

Memorandum

To: CHAIR AND COMMISSIONERS

Date: February 8, 2010

From: BIMLA G. RHINEHART
Executive Director

File: Book Item 2.2c (11)
Action

Ref: Final Environmental Impact Report for the BART to Oakland International Airport Connector Project (Resolution E-10-16)

ISSUE: Should the Commission, as a Responsible Agency, accept the Final Environmental Impact Report (FEIR), Findings and Statement of Overriding Considerations for the BART to Oakland International Airport Connector Project (project) in Alameda County and approve the project for future consideration of funding?

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

BACKGROUND: The San Francisco Bay Area Rapid Transit District (BART) is the CEQA lead agency for the project. The project consists of construction and operation of a link between the Coliseum BART Station and the Oakland Airport, with one possible future intermediate station, utilizing an exclusive aerial guideway for transit vehicles. The initial system will operate on a 3.2 mile exclusive right of way without drivers or on board attendants. The project includes an alignment that is largely in the Hegenberger Road corridor, running on an aerial guideway between the Coliseum BART station and Doolittle Drive. The guideway passes under Doolittle Drive then runs at grade adjacent to Airport Drive. In the airport terminal area the guideway again becomes aerial, over the airport parking area, terminating in front of existing Terminals 1 and 2

On March 28, 2002 the BART Board of Directors certified the FEIR in accordance with the provisions of CEQA. The Federal Transit Administration issued the Record of Decision for the project on July 16, 2002 completing the NEPA process. Some minor alignment revisions were adopted by the BART Board through an addendum to the FEIR/Final Environmental Impact Statement (FEIS) on February 22, 2007, including elimination of the Edgewater Drive intermediate station as a result of a change in land use in the proposed station area. The Board made a finding that there were no substantial changes in the existing environment, and there were no new or more severe impacts not identified in the FEIR/FEIS. On March 20, 2007, FTA concurred with the Board's finding and concluded that a Supplemental EIS was not required.

BART found that certain significant impacts related to visual quality, noise, energy, construction impacts to transportation, noise and vibration, could not be reduced to a less than significant level after mitigation. On March 28, 2002, the BART Board of Directors found that the unavoidable significant effects are acceptable due to adoption of overriding considerations. These overriding considerations are attached for additional information.

The project is estimated to cost \$529,000,000 and is anticipated to be funded with STIP (\$20,665,000), Local (\$318,552,000) Federal ARRA (\$70,000,000), SLPP (\$20,000,000) and TIFIA (\$99,783,000) funds. In May 2009, BART issued a Request for Qualifications/Proposals under a design-build/operate maintain procurement method. BART has received bids and intends to award the project by the end of February 2010.

On January 25, 2010, BART provided confirmation that the project cleared through the FEIR is consistent with the project scope of work programmed by the Commission in the STIP and SLPP.

Attachments

- Resolution E-10-16
- Findings and Overriding Considerations
- Project Location

CALIFORNIA TRANSPORTATION COMMISSION

Resolution for Consideration of Funding

4 - Alameda

Resolution E-10-16

- 1.1 **WHEREAS**, the San Francisco Bay Area Rapid Transit District (BART) has completed a Final Environmental Impact Report (FEIR) pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines for the following project:
 - BART-Oakland International Airport Connector Project
- 1.2 **WHEREAS**, the BART has certified that the Final Environmental Impact Report has been completed pursuant to CEQA and the State CEQA Guidelines for its implementation; and
- 1.3 **WHEREAS**, the project will construct and operate a link between the Coliseum BART Station and the airport, with one possible future intermediate station, utilizing an exclusive aerial guideway for transit vehicles; and
- 1.4 **WHEREAS**, the California Transportation Commission, as a Responsible Agency, has considered the information contained in the Final Environmental Impact Report; and
- 1.5 **WHEREAS**, written findings were made pursuant to CEQA guidelines to indicate that the project will result in significant and unavoidable impacts related to visual quality, noise, energy, construction impacts to transportation, noise and vibration; and
- 1.6 **WHEREAS**, a Statement of Overriding Considerations was adopted by the BART pursuant to CEQA guidelines that the benefits of the project outweigh the unavoidable adverse environmental impacts of the project; and
- 1.7 **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 Findings and Statement of Overriding Considerations and approve the above referenced project to allow for future consideration of funding.



MAKING THE CONNECTION



***BART-Oakland International Airport Connector
Findings, Facts in Support of Findings, and
Statement of Overriding Considerations***

Adopted March 28, 2002 by the BART Board

March, 2002



MAKING THE CONNECTION



***BART-Oakland International Airport Connector
Findings, Facts in Support of Findings, and
Statement of Overriding Considerations***

Adopted March 28, 2002 by the BART Board

March, 2002

Prepared by:

San Francisco Bay Area Rapid Transit District



Contents

	Page
Section 1 Introduction	
1.1 Project Summary.....	1-1
1.2 CEQA Process.....	1-2
Section 2 Alternatives Considered	
2.1 Adopted Project: AGT Alternative with Intermediate Stations and Option A	2-1
2.2 No Action Alternative.....	2-2
2.3 Quality Bus Alternative	2-3
2.4 AGT Design Options.....	2-4
Section 3 Findings	
3.1 California Environmental Quality Act Requirements	3-1
3.2 Findings Regarding Independent Review and Judgment.....	3-2
3.3 Findings Regarding the Project	3-2
3.3.1 Findings Regarding Significant and Unavoidable Effects.....	3-2
3.3.2 Findings Regarding Significant Effects Mitigated to Less Than Significant Levels.....	3-13
3.4 Findings Regarding Other Alternatives.....	3-42
3.4.1 No Action Alternative.....	3-42
3.4.2 Quality Bus Alternative.....	3-43
3.4.3 AGT Alternative without Intermediate Stations.....	3-46
3.4.4 AGT Alternative with Design Option B	3-46
3.4.5 AGT Alternative with Design Option D.....	3-47
3.4.6 AGT Alternative with Median Option.....	3-48
Section 4 Overriding Considerations	4-1
Section 5 Findings of Conformity to the Air Quality State Implementation Plan	
5.1 Adoption of Findings	5-1
5.2 Findings Regarding Air Quality Conformity.....	5-1
5.2.1 No Interference with Applicable Bay Area Air Quality Implementation Plan	5-1
5.2.2 Use of Latest Planning Assumptions.....	5-2
5.2.3 Latest Emissions Model.....	5-2
5.2.4 Consultation Procedures	5-2

	Page
5.2.5 Currently Conforming Transportation Plan and Transportation Improvement Program.....	5-3
5.2.6 Project Comes from a Conforming Transportation Plan and Program....	5-3
5.2.7 Project Does not Cause or Contribute to New CO or PM₁₀ Violations	5-4
5.2.8 Compliance with PM₁₀ Control Measures	5-5
5.2.9 Reduction of Motor Vehicle Emissions in Support of the Regional Transportation Plan and the Regional Transportation Improvement Program	5-6

Section 1

Introduction

The San Francisco Bay Area Rapid Transit District (BART) Board of Directors is adopting the Automated Guideway Transit (AGT) Alternative for the BART-Oakland International Airport Connector (Project). The Project consists of construction and operation of a link between the Coliseum BART Station and the airport, with two intermediate stations, utilizing an exclusive aerial guideway for transit vehicles. The Project is analyzed in the BART-Oakland International Airport Connector Final Environmental Impact Report/Final Environmental Impact Statement (FEIR/FEIS). The BART Board's Findings, Facts in Support of Findings and Statement of Overriding Considerations for the Project, as required by the California Environmental Quality Act (CEQA), are presented in this document.

Section 1 of this document provides a summary of the Project and the environmental review process. The alternatives considered are described in Section 2. The BART Board's findings, as required by CEQA for each significant environmental effect of the Project identified in the FEIR/FEIS, follow in Section 3 of this document. Section 4 of this document provides the Statement of Overriding Considerations, as required by CEQA Guidelines Section 15093, stating the specific reasons supporting BART's determination that certain unavoidable environmental risks are acceptable because the benefits of the Project outweigh the unavoidable adverse environmental effects. The BART Board's air quality findings of conformity to the State Implementation Plan follow in Section 5.

