants), or at a ratio determined in consultation with resource agency personnel. VTA will also mitigate in accordance with the California Native Plant Society's recommended measure for mitigating effects on Congdon's tarplant.

Significant Effect: The revised wetland delineation completed in the fall 2006 identified an additional 2.79 acres of wetlands and waters of the United States compared to the information presented in the 2004 FEIR (Table 4.4.2–2). Of this additional acreage, 0.92 acres is attributed to drainage ditches running along the railroad corridor that were not previously identified. An additional 0.76 acres is attributed to the design change at Berryessa Creek where a larger area would be impacted by construction of a multi-cell box culvert (see below). Confirmation of the revised delineation by the Army Corps of Engineers is pending. Mitigation is proposed that replaces the information in the 2004 FEIR.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: VTA will design all Project facilities to avoid temporary and permanent impacts to wetlands and waters of the United States to the maximum extent practicable. If avoidance is not feasible, VTA will mitigate the permanent loss of wetlands at a minimum 2:1 ratio (replacement area: loss area) and the temporary loss of wetlands at a minimum 1:1 ratio, or at higher ratios determined in consultation with resource agency personnel. Permanent and temporary impacts to waters of the United States will be mitigated at minimum 1:1 ratio, or at a higher ratio determined in consultation with resource agency personnel. Mitigation will be on-site and in-kind to the maximum extent practicable. If mitigation cannot be accommodated entirely on-site, VTA will investigate other mitigation opportunities in coordination with resource agency personnel within the impacted watershed, if possible. A qualified biologist, in coordination with resource agency personnel, will prepare a mitigation and

monitoring plan for impacts to wetlands and waters of the United States due to the Project. Alternatively, VTA may purchase credits in an approved mitigation bank.

Significant Effect: The 2004 FEIR includes and access road from Berryessa Road to the Berryessa station area west of railroad ROW. During PE, this road was relocated to the east of the railroad ROW. Under both configurations the road breaches the 150-foot riparian setback from Upper Penitencia Creek. Effects on Upper Penitencia Creek associated with the access road discussed previously in the 2004 FEIR remain applicable in the SEIR, as the road would still cross the creek and affect the same types of biological resources, although approximately 650 feet farther east. Mitigation is proposed to replace riparian habitat, which supplements the information in the 2004 FEIR.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: VTA will design all Project facilities to avoid temporary and permanent effects on riparian habitat to the maximum extent practicable. If avoidance is not feasible, effects on the riparian habitat will be mitigated at ratios based on the quality of habitat to be affected. Effect ratios of 3:1, 2:1, and 1:1 (replacement area: loss area) will be applied for effects on high-quality, medium-quality, and lower-quality habitats, respectively. Mitigation for effects on riparian habitat will be in-kind, except that non-native species will be replaced with commercially available native species common to the planting area, and on-site to the maximum extent practicable. If mitigation cannot be accommodated entirely on-site, VTA will coordinate with resource agency personnel to identify other potential riparian mitigation sites within the affected watershed, if possible. A qualified biologist, in coordination with resource agency personnel, will prepare a mitigation and monitoring plan for effects on riparian habitat due to the Project.

Cultural and Historic Resources—Archaeological Resources

Significant Effect: Archaeological resources are expected to occur within the revised APE.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: An MOA and supporting Cultural Resources treatment Plan (CRTP) will be developed for the archaeological sites in consultation with the Native American community, Hispanic historical organization, appropriate city and county historic preservation bodies, SHPO, and ACHP. Mitigation measures may include subsurface excavations, focused

archival research, site protection, on-site monitoring, following procedures in CRTP, curation, and public interpretation.

Cultural and Historic Resources—Architectural Resources

Significant Effect: New impacts to historic or architectural resources would result from station entrance M-1C for the Downtown San Jose Station at the Western Dental Building (42-48 East Santa Clara Street). This building is listed on the NRHP as a contributor to a historic district, the San Jose Downtown Commercial Historic District. Construction of the station entrance may require the substantial alteration of a historic property, which would constitute a substantial adverse change to a component of the historic district, as it would change the physical features within the setting and visual linkage to the District and possibly diminish the integrity of the District.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Mitigation measures for the historic properties will be set forth in a MOA to be executed by appropriate government and historic preservation bodies. Other elements of the mitigation measures and MOA described in the 2004 FEIR remain applicable.

Noise and Vibration

Significant Effect: A total of 132 ground level receptors (approximately 185 individual units) from Warm Springs to the east tunnel portal that would be exposed to noise levels in excess of FTA criteria. The Project also impacts residences with second level or higher floors. This is a result of the existing sound walls and other features that provide noise mitigation only for ground level floors. A total of 425 residential units in 281 buildings on the second level or higher floor would be impacted.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Sound walls are the recommended noise mitigation for residences impacted by BART operations along this portion of the alignment. The approximate length of sound walls needed is 9,100 linear feet. The sound walls range in length from 150 to 1,730 feet long. Typically, the location of a sound wall is either 10 feet or 13 feet from the track centerline, depending upon the track profile. In areas where sound walls are recommended on both sides of the alignment, absorptive sound walls are the recommended noise mitigation.

Significant Effect: Crossover Tracks near Kato Road (Design Change 4). The crossover south of Kato Road is expected to increase noise levels at nearby residences by approximately 3 dBA. There would be four residences with Severe Impact as defined by FTA criteria. To mitigate outdoor severe noise impacts at these residences would require a 14-foot high sound wall at the property line. A wall of this height may be infeasible due to cost and/or the wall being undesirable to residents because of visual impacts. If a 14-foot sound wall is infeasible a sound wall would be constructed closer to the tracks to mitigate noise impacts. In addition, nine residences would have noise impacts to the second story and above. These second stories would be too high for a feasible sound wall height (i.e., greater than 14 feet) to mitigate noise. To mitigate noise impacts to second stories and above, noise insulation of the structure would be provided or a sound wall would be constructed closer to the eastern track to reduce noise impacts.

Findings: The VTA hereby makes findings (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Approximately 340 feet of 14-foot-high, sound walls and noise insulation for the second and higher floors will reduce noise effects to less-than-significant levels. If a 14-foot high sound wall is infeasible, a sound wall would be constructed closer to the track to reduce noise impacts.

Significant Effect: Dixon Landing Road Alignment (Design Change 8). The at grade configuration would result in noise impacts to 16 residences at the ground floor and 114 residences with second and higher floors.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The at grade configuration would require approximately 720 linear feet of 7- to 8-foot-high sound walls and noise insulation for the second and higher floors. These mitigation measures will reduce noise effects to less-than-significant levels.

Significant Effect: Curtis Avenue to Trade Zone Boulevard (Design Change 14). The long retained cut configuration would result in noise impacts to 19 residences. Residences with second and higher floors would also be affected.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The long retained cut configuration requires approximately 1,150 linear feet of 6 to 12-foot-high sound walls. Residences located on the second floor or higher would potentially remain impacted even with the sound walls. The exterior walls, windows, and doors of each structure will be assessed to determine the ability of the existing building facades to provide sufficient attenuation of airborne noise to achieve an interior noise level

of Ldn 45 or less. Noise insulation for second or higher floors would be provided as needed to meet FTA noise criteria.

Significant Effect: Tunnel Portion. The shallower tunnel depth and higher vehicle speeds within the tunnel compared to the 2004 FEIR would result in groundborne noise impacts to 133 residences and other sensitive uses along the tunnel alignment.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Mitigation includes approximately 5,500 linear feet of highly resilient direct fixation rail fasteners and 10,500 linear feet of rail suspension fasteners (RSF) to reduce groundborne noise impacts to meet FTA criteria.

Significant Effect: Line Portion. An estimated 172 single family and 171 multifamily residences from Warm Springs to the east tunnel portal would be exposed to vibration levels in excess of FTA criteria without mitigation.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Approximately 6,260 linear feet of tire-derived aggregate and 8,225 linear feet of floating slab track with a design frequency of 8 Hz, or other equivalent measures, will reduce vibration effects to meet FTA criteria. Floating slab track provides a greater reduction where needed.