Section 1.1

Project Summary

The AGT system is designed to improve access from the BART system to the Oakland International Airport (OIA) by providing an exclusive aerial guideway for transit vehicles. AGT vehicles, which can operate on rubber tires or steel wheels, or be air or magnetically levitated, will run along a dual guideway, at an average cruising speed of 36 mph. The AGT system will utilize one or two vehicles in a train, and may be automated and driverless. A peak operating fleet of eight new AGT vehicles (total fleet of 10 vehicles) will allow the 3.8-minute peak period headways required to carry the projected passenger demand in 2020. Daily ridership in 2020 is projected to be approximately 14,000 passengers on an average day and approximately 21,000 passengers on a peak day. The one-way trip time is estimated to be approximately 9 minutes. The alignment will leave the Coliseum BART Station on an aerial guideway and proceed along the west side of the Hegenberger Road southbound on-ramp, over the Union Pacific Railroad tracks, along the west side of Hegenberger Road, then cross

I-880 along the west side of the Hegenberger Road overpass. (The portion of the aerial guideway along the west side of Hegenberger Road between Elmhurst Channel and Coliseum Way was referred to as Design Option A in the DEIR/DEIS.) After crossing I-880 and Edgewater Drive, the alignment would move to the Hegenberger Road median, continue in the median until Pardee Drive/Airport Access Road, then pass over 98th Avenue, enter into a tunnel under Doolittle Drive, and return to grade adjacent to the east side of Airport Drive. As the alignment approaches the intersection of Airport Drive and Air Cargo Drive, it would transition to an aerial alignment and follow the east side of the airport entry road to an AGT station at the new airport parking garage.

AGT stations will be constructed at OIA and the Coliseum BART Station. Two locations for intermediate AGT stations have been identified at sites along the Hegenberger Road alignment: near Edgewater Road and near Doolittle Drive. BART fare collection facilities will be available at each station, allowing for a seamless transfer between BART and the AGT. A maintenance facility will be located at the end of the guideway in the Coliseum BART Station parking lot. Three or four power substations will be required depending on the selected AGT technology; these will be located at each end of the guideway and at intermediate points along the alignment.

Section 1.2

CEQA Process

BART determined that the Project could have a significant effect on the environment. Accordingly, a Final Environmental Impact Report/Final Environmental Impact Statement was prepared that provides full disclosure of the anticipated environmental impacts of construction and operation of the Project. The FEIR/FEIS consists of a Final Environmental Impact Report (Final EIR) prepared in compliance with the California Environmental Quality Act (CEQA) and the state CEQA Guidelines, and a Final Environmental Impact Statement (Final EIS) prepared in compliance with the National Environmental Policy Act (NEPA). For purposes of CEQA, the Final EIR consists of three documents:

- (1) The Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/DEIS),**
- (2) Appendices to the DEIR/DEIS, and**
- (3) Responses to Comments and revisions to the DEIR/DEIS**

The DEIR/DEIS was circulated for a 45-day public comment period (August 3, 2001 through September 17, 2001), during which time a public hearing was held to receive comments on the DEIR/DEIS. All comments received at the public hearing and during the comment period were responded to fully in the Response to Comments document.

Pursuant to CEQA Section 21081.6, BART is also adopting a Mitigation Monitoring and Reporting Plan (MMRP). The MMRP defines a program that ensures that adopted mitigation measures are implemented through specified monitoring and reporting procedures.

After the BART Board decides to certify the Final EIR and adopts the Project, the Final Environmental Impact Statement (Final EIS) will be issued, containing a focused environmental analysis of the adopted project as the preferred alternative, in accordance with Federal Transit Administration (FTA) procedures for preparing final NEPA documents. FTA will then proceed with the required federal action.

Section 2

Alternatives Considered

This section provides a description of the Project adopted by the BART Board of Directors. It also briefly describes the alternatives evaluated in the Final EIR but rejected by the Board.

Section 2.1

Adopted Project: AGT Alternative with Intermediate Stations and Design Option A

The Project consists of the AGT Alternative with intermediate stations. In addition, the adopted Project utilizes Option A for a small portion of the AGT alignment.

The Automated Guideway Transit (AGT) Alternative separates the transit vehicles from automobile traffic for the entire trip on an exclusive right-of-way, offers automated vehicles and also includes customer amenities. A specific technology has not been selected for the AGT, because BART wants to encourage competition among potential vendors. An array of transit technologies will be considered which generally would operate within their own guideway, have stations physically integrated with the Coliseum BART Station and the airport terminal, and not require an operator. BART will provide minimum performance specifications that will have to be satisfied by prospective suppliers. Such specifications include minimum operating speeds and carrying capacities necessary to serve the ridership forecasts.

AGT Alignment

The alignment will leave the Coliseum BART Station on an aerial guideway and proceed along the west side of the Hegenberger Road southbound on-ramp and over the Union Pacific Railroad tracks. The guideway will continue along the west side of Hegenberger Road above the sidewalk and breakdown lane towards I-880, then cross I-880 along the west side of the Hegenberger Road overpass. The portion of the aerial guideway along the west side of Hegenberger Road between Elmhurst Channel and Coliseum Way was referred to as Design Option A in the DEIR/DEIS.

After crossing I-880 and Edgewater Drive, the alignment will move to the Hegenberger Road median and continue in the median until Pardee Drive/Airport Access Road. At this point,

the alignment would transition eastward. The route would pass over 98th Avenue and then enter into a 430-foot tunnel under Doolittle Drive and return to grade within the 35-foot right-of-way adjacent to the east side of Airport Drive, reserved by the Port of Oakland for the Connector as part of its Airport Development Plan. As the alignment approaches the intersection of Airport Drive and Air Cargo Drive, it would transition to an aerial alignment. While subject to further refinement, the airport terminal design and road system layout currently propose a “straight in” AGT alignment parallel to Airport Drive into an AGT station adjacent to the airport’s new multi-story parking garage.

AGT Stations

The AGT station at the Coliseum BART Station will allow barrier-free transfers between BART and the AGT. The AGT station will be constructed over the east end of the BART train platform. At this location, the station will span San Leandro Street. The AGT guideway will extend over the BART platform and continue toward the BART parking lot where the AGT maintenance facility will located. Passengers will be able to use stairs, escalators, or elevators to transfer between the BART platform and the AGT platform. The AGT platform will allow passengers to board the vehicles on either side of the platform without having to step up into the vehicle.

Two locations for intermediate stops are identified as part of the Project: near the intersection of Hegenberger Road/Edgewater Road and near the intersection of Airport Drive/Hegenberger Road. The intermediate stops will be developed as full BART stations, with fare collection, restrooms, and station agents. Parking areas for maintenance and service vehicles, employees and emergency vehicles will also be provided at the intermediate stations.

The AGT aerial guideway will lead to an aerial Airport AGT Station. The aerial Airport AGT Station design, while conceptual at this time, will be located adjacent to the multi-level parking structure, near the entrance to the moving walkway connecting the parking structure to the main terminal. Passengers traveling to or from the airport ticketing area and the AGT station will not need to change levels. The Airport AGT Station will include space, equipment, facilities, and staff to accommodate BART fare collection and station agent functions. The Airport AGT Station, like the Coliseum AGT Station, will have a central loading platform, capable of accessing trains on either side of the platform.

Section 2.2

No Action Alternative

CEQA Guidelines Section 15126.6(e)(2) states that, “(T)he no project analysis shall discuss the existing conditions at the time the notice of preparation is published... as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.” A connection between the BART system and OIA is currently

provided by a direct bus shuttle known as AirBART. The No Action Alternative assumed that the existing AirBART shuttle service between the BART system and OIA would continue. The service is jointly provided by BART and the Port of Oakland and operated by a private contractor. The shuttle service operates with 40-foot, low-floor diesel buses, each with a two-tier luggage rack, having capacity for 32 seated passengers and ten standees with their luggage. By 2020, the air passenger demand is expected to increase such that to maintain the same mode share, an operational fleet of eight 40-foot vehicles would be required, or five more buses than currently operate on the route. Accordingly, the No Action Alternative would include the purchase of five additional buses to accommodate the projected future AirBART ridership. The current route for AirBART would remain unchanged in the future.

Section 2.3

Quality Bus Alternative

The Quality Bus Alternative consists of an improved bus system that would be given preferential signal treatment while traveling on Hegenberger Road, with stations physically integrated with the Coliseum BART Station and the airport to create a more efficient transit connection.

The Quality Bus Alternative is designed to be more convenient than the current AirBART shuttles. Efficient passenger boarding and alighting would be facilitated by three features of the vehicles: low floors, telescoping ramps, and three doors. Articulated buses, typically about 60 feet in length, would be needed to accommodate the projected average peak-hour passenger demand. Such buses can handle 47 seated passengers and 13 standees for a total of 60 passengers with luggage.

QB Route

From OIA to the Coliseum BART Station, the Quality Bus route would be identical to the existing AirBART route. The buses would use Airport Drive to reach Hegenberger Road, and then travel on Hegenberger Road to San Leandro Street. The buses would exit Hegenberger Road at the San Leandro Street off-ramp, turn left onto San Leandro Street, and stop under the Hegenberger overpass at the Coliseum BART Station. To return to OIA, buses would proceed directly to Hegenberger Road from San Leandro Street, rather than follow the current AirBART route. OIA-bound buses would travel on Hegenberger Road through the intersection with Doolittle Drive and onto Airport Drive to OIA.

Approaching the airport terminal, Quality Bus vehicles would use an exclusive bus lane that would divert from Airport Drive. The exclusive bus lane would provide access to a Quality Bus station on the ground floor of the airport parking garage. The exclusive Quality Bus lane would minimize exposure to traffic congestion near the terminal. Operation of the Quality Bus system would also include signal preemption on Hegenberger Road and Airport Drive,

which provides the Quality Buses with additional “green” time to pass through the signalized intersections. Signal preemption would be provided for both directions at all signalized intersections along the Quality Bus route.

QB Stations

The Coliseum QB Station would be located at street level of the east end of the existing BART station, under the Hegenberger Road overpass, and between the off-ramp and on-ramp to Hegenberger Road from San Leandro Street. This space under the BART tracks and platform is currently vacant. There is a No Stopping zone in the curb space in this area, and the QB station would be about 500 feet east of the curbside berthing area currently used by AirBART and AC Transit buses. Escalators, elevators, and stairs would link the QB station directly to the east end of the BART station platform, located directly above. The bus loading area would have capacity for two buses to berth simultaneously. Buses would stop adjacent to the QB station. Walkways would provide an enclosed pedestrian travelway between the bus doorways and the paid area of the Coliseum BART Station. All transfers between BART and QB would occur within the paid area of the BART station.

An at-grade Airport QB Station would be located within the proposed OIA parking garage. Passengers would exit the buses at the QB station, walk through the BART fare gates in the QB station, and then cross seven traffic lanes to the new enlarged terminal. Passengers traveling from OIA to the BART station would enter the BART fare gates in the Airport QB Station before boarding the bus from the station platform, which would be able to accommodate two buses at once. The station would function as a typical BART station, with BART ticket machines, a station agent booth, and a secure paid area for QB bus passengers to wait. Parking areas for maintenance and service vehicles, employees and emergency vehicles would also need to be provided near the station. These facilities would likely be consolidated within the parking structure in which the QB station would be constructed.

The QB vehicles would enter and exit the parking garage on the side near the terminal, so that non-QB pedestrians walking between the parking garage and the terminal on the ground level would have to cross the QB lane. Two bus-actuated traffic signals would be installed at the locations where pedestrians would cross the QB lane. The signals would be actuated by the QB vehicles, stopping pedestrian traffic for the time required for the QB to pass. Pedestrians would have the “green” phase at all other times.

Section 2.4 AGT Design Options

The following AGT alignment options were evaluated in the Final EIR but rejected by the Board.

- Design Option B: Under this option, the AGT alignment would travel along the west side of Hegenberger Road, between Edgewater Road and Pardee Drive. As part of the**

City of Oakland's Hegenberger Road beautification project, the City intends to extend the sidewalk into the existing breakdown lane and plant street trees. Under Option B, the centerline of the AGT alignment would generally be about 20 feet west of the existing curbline. As a result, this segment of the AGT guideway would be situated within the 65-foot front building setback, between the building entrances and the sidewalk.

- **Design Option D:** Under this option, the AGT alignment would travel at-grade along the east side of Airport Drive adjacent to Lew F. Galbraith Golf Course, as with the proposed project. As the alignment approaches the intersection of Airport Drive and Air Cargo Drive, Option D would transition to an aerial alignment and veer to the east away from Airport Drive. The alignment would skirt the outside perimeter of the Airport Drive loop road and enter the terminal area from the east. This alignment option would entail crossing jurisdictional wetlands located east of Airport Drive between Lew F. Galbraith Golf Course and the Airport Drive loop.
- **Median Option:** Under this option, the portion of the aerial guideway between Elmhurst Channel and Coliseum Way would travel in the Hegenberger Road median. This would require the guideway to transition from the west side of Hegenberger Road and cross into the median at Elmhurst Channel; and transition from the median back to the west side of Hegenberger Road at Coliseum Way. This segment, referred to as the Median Option, was a part of the proposed AGT alignment described in the DEIR/DEIS. In the Project, as described in these Findings, this segment is replaced with an alignment on the west side of Hegenberger Road, referred to as Option A in the DEIR/DEIS.
- **Two-Station AGT (without intermediate stations):** Under this option, the AGT alignment would travel along the median alignment described in the DEIR/DEIS, without intermediate stations at the locations identified in the Project description above. The AGT system would have only two terminal stops at the Coliseum BART station and OIA.



Section 3 Findings

Section 3.1 California Environmental Quality Act Requirements

The California Environmental Quality Act (CEQA), Public Resources Code, Section 21000 et seq., requires written findings of project impacts, pursuant to Section 21081. Regarding these findings, CEQA Guidelines, Title 14, California Code of Regulations (Guidelines), Section 15091, states the following:

- (a) No public agency shall approve or carry out a project for which an EIR has been completed 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 alternations 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 state law, as quoted above, may be mitigation measures, alternatives to the project, or changes to the project by the project proponent. The Final EIR identifies mitigation measures that will minimize significant effects of the Project

or mitigate other potential effects which may not be, strictly speaking, environmental effects under CEQA. These mitigation measures will be incorporated into the design of the Project. A Mitigation Monitoring and Reporting Plan will also be adopted by the BART Board to ensure that all mitigation measures identified in the Final EIR and in these Findings will be implemented.

The documents and other materials which constitute the record of proceedings upon which BART's decision is based, are in the custody of Desha Hill, BART Director of Real Estate Services, and are located at 800 Madison Street, Oakland, California, 94604-2688.

Section 3.2

Findings Regarding Independent Review and Judgment

Each member of the BART Board of Directors was provided a complete copy of the Final EIR for the project on March 19, 2002. The BART Board hereby finds that the Final EIR reflects the independent judgment of the BART District. The BART Board also finds that the Board has independently reviewed and analyzed the Final EIR prior to taking any final action with respect to the Project.

Section 3.3

Findings Regarding the Project

Having reviewed and considered the information contained in the Final EIR, and the drafts of the Findings, Facts in Support of Findings, Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Plan, the BART Board of Directors finds that the AGT Alternative with Intermediate Stops and Design Option A is an appropriate transit system and alignment for the Project.

3.3.1 Findings Regarding Significant and Unavoidable Effects

It has been determined that, for the following Significant Effects, mitigation measures included in the Final EIR will lessen the effect but will not result in complete mitigation of the effects to insignificance. The findings reflect the BART Board's decision to adopt the Project.

Visual Quality

Significant Effect: The Project will substantially alter the visual character of the alignment corridor.

Finding: BART hereby makes findings (a)(1) and (a)(3), as described in Section 3.1 above, as required by CEQA Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings:

- (a) The AGT structure will impose a physical dominance on the Hegenberger Corridor built environment and streetscape. Along the entire length of the AGT alignment in the Hegenberger Road corridor from the Coliseum Station to OIA, the AGT will be visually dominant. The AGT will be seen within the Hegenberger Road Corridor and create a sense of visual encroachment for building occupants within 60 feet. The guideway will reinforce and call visual attention to the linear configuration of the corridor. Furthermore, it will remove landscaping, emphasizing the presence of signage and hard surfaces both at-grade and on buildings.
- (b) BART will consult with the City of Oakland and Port of Oakland staff and then identify site planning and design guidelines for the AGT guideway, stations, and auxiliary facilities that are consistent with the Gateway Development Plan and the Airport Roadway Plan, which both have the objective of improving the image and function of the Gateway. To improve the appearance of the guideway structure and columns, during the design phase, BART will incorporate design and aesthetic treatments in the design of the Project to the extent possible. BART will also establish a planting plan that will shield views of the Maintenance and Control Facility from adjacent areas. In coordination with the City of Oakland and the Port, BART will identify the planting areas in the Gateway Design Plan that will be affected by the Project and develop alternative planting schemes that will both accommodate the guideway and enhance appearances along the guideway route, emphasizing seasonal color, flowering species, and textures that offer visual interest at ground level and above grade level.
- (c) Implementing the mitigation measures identified in (b), above, will reduce the visual impacts of the Project on the Hegenberger Corridor constructed environment and streetscape. However, no additional and feasible mitigation is available to reduce this impact to a less than significant level.
- (d) The overriding social, economic, and other considerations set forth in the statement of overriding considerations and in the findings regarding alternatives provide additional facts in support of these findings. Any remaining, unavoidable significant effect after available mitigation is implemented is acceptable when balanced against the facts set forth therein.

Significant Cumulative Effect: The Project in combination with other development projects in the Hegenberger Corridor will have a significant cumulative visual effect on streetscape and views.