Significant Effect: Crossover Tracks near Kato Road (Design Change 4). This design change would result in vibration impacts in excess of FTA criteria to 29 residences near Kato Road.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Mitigation includes approximately 300 linear feet of floating slab track and 700 linear feet of tire-derived aggregate (or equivalent measures) to reduce vibration impacts to meet FTA criteria. Floating slab track is recommended to reduce train-generated vibration for a portion of the proposed Castilleja Condominiums and tire-derived aggregate is recommended the remaining Castilleja Condominiums and the proposed Warm Springs Village.

Significant Effect: Dixon Landing Road Alignment (Design Change 8). The at grade configuration near Dixon Landing Road would result in vibration impacts in excess of FTA criteria to 59 residences.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The at-grade configuration will require approximately 2,230 linear feet of tire-derived aggregate and 560 feet of floating slab track (or equivalent measures) to reduce vibration impacts to meet FTA criteria.

Construction—Biological Resources and Wetlands

Significant Effect: Fragments of nonnative grasslands and potential burrowing owl habitat exist along the alignment. Effects on burrowing owls occur when construction activity is within 50 meters (approximately 165 feet) of an occupied burrow, destroys a natural or artificial burrow, or results in destruction of degradation of foraging habitat within 100 meters (approximately 330 feet) or an occupied burrow.

Finding: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: A preconstruction survey of suitable habitat within 250 feet of construction areas (access permitting) will be conducted per California Department of Fish and Game (SDFG) guidelines by a qualified biologist within 30 days prior to construction to determine the presence of burrowing owls. If burrowing owls are determined to be present, avoidance of occupied burrows is the preferred method of addressing potential effects. If avoidance is not feasible, a qualified biologist, in consultation with CDFG, will use passive relocation techniques (e.g., installing one-way doors at burrow entrances) to displace burrowing owls from the construction area to avoid the loss of any individuals due to construction. If destruction of occupied burrow is unavoidable, the loss of foraging, nesting, and roosting habitat will be mitigated through habitat preservation at a ratio of 6.5 acres of foraging habitat permanently preserved for each pair or unpaired resident bird\e displaced due to the Project. Such mitigation will be provided via preservation of the appropriate acreage of occupied burrowing owl habitat with a conservation easement, or the purchase of credits in a CDFG approved conservation bank.

Significant Effect: Construction activities may affect nesting raptors in nonnative grassland and riparian areas. In addition, the removal of trees anywhere along the alignment may affect nesting raptors.

Finding: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: To the extent feasible, construction activities, including tree and shrub removal, will be scheduled between September and

December to avoid the nesting season for most raptors, as well as other bird species. If construction cannot be scheduled between September and December, preconstruction surveys for nesting raptors will be conducted by a qualified biologist during the nesting season (January through August) to ensure that no raptor nests will be disturbed during construction. The surveys will be conducted no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (January through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). During this survey, the ornithologist will inspect all trees and electrical towers in, and immediately adjacent to, the effect area for raptor nests. If an active raptor nest is found close enough to the construction area to be disturbed by these activities, the ornithologist, in consultation with the California Department of Fish and Game, will determine the extent of a construction-free buffer zone, typically 250 feet, to be established around the next until the chicks have fledged.

Significant Effect: The 2004 FEIR includes the development of stream diversion plans in accordance with the VTA's Fish Friendly Channel Design Guidelines (March 2000). In the SEIR, this requirement extends to construction of the multi-cell box culvert at Berryessa Creek (Design Change 9). The requirement also extends to Upper Penitencia Creek where, with implementation the Army Corps of Engineer's Upper Penitencia Creek Flood Control Project, which will widen the creek near the Berryessa Station, it would be necessary to construct columns within the channel to support both the BART aerial structure and roadway overpass at the station.