Finding: BART hereby makes findings (a)(1), and (a)(3), as described in Section 3.1 above, as required by CEQA Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings:

- (a)** There are eight development projects proposed along Hegenberger Road that are in various stages of construction or development approval. These projects would serve as infill projects utilizing currently unproductive sites with buildings, landscaping, and development that will shape this gateway into Oakland.
- (b)** The Project will be the largest single contributor to altering visual conditions within the corridor due to its height, dimensions of the guideway and supporting columns, and linear configuration. The Project in combination with these eight development projects would substantially alter the visual character of the Hegenberger Corridor. This cumulative growth will result in intensified development within the corridor and fewer ground-level view opportunities of the Oakland Hills to the north and downtown skyline to the west.
- (c)** BART will consult with the City of Oakland and Port of Oakland staff and then identify site planning and design guidelines for the AGT guideway, stations, and auxiliary facilities that are consistent with the Gateway Development Plan and the Airport Roadway Plan, which both have the objective of improving the image and function of the Gateway. To improve the appearance of the guideway structure and columns, during the design phase, BART will incorporate design and aesthetic treatments in the design of the Project to the extent possible. BART will also establish a planting plan that will shield views of the Maintenance and Control Facility from adjacent areas. In coordination with the City of Oakland and the Port, BART will identify the planting areas in the Gateway Design Plan that will be affected by the Project and develop alternative planting schemes that will both accommodate the guideway and enhance appearances along the guideway route, emphasizing seasonal color, flowering species, and textures that offer visual interest at ground level and above grade level.
- (d)** Implementing the mitigation measures identified in (c), above, will reduce the cumulative visual impacts of the Project on the Hegenberger Corridor. However, no additional and feasible mitigation is available to reduce the Project's contribution to cumulative impacts on streetscapes and views to a less than significant level.
- (e)** The overriding social, economic, and other considerations set forth in the statement of overriding considerations and in the findings regarding alternatives provide additional facts in support of these findings. Any

remaining, unavoidable significant visual effect after available mitigation is implemented is acceptable when balanced against the facts set forth therein.

Noise

Significant Cumulative Effect: AGT operational noise, in combination with cumulative growth in motor vehicle traffic and aircraft noise in the Project corridor, may have significant cumulative noise impacts on Hegenberger Road hotels.

Finding: BART hereby makes findings (a)(1) and (a)(3), as described in Section 3.1 above, as required by CEQA Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings:

- (a) **Cumulative growth in motor vehicle activity is expected to cause traffic noise in the vicinity of the Hegenberger Road hotels to increase about 2 dBA between the existing conditions and 2005 and by about 3 dBA between existing conditions and 2020. Traffic noise in the Hegenberger Road portion of the corridor is anticipated to generate 70 to 75 Ldn, for these receptors. The AGT system will contribute to this cumulative noise effect.**
- (b) **Although outdoor recreational uses would not be affected by increased traffic noise, the Lew F. Galbraith Golf Course would experience cumulative impacts due to increased aircraft noise in the vicinity of the OIA North Field. The AGT system will contribute to this cumulative noise effect.**
- (c) **The AGT design specifications will require that the contractor reduce operational noise to or below BART design criteria for vehicle passby noise. The BART design criteria thresholds can be achieved for rail equipment by incorporating spin-slide wheel traction control, wheel truing, and rail grinding to eliminate wheel flats and rail corrugation; and for diesel-powered equipment by incorporating engine compartment treatments with sound absorbing materials and low-noise engine mufflers.**
- (d) **Implementation of the measures identified in (c), above, will reduce the effects of operational noise. However, no additional and feasible mitigation is available to reduce this impact to a less than significant level.**
- (e) **The overriding social, economic, and other considerations set forth in the statement of overriding considerations and in the findings regarding alternatives provide additional facts in support of these findings. Any remaining, unavoidable significant effect after available mitigation is implemented is acceptable when balanced against the facts set forth therein.**

Energy

Significant Effect: Unless the regional electrical energy supply is increased sufficiently to accommodate additional demand in the future, the Project demand on the electrical supply system could potentially have a significant impact.

Finding: BART hereby makes findings (a)(1), (a)(2), and (a)(3), as described in Section 3.1 above, as required by CEQA Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings:

- (a) Given the uncertainty over the region's future electric supply and the possibility of interrupted service, peak electricity demand (worst case) for the Project is estimated to be approximately 2.8 MW, representing approximately 0.01 percent of the regional peak electricity demand
- (b) The current electric energy situation in California is uncertain, with demand for electric energy exceeding the supply on recent occasions. Increased generating capacity has been forecast, but the timing of new supply and the demands of the market are uncertain. Due to the uncertainty over the region's future electric supply and transmission system constraints, any increase in electric energy demand from the Project could potentially have a significant effect on the electric energy supply.
- (c) BART customarily adopts energy conservation techniques such as operation of fewer cars during off-peak hours to reduce the electric load, low-power consuming propulsion systems, and low-power consuming light bulbs. However, considering the uncertainty of electric supplies in the coming years, these conservation measures will not be sufficient to reduce the impact to a less than significant level.
- (d) No additional and feasible mitigation is available to reduce this impact to a less than significant level. There are no reasonable mitigation measures to address the impact on electricity supplies other than an increase in the electric energy supply. If the supply of electric energy increases sufficiently before the Project begins to demand electricity, the impact would be eliminated. Measures which would increase regional electricity supplies are under the jurisdiction of other public agencies. However, the availability of electric energy in the future is unknown and so the impact is potentially significant and unavoidable.
- (e) The overriding social, economic, and other considerations set forth in the statement of overriding considerations and in the findings regarding alternatives provide additional facts in support of these findings. Any remaining, unavoidable significant effect after available mitigation is implemented is acceptable when balanced against the facts set forth therein.

Significant Cumulative Effect: The cumulative demand on electricity supply to which the Project will contribute may exceed the available supply.

***Finding:* BART hereby makes findings (a)(1), (a)(2), and (a)(3), as described in Section 3.1 above, as required by CEQA, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.**

Facts in Support of Findings:

- (a) The current electric energy situation in California is uncertain, with demand for electric energy exceeding the supply on recent occasions. Increased generating capacity has been forecast, but the timing of new supply and the demands of the market are uncertain. Due to the uncertainty over the region's future electric supply and transmission system constraints, the cumulative effects on the electric demand from the Project together with other projects and growth in the region could potentially exceed electrical generation and transmission capacity.**
- (b) BART customarily adopts energy conservation techniques such as operation of fewer cars during off-peak hours to reduce the electric load, low-power consuming propulsion systems, and low-power consuming light bulbs. However, considering the uncertainty of electricity supplies in the coming years, these conservation measures will not be sufficient to reduce the impact to a less than significant level.**
- (c) No additional and feasible mitigation is available to reduce this impact to a less-than-significant level. There are no reasonable mitigation measures to address the impact on electricity supplies other than an increase in the electric energy supply. If the supply of electric energy increases sufficiently before the Project begins to demand electricity, the impact would be eliminated. Measures, which would increase regional electricity supplies, are under the jurisdiction of other public agencies. However, the availability of electric energy in the future is unknown and so the impact is potentially significant and unavoidable.**
- (d) The overriding social, economic, and other considerations set forth in the statement of overriding considerations and in the findings regarding alternatives provide additional facts in support of these findings. Any remaining, unavoidable significant effect after available mitigation is implemented is acceptable when balanced against the facts set forth therein.**

Construction – Transportation

Significant Cumulative Effect: If eight other proposed projects in the Hegenberger Road Corridor are constructed within the same time frame as Project construction, increased

construction-related traffic from the Project could contribute to cumulatively significant traffic impacts.

***Finding:* BART hereby makes findings (a)(1), (a)(2) and (a)(3), as described in Section 3.1 above, as required by CEQA section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.**

Facts in Support of Findings:

- (a) Eight other development projects in the Census Tract 4090, which encompasses the majority of the project corridor, are under construction or anticipated to be completed by 2005. These projects represent about 730 hotel rooms and nearly 2 million square feet of office, research and development, and distribution space. Construction of these projects may not coincide geographically or in time with construction of the Project. Nevertheless, given the number of development projects and their magnitude and the length of construction for the AGT system, some of the projects may occur within the same time. Cumulative traffic effects of construction of one or more of these projects concurrently with the Project include increased congestion and delays due to construction vehicle traffic, diminished access for businesses, reduced automobile, transit, pedestrian, and bicycle movements, impacts on emergency response, and displacement of on-street parking places.**
- (b) Construction traffic management plans will be filed with the City of Oakland as part of individual applications for each development project, which will enable the City to coordinate traffic movement, detours, and emergency response. These plans will contain specific measures and practices to reduce project-related construction traffic impacts. The size, number, and duration of the cumulative construction activities, however, are likely to result temporarily in increased congestion and diminished circulation and access.**
- (c) Mitigation measures for transportation impacts in the Project's construction traffic management plan will reduce the Project's contribution to cumulative construction traffic impacts. However, no additional and feasible mitigation is available to reduce this impact to a less-than-significant level.**
- (d) The overriding social, economic, and other considerations set forth in the statement of overriding considerations and in the findings regarding alternatives provide additional facts in support of these findings. Any remaining, unavoidable significant effect after available mitigation is implemented is acceptable when balanced against the facts set forth therein.**

Construction – Noise and Vibration

Significant Effect: The Project will cause impacts due to construction noise.

Finding: BART hereby makes findings (a)(1) and (a)(3), as described in Section 3.1 above, as required by CEQA Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings:

- (a) **Construction for the foundations of the Project facilities will generate intense noise impacts. Typical equipment without pile-driving could cause intermitted one-hour Leq noise levels above 85 dBA for receptors within approximately 220 feet, and intermittent noise levels could be above 80 dBA for receptors within approximately 400 feet. For any receptor within 1,200 feet of the alignment, pile driving phases could cause intermittent noise levels up to 75 dBA. Activities related to lifting and connecting guideway sections, constructing the top deck, installing guideway equipment, or erecting ancillary structures will require continued (longer-term) use of heavy equipment, but not at the intense levels expected during the foundation phases. Excavation for foundations and placement of concrete columns could require crews to work at each column location along the alignment for several weeks at a time. Intermittent construction activity at each location over a total of two years will be required to complete on-the-ground construction activities.**

- (b) **The noise impacts caused by construction of the guideway, stations, and ancillary facilities are expected, at times, to exceed the applicable noise thresholds and will be considered significant for noise-sensitive receptors in the vicinity of the alignment. In the vicinity of San Leandro Street and the Coliseum BART station, construction will be approximately 600 feet southeast of the nearest residential areas. Other residential areas are no closer than about 700 to 800 feet from the alignment. Hotels are as near as approximately 100 feet from the alignment. Recreational facilities and commercial uses adjacent to the alignment will also be affected by construction noise. Residential areas within approximately 1,200 feet of the foundation or excavation work, and hotels within approximately 650 feet, will experience short-term and intermittent significant noise impacts during pile driving phases.**

- (c) **Construction contractors will be required to follow best management practices for noise control, which include maximizing the physical separation between the noise generators and noise receptors, scheduling construction activity that produces higher noise levels during less noise-sensitive hours, and selecting haul routes for removal of excavation materials such that noise sensitive areas are avoided as much as possible. If the construction right-of-way is within 700 feet of a residential area, 400 feet of a hotel, or 220 feet of another commercial use, BART will require the contractor to reduce construction noise to or below BART's construction noise thresholds. If pile driving is planned within 1,200 feet of residences, or within 650 feet of hotels or in-use outdoor recreation areas, technologies for the reduction of noise will be used as an**

alternative to meet BART's noise and vibration criteria, including cast-in-drilled-hole (CIDH) piles, pre-drilled piles, soil-mix wall technology, shielded pile drivers, or vibratory pile drivers.

- (d) Implementing the mitigation measures identified in (c), above, will likely reduce noise impacts to residential areas to a less-than-significant level, but impacts to hotels, outdoor recreational areas, and commercial uses will remain significant and unavoidable. No additional and feasible mitigation is available to reduce these impacts to a less-than-significant level.**
- (e) The overriding social, economic, and other considerations set forth in the statement of overriding considerations and in the findings regarding alternatives provide additional facts in support of these findings. Any remaining, unavoidable significant effect after available mitigation is implemented is acceptable when balanced against the facts set forth therein.**

Significant Effect: Construction-related vibration will cause annoyance to offices, residential, hotel, and recreational uses in the vicinity of the Project.

***Finding:* BART hereby makes findings (a)(1) and (a)(3), as described in Section 3.1 above, as required by CEQA Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.**

Facts in Support of Findings:

- (a) Construction of the guideway will require short-term use of drilling rigs, trucks to remove excavated material and deliver structural concrete, cranes, backhoes, and other miscellaneous equipment. The foundation columns and piles will be placed using CIDH techniques or pile driving.**
- (b) The short-term ground-borne vibration impacts from pile driving associated with construction of the AGT guideway, stations, and ancillary facilities will be potentially significant for occupants of office buildings and hotels, and patrons of restaurants, within 400 feet of the activity. Occupants of office buildings and hotels, and patrons of restaurants, within about 125 feet of the pile driving could experience significant effects over the 90 VdB threshold for transient effects. During all other periods of construction, other heavy equipment could cause sustained ground-borne vibration levels to be as high as 80 VdB within 60 feet of the activity. Buildings closest to the Doolittle Drive tunnel portion of the alignment will be most likely to experience the adverse impacts because sheet pile driving will be necessary to maintain a construction corridor to the tunnel. Within the construction right-of-way, haul trucks passing with material loads or movement of bulldozers and cranes will be routine and cause longer-term effects due to the duration of activity. These routine activities will cause significant annoyance effects at hotels, office buildings, and restaurants within about 60 feet of the right-of-way.**

- (c) **Mitigation measures to reduce construction noise, discussed above, will also reduce construction-related vibration. In addition, if pile driving is planned within 400 feet of hotels, office buildings, or restaurants, BART will use the following technologies for minimizing vibration effects on building occupants: CIDH piles, pre-drilled piles, soil-mix wall technology, shielded pile drivers, or vibratory pile drivers.**
- (d) **Implementation of the measures identified in (c), above, will reduce the effects of construction-related vibration on building occupants. However, no additional and feasible mitigation is available to reduce this impact to a less-than-significant level.**
- (e) **The overriding social, economic, and other considerations set forth in the statement of overriding considerations and in the findings regarding alternatives provide additional facts in support of these findings. Any remaining, unavoidable significant effect after available mitigation is implemented is acceptable when balanced against the facts set forth therein.**

Significant Effect: Ground vibration associated with construction of the Project could damage buildings in the vicinity.

***Finding:* BART hereby makes findings (a)(1) and (a)(3), as described in Section 3.1 above, as required by CEQA Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.**

Facts in Support of Findings:

- (a) **The project corridor does not include any extremely fragile historic buildings that would be sensitive to potential damage from vibration from routine construction activities. However, pile driving associated with the Project could damage fragile buildings or structures within 50 feet of such activity.**
- (b) **Mitigation measures to reduce construction noise and vibration, discussed above, will also reduce construction-related vibration impacts on structures. In addition, BART will conduct a pre-construction survey of existing conditions, including buildings and other infrastructure and, if recommended by the geotechnical engineer, for structures or facilities within 50 feet of pile driving, BART will require ground-borne vibration monitoring of vibration-intensive activities.**
- (c) **Implementation of the measures identified in (b) , above, will reduce the effects of construction-related vibration on building occupants. However, no additional and feasible mitigation is available to reduce this impact to a less-than-significant level.**
- (d) **The overriding social, economic, and other considerations set forth in the statement of overriding considerations and in the findings regarding**

alternatives provide additional facts in support of these findings. Any remaining, unavoidable significant effect after available mitigation is implemented is acceptable when balanced against the facts set forth therein.

Significant Cumulative Effect: If eight other proposed projects in the Hegenberger Road Corridor are developed within the same time frame as Project construction, increased noise from Project construction vehicles and equipment could contribute to cumulatively significant noise impacts.

***Finding:* BART hereby makes findings (a)(1), (a)(2), and (a)(3), as described in Section 3.1 above, as required by CEQA, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.**

Facts in Support of Findings:

- (a) Eight other development projects in the Census Tract 4090, which encompasses the majority of the project corridor, are under construction or anticipated to be completed by 2005. These projects represent about 730 hotel rooms and nearly 2 million square feet of office, research and development, and distribution space. Construction of these projects may not coincide geographically or in time with the Project. Nevertheless, given the number of development projects and their magnitude and the length of construction for the AGT system, some of the projects may occur within the same time. Use of heavy construction equipment, truck movements, and pile driving related to the eight development projects and the AGT system will result in cumulative noise impacts that will affect the offices, hotels, restaurants, and residences along the Hegenberger Corridor.**
- (b) Implementation of best management practices to reduce construction noise will be required by the City of Oakland for each of the development projects. These plans will contain specific measures and practices to reduce project-related construction noise. The size, number, and duration of the cumulative construction activities, however, are likely to result temporarily in construction noise exceeding acceptable noise exposure levels.**
- (c) Mitigation measures for Project construction noise will reduce the Project's contribution to cumulative construction noise impacts. However, no additional and feasible mitigation is available to reduce this impact to a less-than-significant level.**
- (d) The overriding social, economic, and other considerations set forth in the statement of overriding considerations and in the findings regarding alternatives provide additional facts in support of these findings. Any remaining, unavoidable significant effect after available mitigation is implemented is acceptable when balanced against the facts set forth therein.**

3.3.2 Findings Regarding Significant Effects Mitigated to Less Than Significant levels

It has been determined that, for the following effects, mitigation measures included in the Final EIR will mitigate the effects of the Project to insignificance.

Transportation

Significant Effect: The Project may require alteration of left-turn lanes at intersections and access to businesses along Hegenberger Road.