Finding: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction within the channels that cross the Project alignment, including installation of temporary stream diversion structures, will be restricted to the dry season, which generally extends from June 1 to October 15 depending on the species present. In some cases, construction may begin earlier than June 15 or continue past October 15, as specified in regulatory agency permits and agreements or any authorized extensions.

Construction—Noise and Vibration

Significant Effect: Construction vibration effects would occur from the use of vibratory pile drivers, large tracked dozers, compactors and other heavy equipment. Vibration effects are a major concern for the construction of the Downtown San Jose Station because of the adjacent building. Vibration effects are not anticipated from the tunnel boring machines.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction activities shall be carried out in compliance with FTA vibration criteria and guidelines, and applicable local regulations to the extent feasible. Specific property line vibration limits will be developed during Final Design and included in the construction vibration specifications for the Project. Regular vibration monitoring will be performed during construction to verify compliance with the limits. The use of "resonant-free pile drivers" of other measures will be required if vibration levels exceed the criteria.

Construction—Geology, Soils, and Seismicity

Significant Effect: Surface settlements and ground movements may cause damage to structures, facilities, and utilities. However, the occurrence of settlement does not necessarily result in damage. Depending on the predicted degree of effect, probability of exceedance, structural sensitivity to movement, the Project would include ground treatment measures, strengthening of structures, and underpinning of structures on a case-by-case basis prior to tunnel boring or cut and cover construction. The Project also would employ earth pressure balance tunnel boring machines to minimize the risk of surface settlements and lateral ground movements. In additions to these design requirements, mitigation can be implemented to reduce the magnitude and likelihood of surface settlements and ground movement, physical damage, or functional effects.

Findings: The VTA hereby makes finding (a)(1) (described in Section 3.1 above), as required by PRC 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Pre-construction condition surveys, of the interiors and exteriors of select structures within the settlement trough along the tunnel alignment and within the limit of influence around the cut and cover excavations, will be conducted by independent surveyors to assess the condition of each property. These surveys will include written and photographic (video and still) records. The results of these surveys will be compared with post-construction condition surveys so that any effects of tunneling and cut and cover construction on structures can be assessed. For the tunnel activity, surveys will occur as close to the planned dates of tunneling as possible so that the results are as current as possible. Therefore, surveys will be performed prior to passage of the tunnel boring machines with some surveys conducted once tunneling has commenced.

For the tunneling activity, ground surface monitoring will be performed prior to and during construction. Instrumentation will be installed to monitor ground movements and effects of tunnel boring on structures and utilities. Monitoring can be used to direct real-time modifications, as appropriate, to tunneling practices and procedures to assist in minimizing impacts along the tunnel alignment.

Monitoring points will be mounted on select structures within the settlement trough along the tunnel alignment and within the limit of influence around the cut and cover excavations to monitor any effects of settlement.

A preconstruction condition survey will be conducted of utilities deemed to be potentially at risk due to surface settlement or ground movement. Major utilities deemed to be at risk will be monitored during construction. Coordination with utility providers will be conducted prior to installation of utility monitoring points.

The option of post construction repair is based on the probability of damage, predicted degree of damage, sensitivity of the structure or facility, and cost and ease of repair. If repair is not feasible, compensation may be necessary.

Significant Effects Mitigated to Less-Than-Significant Levels Identified in the 2004 FEIR

Mitigation measures were included in the 2004 FEIR to mitigate the effects of the Project to a less-than-significant level. However, some of the measures in the 2004 FEIR have been deleted and/or replaced with new or revised measures in the SEIR. Appendix A to this document includes the mitigation measures from the 2004 FEIR that remain applicable.

3.4 Findings Regarding the Other Alternatives

As required by CEQA, discussion of possible alternatives to the Project, including a No-Project Alternative, was included in the 2004 FEIR for the Project. These findings are repeated below. With adoption of the Project, the VTA Board of Directors makes the following findings to support its rejection of these two alternatives in favor of the Project.

3.4.1 No-Project Alternative

Findings: The VTA Board of Directors hereby finds that this alternative is not "feasible" as defined in Section 15364 of the State CEQA Guidelines for the following reasons.