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

Facts in Support of Findings:

- (a) The AGT elevated guideway will be supported on columns. Preliminary engineering assessment indicates that the columns for the AGT guideway could be constructed without requiring the removal of any left-turn lanes. During the design and build phase of the AGT system, contractors may encounter unforeseeable circumstances that require the permanent removal or shortening of left-turn lanes at certain locations. The removal of left-turn lanes will require vehicles to turn left at other locations. Depending upon the specific location where a left-turn lane will be removed, local vehicular circulation and access to businesses in the project corridor could be affected.**
- (b) BART will accommodate any displaced left-turn movement by providing a new left-turn lane at a new location or by providing additional capacity at another existing left-turn lane. Provision of a new left-turn lane may require the reconstruction of the median of Hegenberger Road and possibly the provision of a new traffic signal. This mitigation measure will require the cooperation and approval of the City of Oakland and the Port of Oakland.**
- (c) Actions identified in (b) above will reduce this potentially significant traffic impact to a less-than-significant level as defined by CEQA.**

Significant Effect: The Project may reduce the parking supply available to private businesses in two ways: (i) the Project will require permanent removal of some off-street parking; and (ii) the Project could lead to potential spillover parking in areas adjacent to the Coliseum BART station.

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

Facts in Support of Findings:

- (a) **The Project will require the permanent removal of a portion of the private off-street parking from two businesses along the project corridor, the General Motors property (8099 Coliseum Way) and the Chevron property (451 Hegenberger Road). The permanent removal of this off-street parking could potentially reduce the parking supply below the level necessary to accommodate the estimated demand.**
- (b) **As a mitigation measure for this permanent removal of off-street parking, BART will provide on-site replacement parking facilities for properties that will have parking spaces permanently removed by the Project. If on-site replacement parking facilities cannot be identified, BART will compensate the property owners for the permanent removal of the parking spaces.**
- (c) **BART recently adopted a 24-hour time restriction at all BART parking lots. In order to avoid paying higher parking fees at OIA, and also to avoid the 24-hour time restriction on BART parking, some air travelers may choose to park in the residential and commercial areas near the BART station to gain access to the AGT system. The potential for such parking spillover is considered speculative and uncertain. BART has not previously imposed 24-hour restrictions on the duration of parking at any station, and the effect of such time restrictions on the behavior of passengers using an airport connector service is unknown.**
- (d) **As a mitigation measure to address the possibility of parking spillover at the Coliseum station, BART will monitor parking activity on streets adjacent to the Coliseum BART station. A baseline survey of parking conditions in the vicinity of the station will be conducted prior to commencement of Project operations. The baseline survey will establish parking conditions in the vicinity of the station during weekday morning hours. Monitoring will be conducted during the first six months of operation of the Connector to verify if spillover parking is occurring. Such monitoring will be based on field surveys and any complaints received by BART and local parking authorities. After the first six months of operation of the station, BART Community Relations staff will respond to parking complaints and BART will investigate such complaints to verify parking concerns. If a significant parking spillover impact is identified, BART will assist the City of Oakland in implementing a parking management program. The program will incorporate parking control measures based on BART's Parking Management Toolkit. The Toolkit identifies a detailed process for understanding local parking issues, evaluating parking conflicts, and implementing specific parking control measures. These measures could include time limits and time-based restrictions, increased enforcement, or parking fees. The parking management program would be implemented by the City of Oakland. BART staff would assist the City to ensure that parking control measures adapted for site-specific conditions are implemented and are achieving the necessary effect. BART staff would also**

continue discussions as necessary with the City to help adjust any parking control measures in response to issues that may arise during implementation of such measures.

- (e) Actions identified in (b) and (d) above will reduce the potential impact on parking to a less-than-significant level as defined by CEQA.**

Socioeconomics

Significant Effect: Acquisition of property will be required to implement the Project, creating potential displacement impacts and economic loss.

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

Facts in Support of Findings:

- (a) The Project will require easements or the acquisition of all or part of certain parcels along the project corridor. Some parcels may require other types of modifications. Affected parcels include:**
- (1) Building at 675 Hegenberger Road that includes the Employment Development Department (EDD) (APN 042-4328-001-20) - - a partial acquisition affecting parking;**
 - (2) Home Base at 633 Hegenberger Road (APN 042-4328-001-16) - a partial affecting parking;**
 - (3) Sam's Hofbrau Restaurant at 595 Hegenberger Road (APN 042-4328-001-14) - a partial acquisition along the Hegenberger Road frontage;**
 - (4) Denny's Restaurant at 601 Hegenberger Road (APN 042-4328-001-14) - a partial acquisition along the Hegenberger Road frontage;**
 - (5) Caltrans (currently leased by General Motors truck sales) property at 8099 Coliseum Way (APN 042-4328-008-01) - a partial acquisition affecting parking areas;**
 - (6) Ramada Site (Metroport) at Hegenberger Road near Edgewater Drive (APN 042-4425-010-00) - a partial acquisition for station footprint and associated service vehicle parking;**
 - (7) Chevron Station property at 455 Oakport Street (at the corner of Edgewater and Hegenberger) (APN 024-2245-010-00) - a partial acquisition possibly affecting the canopy over the pumps is needed, as well as up to two parking spaces;**

- (8) **Circle K Gas Station and Car Wash at 449 Hegenberger Road (APN 042-4425-012-04) - the two pumps closest to Hegenberger Road and the related canopy over them;**
 - (9) **Brotherhood of Teamsters property at 70 Hegenberger Road (APN 044-5020-005-49) - entire property, affecting 54 employees (City of Oakland, 2000) and the loss of \$19,192.16 property tax annually for the City of Oakland (BART, 2000);**
 - (10) **Edgewater West (Motel) at 10 Hegenberger Road (APN 044-5050-004-01) – partial acquisition affecting the back parking lot; and**
 - (11) **Various aerial operating easements.**
- (b) **In addition, a permanent operating easement will be required for portions of the AGT alignment located within public street rights-of-way or medians and on airport property.**
 - (c) **BART will negotiate with the property owners of all affected parcels to minimize economic loss. For all displacements, BART will comply with the Federal Uniform Relocation Act (Public Law 91-646), the California Relocation Act (Chapter 16, 7260 et. seq. of the Government Code) and related laws and regulations. Appropriate mitigation could involve relocating affected uses to another location or compensation for modification of the existing property. If on-site relocation or modification of the affected uses is not feasible, BART will compensate the property owners in conformance with the state and federal relocation laws.**
 - (d) **BART will provide on-site replacement parking facilities for properties that will have on-site parking spaces permanently removed by the Project. If on-site replacement parking facilities cannot be identified, BART will compensate the property owners for the permanent take of the parking spaces in accordance with state and federal relocation laws.**
 - (e) **Actions identified in (c) and (d) above will reduce the socioeconomic effects of land acquisition and displacement to a less-than-significant level as defined by CEQA.**

Visual Quality

Significant Effect: Lighting used inside the AGT vehicles and vehicle headlight could cause glare and point sources of light affecting motorists or pedestrians, and station lighting could affect motorists and neighboring properties.

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

Facts in Support of Findings:

- (a) **Lighting used inside the AGT vehicles and vehicle headlights could cause glare and point sources of light affecting motorists or pedestrians.**
- (b) **Because the AGT station and guideway will be higher than the BART guideway, lighting used at the stations could extend beyond the station area and be of sufficient intensity to affect motorists or people in neighboring land uses. There is a potential for light to extend beyond the BART station and adversely affect residents north of Snell Street. Lighting at the Coliseum AGT Station and guideway could also cause glare for motorists on Hegenberger Road and San Leandro Street. The lighting used at the intermediate stops will increase illumination at the station locations. Hotel guests and motorists on Hegenberger Road, Airport Access Road, 98th Avenue, Airport Drive, Edgewater Drive, and Doolittle Drive could be affected if the lighting were excessive.**
- (c) **To control light and glare impacts from the AGT vehicles, the headlight used for the AGT vehicles will be designed to avoid significant safety hazards for building occupants, motorists, and pedestrians. The lights used inside the AGT vehicles will be of the necessary wattage or candlefoot power necessary for passenger safety and comfort while not affecting adjacent land uses.**
In addition, materials with low reflective capabilities will be used for the body of the AGT vehicle.
- (d) **To control spillover lighting impacts, BART will ensure that the lighting fixtures along the alignment and at stations be designed to control light intensity on adjacent land uses. The construction contractor will be required to focus illumination downward and to restrict light from extending beyond the project site or causes illumination/glow above the light fixtures. To achieve this, the light fixtures will be fitted with lenses, hoods, and reflectors to minimize spillover light and glare while maintaining safety and security.**
- (e) **Actions identified in (c) and (d) above will reduce potential light and glare impacts to a less-than-significant level as defined by CEQA.**

Community Services

Significant Effect: The tunnel constructed for the Project alignment under Doolittle Drive will present an obstacle for firefighters.

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

Facts in Support of Findings:

- (a) **The tunnel constructed for the Project alignment under Doolittle Drive, will present an obstacle for firefighters if it is not constructed with appropriate firefighting features to improve fire response services.**
- (b) **Water supply, lighting, and communication systems will be incorporated into the design of the tunnel beneath Doolittle Drive consistent with BART design criteria to ensure that the Oakland Fire Department can provide necessary fire protection and emergency response.**
- (c) **The action identified in (b) above will reduce this potential impact on fire and emergency protection services to a less-than-significant level as defined by CEQA.**

Significant Effect: The Project will generate increased need for BART police services to patrol the stations and intermediate stops.

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

Facts in Support of Findings:

- (a) **The BART Police Department will hire additional officers to provide full coverage of the Coliseum AGT Station. If the Airport AGT Station is under BART jurisdiction, the BART Police Department will also be required to create a new beat to provide service. The creation of a new beat will require additional staffing, equipment and facilities. This beat will also provide coverage for the intermediate stops.**
- (b) **If the Airport AGT Station is under the jurisdiction of the BART Police, provision of police reporting facilities at OIA will be incorporated into the design of the new OIA station. The facility will include a secure parking area for two BART Police vehicles at OIA. If the Airport BART Station is not under the jurisdiction of the BART Police, reporting facilities at the Coliseum BART Station will be improved as necessary to accommodate the extra police activity related to the intermediate stops.**
- (c) **Actions identified in (b) above will reduce this potential impact on police services to a less-than-significant level as defined by CEQA.**

Hydrology

Significant Effect: The Project will require maintenance activities that could adversely affect the quality of surface water through discharges to storm drains, and the quality of groundwater through infiltration from the surface.

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

Facts in Support of Findings:

- (a) **The Project will involve maintenance activities that could adversely affect water quality. Maintenance activities typically involve the storage and use of chemicals, such as fuels, cleaning solvents, or heavy metals that can be exposed to storm water and become entrained in runoff. Discharged through storm drains, these pollutants can degrade downstream surface water quality. In addition, misuse or improper storage and handling procedures can result in leaks, spills, or other forms of releases to the surface, where they are potentially exposed to storm water or potentially infiltrate into the ground and reach the water table.**
- (b) **BART or its contractor will obtain an Industrial Storm Water General Permit and prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will recommend site-specific Best Management Practices (BMPs) that reduce storm water pollution. BMPs will include, but not be limited to, housekeeping practices intended to reduce pollutant loading at the maintenance facility, and techniques and equipment to collect and treat storm water pollution.**
- (c) **Actions identified in (b) above will reduce this potential impact on water quality to a less-than-significant level as defined by CEQA.**

Biological Resources

Significant Effect: Construction of the Project will require removal of trees that could be of substantial size or habitat for nesting birds.

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

Facts in Support of Findings:

- (a) **The AGT system will result in the removal of trees within three segments of the construction corridor, and other trees may be affected by construction activities. Removal of trees measuring nine inches diameter at breast height (dbh) or greater, except for Eucalyptus, Monterey Pine, and California or Coast Live Oaks, and removal of California or Coast Live Oaks measuring four inches dbh or greater, would be considered a significant effect.**
- (b) **For removal of any California or Coast Live Oak with trunk size measuring four inches dbh or larger, or any other tree measuring nine inches dbh or**

larger (except Eucalyptus and Monterey Pine), replacement trees will be planted in the project corridor. Replacement trees will be native tree species (e.g., Coast Redwood, Coast Live Oak, Madrone, California Buckeye, California Bay Laurel, or other appropriate species native to Oakland). At a minimum, each removed tree meeting the above size standards will be replaced either with (i) one replacement tree of 24-inch box size, or (ii) three replacement trees of 15-gallon size.

- (c) In addition, a survey will be conducted prior to construction to identify potential nesting habitat. If nests are identified, all construction activity within 150 feet of the active nest will be postponed until the nest is vacated and juveniles have fledged (typically 3 to 4 weeks).
- (d) Actions identified in (b) and (c) above will reduce this potential biological impact related to loss of trees to a less-than-significant level as defined by CEQA.

Noise and Vibration

Significant Effect: Operation of the Project will result in significant noise impacts for land uses along Hegenberger Road. The noise levels from vehicle passby will exceed BART's noise design criteria.

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

Facts in Support of Findings:

- (a) AGT vehicles may operate on rubber-tires, steel wheels, or some other type of contact with the guideway, with a steel-wheel system generating a higher level of noise and vibration than rubber-tire or levitated system. The preliminary designs of the guideway include a sound barrier close to the transit vehicles that will reduce operational noise by about 6 dBA.
- (b) BART's design criteria for passby noise in areas similar to the Hegenberger Corridor are 75 dBA L_{max} for residences, 80 dBA L_{max} for recreational areas, and 85 dBA L_{max} for commercial uses.
- (c) Noise-sensitive receptors within about 500 feet of the AGT guideway could experience impacts from AGT passby noise. Residences are further away and would not be exposed to noise impacts from the Project. The maximum passby noise from the Project would exceed BART's design criteria at Sam's Hofbrau at 595 Hegenberger Road, Denny's at 601 Hegenberger Road, the building at 675 Hegenberger Road, and the proposed Bay Trail Extension along the Lew F. Galbraith Golf Course. |

- (d) **Operational noise will be reduced to or below the BART design criteria for passby noise. The BART design criteria thresholds may be achieved for diesel-powered equipment by incorporating engine compartment treatments with sound absorbing materials and low-noise engine mufflers, and for rail equipment by incorporating spin-slide wheel traction control, wheel truing, and rail grinding to eliminate wheel flats and rail corrugation.**
- (e) **Actions identified in (d) above will reduce noise impacts generated by AGT vehicles to a less-than-significant level as defined by CEQA.**

Significant Effect: Noise generated by operation of ancillary facilities related to the Project will impact sensitive receptors.

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

Facts in Support of Findings:

- (a) **The AGT system will include ancillary facilities that will be new stationary sources of noise. The maintenance and central control facility will be located in the southeast corner of the parking lot of the Coliseum BART Station beyond the operational end of the guideway. At the maintenance facility, vehicle repair and maintenance activities will occur within an enclosed building, and vehicle washing and cleaning could occur outside the building. The propulsion power substations for the AGT will be located at each end of the alignment and at one or two intermediate locations along the alignment, under the aerial guideway.**
- (b) **Peak noise from operation of equipment at the maintenance facility will occur during vehicle washing. Outdoor car washing will cause peak noise levels of approximately 53 dBA Lmax at the nearest residences. The BART design criteria of 45 dBA Lmax for residences with similar noise environments would be exceeded by vehicle cleaning at residences near 71st and 70th Streets.**
- (c) **Noise from the substations could disturb sensitive land uses (i.e., hotels and outdoor recreational areas) along the remainder of the alignment. Locating a new substation within 250 unobstructed feet of an existing noise-sensitive land use, or within 125 feet if there are intervening structures, could potentially result in a potentially significant noise impact, exceeding BART's design criteria of 65 dBA Lmax for transient noise from ancillary facilities in commercial areas.**
- (d) **If the site or sites selected for development of AGT power substations are within 250 feet of a commercial or outdoor recreational use, operational noise will be reduced to or below the BART design criteria for noise from ancillary**

facilities. The BART criteria thresholds can be achieved by incorporating noise barriers, facility enclosures, or other noise reduction features.

- (e) Noise from outdoor vehicle washing will be reduced to or below the BART design criteria for noise from ancillary facilities. The thresholds can be achieved by incorporating noise barriers, facility enclosures, or other noise reduction features such as low-noise washing equipment.**
- (f) Actions identified in (d) and (e) above will reduce potential noise impacts from the Project's ancillary facilities to a less-than-significant level as defined by CEQA.**

Significant Effect: Operation of the Project could result in significant vibration from vehicle passby.

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

Facts in Support of Findings:

- (a) AGT vehicles could operate a wide range of technologies including rubber-tires, steel wheels, or some other type of contact with the guideway. Steel-wheel AGT systems would cause the most intrusive vibration effects of these technologies. Because the system is primarily aerial, the supporting structure would provide insulation for ground-borne vibration at most receptors in the corridor.**
- (b) The design of structures could increase the likelihood of wheel-to-rail impacts that could increase vibration. Crossovers, switches, or other special trackwork could cause ground-borne vibration from an AGT passby if located on the aerial structure adjacent to office buildings or restaurants (within about 35 feet of the centerline of the aerial structure), or in the tunnel near hotels (within about 110 feet of the tunnel centerline). One hotel, two restaurants, and one commercial building are located sufficiently close to the aerial guideway that they could experience vibration from vehicle passbys.**
- (c) Vehicle interactions with the guideway and the guidance and running structures and surfaces will be designed to minimize the transmission of vibration through the guideway structure to the surrounding buildings and terrain during the passage of AGT cars. The AGT system will be designed so that system-induced vibrations are imperceptible at or in surrounding buildings. The threshold of perception will be as defined by the *Guide to the Evaluation of Human Exposure to Vibration in Buildings*, ANSI Standard S3.29-1983.**

- (d) **Actions identified in (c) above will reduce this vibration generated by AGT vehicles to a less-than-significant level as defined by CEQA.**

Construction - Transportation

Significant Effect: Construction of the Project will create temporary disruption at intersections and on adjacent street segments.