Facts in Support of Findings:

- The No-Project Alternative does not achieve the Project's purpose of improving public transit in this severely congested corridor, enhance regional connectivity, accommodate future travel demand, alleviate severe and ever-increasing traffic congestion on I-880 and I-680, improve regional air quality, improve mobility option, maximize transit usage and ridership, and support local economic and land use plans and goals.

- The No-Project Alternative generates lower projected transit ridership than the BART Extension Project and fails to realize the Project's benefits of shifting users from automobiles to transit and reducing long-term traffic congestion on local and regional roadways.
- The No-Project Alternative impedes the improvement of Bay Area air quality. Continued efforts to expand transit ridership are baseline assumptions of the State Implementation Plan (SIP) relative to improving air quality to meet federal and state standards (Bay Area Air Quality Management District, *Bay Area Ozone Attainment Plan*, October 24, 2001). The No-Project Alternative would fail to provide the BART Extension Project's benefits to regional air quality (reduced emissions of ozone precursors, particulate matter, and toxic air contaminants) resulting from decreased automobile VMT. Failure to implement enhanced transit opportunities will impede the SIP's ability to meet air quality improvement goals.
- The No-Project Alternative fails to achieve the BART Extension Project's benefit of decreasing energy consumption resulting from decreased automobile VMT.
- The No-Project Alternative fails to fulfill the mandates of regional planning agencies. The Project is included in both the Metropolitan Transportation Commission's (MTC's) Regional Transit Expansion Policy (RTEP) and Regional Transportation Plan, which lists the Project as a Track 1 priority investment.
- The No-Project Alternative fails to provide the opportunity for future extension of BART service into Santa Clara County, further enhancing the regional network. The Project would facilitate the creation of a rail transit "ring" around the Bay with connections between BART, light rail transit, and Caltrain.
- The No-Project Alternative fails to serve projected long-term population and job growth and subsequent commuting needs in an area currently lacking rail transit services.

3.4.2 "New Starts" Baseline Alternative

Findings: The VTA Board of Directors hereby finds that this alternative is not "feasible" as defined in Section 15364 of the State CEQA Guidelines for the following reasons.

Facts in Support of Findings:

- The Baseline Alternative does not achieve the Project's purpose of improving public transit in this severely congested corridor, enhancing regional connectivity, accommodating future travel demand, alleviating severe and ever-increasing traffic congestion on I-880 and I-680, improving regional air quality, improving mobility option, maximizing transit usage and ridership, and supporting local economic and land use plans and goals.

- The BART Extension Project is endorsed by the community as evidenced by the voters' approval of Santa Clara County Measure A (½ cent sales tax beginning in 2006) on November 7, 2000. Measure A specifically identifies the Project as a major component of its spending plan and provides the largest single source of funding for the Project. The Baseline Alternative would not allow the VTA to meet the Measure A goal of funding an extension of BART from its terminus in Alameda County to the Santa Clara Caltrain station.
- The Baseline Alternative generates lower projected ridership than the Project. The Baseline Alternative generates 22,600 average weekday trips and 6,800 new transit trips compared with the 83,600 average weekday trips and 39,300 new transit trips generated by the BART Extension Project.
- The Baseline Alternative fails to maximize the Project's benefits of shifting users from automobiles to transit and reducing long-term traffic congestion on local and regional roadways. The Baseline Alternative offers 9,700 hours of daily travel time savings and 3,600 peak period trips removed compared with the BART Extension Project's 66,900 hours of daily travel time savings and 25,500 peak period trips removed.
- The Baseline Alternative would be less convenient to travelers utilizing the BART line, thereby providing them a lower LOS. Riders would be required to physically transfer between bus and BART service during through trips beyond the Warm Springs Station. It would be especially inconvenient to the elderly and disabled. The inconvenience would discourage transit use, so the alternative would not be as effective as the Project in maximizing new transit trips or reducing automobile trips.
- The Baseline Alternative fails to provide the opportunity for future extension of BART service into Santa Clara County, further enhancing the regional rail network. The Project would facilitate the creation of a rail transit "ring" around the Bay with connections between BART, LRT, and Caltrain enabling a traveler to move long distances along the ring with a minimum of transfers.
- The Baseline Alternative is less likely than the Project to foster higher intensity development around the proposed station sites. Development of the station sites consistent with local land use policies would maximize user and community benefits from transportation investments. Development investment benefits, including higher land values, increased rents, and greater tax income to cities, are well documented for rail transit-oriented development. One advantage of Baseline Alternative is that its buses offer more flexibility than a fixed-rail system—as growth and travel patterns shift, bus routes can be shifted to accommodate these shifts. In contrast, the rail system infrastructure and stations of the BART system represent a major public investment in an area that is not moveable. Because a BART station is unlikely to move and is an access point to the regional transit network, private developers are more amenable to making a long-term real estate investment around a BART station than a bus center.

Section 4

Overriding Considerations

The 2004 FEIR and the SEIR indicate that if the Project is implemented, certain ~~significant and unavoidable impacts would result. This includes traffic at the~~ following intersections: Great Mall Parkway and Montague Expressway, Milpitas Boulevard and Yosemite Drive, Milpitas Boulevard and Montague Expressway, Dempsey Road and Landess Avenue, Park Victoria Drive and Landess Avenue, Old Oakland/Main Street and Montague Expressway, Milpitas Boulevard and Calaveras Boulevard, Hillview Drive and Calaveras Boulevard, Park Victoria Drive and Calaveras Boulevard, Lundy Avenue and Berryessa Road, King Road and Mabury Road, 24th Street and Santa Clara Street, US 101 and Santa Clara Street, McLaughlin Avenue and Story Road, San Tomas Expressway and El Camino Real, De La Cruz Boulevard and Central Expressway, and De La Cruz Boulevard and Martin Avenue. Significant unavoidable energy impacts would result because the demand for electricity by the Project cannot be accommodated during peak periods without potential disruptions recognizing the deficiencies in the statewide transmission infrastructure. Significant unavoidable vibration impacts would result at two residences at the Terrace Gardens Senior Housing complex. Significant unavoidable traffic impacts during construction would result at Kato Road, Dixon Landing Road, East Santa Clara Street between 4th Street and San Pedro Street and Saint James Street at 5th Street near the Downtown San Jose Station, and West Santa Clara, Autumn, and Montgomery streets near the Diridon/Arena Station. Significant unavoidable parking impacts during construction would result at one office located south of Trade Zone Boulevard and east of the railroad ROW at the Trade Zone Boulevard construction staging area, off-street parking at the Downtown San Jose Station construction staging area, and off- and on-street parking south of West Santa Clara Street near the Diridon/Arena Station. Significant unavoidable noise impacts during construction would result at construction sites within the Project.

As required by the CEQA Guidelines Section 15093, the VTA Board of Directors finds that the unavoidable significant effects described in Section 3 of this document are acceptable because of the overriding considerations described below. These benefits of the Project outweigh its unavoidable environmental effects.

4.1 Statements of Fact in Support of Overriding Considerations

The Project, combined with other transportation projects, addresses the need for improved transportation choices and capacity in the SVRTC. The Project would lead to an increased number of transit trips from origins and destinations in Alameda and Santa Clara counties, as well as Contra Costa County and portions of the Central Valley (San Joaquin and Sacramento valleys), which would have several benefits, including: (1) improving public transit service and modal options, (2) enhancing regional connectivity, (3) reducing congestion on highways and supporting road networks, (4) improving regional and subregional air quality, (5) improving mobility options, (6) maximizing transit usage and ridership, and (7) supporting local economic and land use plans. Specifically, the Project would:

Improve public transit service and modal options

- The Project provides expanded, interconnected rapid transit services within the SVRTC and adjacent areas, providing greater access to major activity and employment centers located throughout the corridor. The Project also provides opportunities for transfers to destinations throughout the San Francisco Bay Area region and beyond. Intermodal connections would be available to existing and future services such as the VTA's light rail transit and buses, Caltrain commuter rail, Altamont Commuter Express, Capitol Corridor Intercity Rail, Amtrak, a variety of bus operators and shuttle services, and a planned Automated People Mover to the Norman Y. Mineta San Jose International Airport.

Enhance regional connectivity

- The Project provides significant travel time savings between Alameda County and downtown San Jose. Notable transit travel time improvements are projected for transit trips to downtown San Jose from various points in Alameda County, including Pleasanton (8 minutes faster), Newark (19 minutes faster), and Union City (26 minutes faster). Travel times into downtown are also projected to improve by up to 34 minutes from various points in eastern Santa Clara County (Travel Demand Forecasts Report, June 2006).

Reduce congestion on highways and supporting road networks

- The Project has a beneficial effect on freeway traffic overall and will reduce severe and ever-increasing traffic congestion on I-880 and I-680 between Alameda and Santa Clara Counties. Specifically, as described in the 2004 FEIR, in 2025 the Project removes 25,500 peak-period roadway trips more than No-Project Alternative and 21,900 more than the Baseline Alternative. At freeways crossing the Alameda–Santa Clara County line, this reduction amounts to about 1,300 to 1,400 vehicles removed in the a.m. and p.m. peak

hours, respectively—about 3.5% of the peak-hour traffic volume on the freeways.

Improve regional air quality by reducing auto emissions

- The BART Extension Project is estimated to result in substantial reductions in air pollutant emissions compared to Without Project, due to the Project having the highest reduction in vehicle miles traveled. As discussed in the SEIR, in 2030, emissions of air pollutants would be reduced by 1,205 pounds per day (ppd) for carbon monoxide, 154 ppd for reactive organic gases, 84 ppd for nitrogen oxides, 2 ppd for sulfur dioxide, and 48 ppd for particulate matter (less than 10 microns in diameter), when compared to Without Project.

Improve mobility options

- The Project improves mobility options to employment, education, medical, and retail centers for corridor residents, in particular for low-income, youth, elderly, disabled, and ethnic minority populations. The Project improves transit access to 51 community facilities within walking distance of a BART station including six schools, three libraries, five civic/community centers, six park and recreational facilities, 24 religious institutions, four entertainment facilities, two museums, and one fire station. The Project also improves accessibility to community facilities in San Francisco, Oakland, and other regional activity centers along the existing BART system.
- Based on 2000 Census data, 11% of households in the SVRTC study area are without private transport. Likewise, 10% of households are below the poverty level. The study area is only 28% Caucasian, indicating high percentages of minority groups. The Project increases the availability and enhances service for these study area populations with improved access to employment, recreation, shopping, and public services, facilities, and opportunities by providing more convenient access to regional rapid transit and by improving connectivity to other transit services.

Maximize transit usage and ridership

- The Project would serve approximately 104,000 average weekday trips in 2030. This represents approximately 50,000 new linked transit trips compared to without Project.
- Several of the new BART stations under the Project are located in areas that are or can be developed at high densities and intensities to maximize transit patronage. The Project would stimulate transit-oriented higher density development encouraged in the Fremont, Milpitas, San Jose, and Santa Clara general plans. All of the station sites along the BART extension would have the potential to accommodate joint development in the future. For example, BART stations parking structures could be combined with higher density residential and/or commercial uses providing economic benefits to the Project and surrounding community.

Support local economic and land use plans and goals

- The Project is consistent with local and regional plans and policies to extend the BART system, creates a unified transit system that potentially will encircle the bay, and encourage higher-density, mixed-use development adjacent to proposed transit nodes.
- The BART Extension Project provides improved transit in the SVRTC and beyond and supports and enhances the south bay's high quality of life and economic vitality.

Provide other benefits

- In addition, as discussed in the SEIR, the Project is estimated to result in substantial reductions in transportation system vehicle energy requirements compared to without Project. Transportation system vehicle operating energy would be reduced by approximately 396,000 British thermal units (BTUs) annually compared to without Project.