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

Facts in Support of Findings:

- (a) **Vehicular traffic associated with the construction of the Project (construction vehicles and trips by construction workers) will affect the traffic operations at intersections and on street segments where the construction occurs.**
- (b) **Construction of the Coliseum AGT Station will involve hoisting prefabricated spans over San Leandro Street that will require temporary street closure and traffic re-routing, and could potentially be significant.**
- (c) **Closure of portions of the two inside lanes along the Hegenberger Road median will be required during construction of the AGT guideway columns, and could cause significant congestion if the construction activity occurs during peak traffic periods. The median land closures and the reconstruction of the median to accommodate the guideway columns on Hegenberger Road could also interfere with left-turn movements to and from the businesses that front on either side of the street.**
- (d) **The AGT station at the OIA will be constructed as part of the parking structure and terminal projects, which is part of the overall Airport Development Program (ADP). Construction of the AGT station and guideway at OIA will likely require temporary traffic lane closures. Depending on the duration of the traffic lane closures, the extent of those lane closures, and whether the construction at OIA could occur simultaneously with construction activities related to the ADP, the disruption to local traffic circulation could potentially be significant.**
- (e) **Construction of the guideway across I-880 will require temporary nighttime closures of portions of I-880. In addition, some median lane closures will be necessary to construct the columns to support the guideway in the freeway median.**
- (f) **Construction along the west side of Hegenberger Road between Coliseum Way and Elmhurst Channel could temporarily interfere with access to businesses. The median of the street would not need to be reconstructed in**

this area, so temporary lane closures in the median would not be necessary, but portions of the shoulder, which is used as a refuge for disabled vehicles, and the curb traffic lane along the west side of the street may need to be closed temporarily. Since this is a no parking zone, no parking spaces would be lost. Closure of the curb/breakdown lane would require the closure of portions of one traffic lane on Hegenberger Road compared to two traffic lanes when construction is in the median. However, the temporary closure of portions of the traffic lane on the west side of the street would substantially interfere with local traffic circulation during peak hours. Depending on the duration of the traffic lane closure and the extent of the closure, the disruption to local traffic circulation could be significant.

- (g) In the street segment between Edgewater Road and Pardee Drive, BART will restripe Hegenberger Road, where the two inside lanes along the median will be closed, to shift the travel lanes outward (toward the curb) and maintain the current number of travel lanes in each direction along Hegenberger Road. This measure will mitigate the traffic impacts associated with closing the two travel lanes on either side of the median.**

- (h) To address other closures, detours, access, and general vehicular circulation (automobiles, buses, delivery trucks, etc.) in the area, a construction phasing and traffic management plan will be prepared and implemented. The plan will define how traffic operations will be managed and maintained during each phase of construction. The plan will be developed with the direct participation of BART, the City of Oakland, the Airport, AC Transit, and Caltrans. In addition, the property owners of all businesses adjacent to the construction areas will be consulted. To the maximum practical extent, the plan will:**
 - (1) Plan, schedule, and coordinate construction activities to reduce impacts on AC Transit bus lines and dead-heading times, so that additional buses are not required on any route to maintain on-time performance, and so that larger buses are not required on any route to maintain on-time performance.**

 - (2) Detail how access will be maintained to individual businesses where construction activities may interfere with ingress and egress. Any driveway closures will take place during non-business hours.**

 - (3) Specify predetermined haul routes from staging areas to construction sites and to disposal areas by agreement with the City prior to construction. The routes will follow streets and highways that provide the safest route and have the least impact on traffic.**

 - (4) During construction, require the contractor to provide information to the public using signs, press releases, and other media tools of traffic closures, detours or temporary displacement of left-turn lanes.**

- (5) Identify a single phone number that property owners and businesses can call for construction scheduling, phasing, and duration information, as well as for complaints. A BART Connector website will contain similar information, and BART will coordinate with the Port so that all construction information will be available to the Port.**
- (6) Identify construction activities that must take place during off-peak traffic hours or result in temporary road closures due to concerns regarding traffic safety or traffic congestion. Any road closures will be done at night under ordinary circumstances. If unforeseen circumstances require road closing during the day, the City of Oakland will be consulted.**
 - (i) BART will coordinate with the OIA to assure that the traffic management plan coordinates construction of the Airport AGT Station with the overall construction of the ADP. If the construction of the ADP does not occur concurrently with an AGT station, then the construction traffic management plan will also include measures to address construction-related impacts on traffic at OIA.**
 - (j) Actions identified in (g), (h) and (i) above will reduce this potentially significant impact on traffic and circulation during the construction period to a less-than-significant level as defined by CEQA.**

Significant Effect: Construction of the Project will require temporary closure of sidewalks and street segments, creating obstacles to pedestrian and bicycle travel.

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

Facts in Support of Findings:

- (a) Construction of the Coliseum AGT Station may require temporary sidewalk closures on the north side of San Leandro Street. The construction may also interfere with pedestrian movements along the south side of San Leandro Street under the Hegenberger Road overpass.**
- (b) Guideway construction in the median of Hegenberger Road may interfere with pedestrian movement through construction zones. Construction activities may also temporarily interfere with bicycle operations in the affected area.**
- (c) Construction of the guideway and the Airport AGT Station could interfere with pedestrian movement in the OIA terminal area.**
- (d) Construction of the guideway at San Leandro Creek and near the Lew F. Galbraith Golf Course could interfere with pedestrian and bicycle use.**

- (e) **BART will prepare and implement a pedestrian/bicycle management plan. Where an existing sidewalk or pedestrian/bicycle path will be closed during construction, a temporary walkway or a clearly marked detour will be provided with appropriate markings, barriers, and signs to safely separate pedestrians from vehicular traffic. If access to pedestrian/bicycle trails or the continuity of the trails is impacted, a properly signed and marked detour will be provided.**
- (f) **BART will coordinate with the OIA to ensure that the pedestrian management plan for the construction of the Airport AGT Station is coordinated with the overall construction of the ADP. If the construction of the ADP does not occur concurrently with the AGT station, then temporary walkways will be provided in consultation with OIA.**
- (g) **Actions identified in (e) and (f) above will reduce this potential impact to pedestrian and bicycle transportation to a less-than-significant level as defined by CEQA.**

Significant Effect: Construction of the Project will temporarily reduce available parking supply in two ways: (i) construction will require temporary use of some off-street parking; and (ii) construction may require temporary use of available parking spaces at OIA.

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

Facts in Support of Findings:

- (a) **The AGT station at OIA will be constructed as part of the parking structure and terminal projects, which are components of the overall ADP. Construction of the AGT station and guideway at OIA will temporarily reduce the available parking supply, especially if the Project were constructed prior to implementation of the ADP.**
- (b) **The construction of the AGT may require the temporary use of private off-street parking from several businesses along the project corridor and use of off-street private parking areas immediately west of Hegenberger Road. The temporary removal of this off-street parking could reduce the parking supply below that which is necessary to accommodate the estimated demand.**
- (c) **To mitigate short-term parking loss during construction, BART will provide on-site or off-site replacement parking facilities on a one-space-for-one-space basis for properties whose on-site parking supply is reduced below demand by construction. If on-site or off-site replacement parking facilities cannot be identified, BART will financially compensate the property owners for the use of the parking spaces during the period that construction activities affect on-site parking.**

- (d) **BART will coordinate with the OIA to assure that the parking management plan for construction of the Airport AGT Station is coordinated with the overall construction of the ADP. If the ADP and the Connector facilities are not constructed concurrently, BART will develop a parking plan with the participation of the Port to maintain parking supply equivalent to the on-airport parking supply at the time of construction. Off-site temporary parking locations may need to be identified to provide additional spaces. Any temporary off-airport parking will require shuttle service. BART will pay for any shuttle service needed beyond those already necessary for the ADP construction.**
- (e) **Actions identified in (c) and (d) above will reduce this potential construction-period impact on parking to a less-than-significant level as defined by CEQA.**

Significant Effect: Construction of the Project will require the temporary use of private off-street parking for five businesses along the corridor.

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

Facts in Support of Findings:

- (a) **Construction of the AGT system will be designed to ensure access to businesses along the corridor. However, depending on the lateral extent of the construction corridor, there are five businesses where temporary use of private off-street parking may be necessary. This temporary loss of parking could reduce the ability of customers to patronize the business. The five potentially affected properties are:**
- **Edgewater West Motel at 10 Hegenberger Road (APN 044-5020-004-01)**
 - **General Motors at 8099 Coliseum Way (APN 042-4328-008-01)**
 - **Chevron Station at 455 Oakport Street (APN 042-4425-010-00)**
 - **Home Base at 633 Hegenberger Road (APN 042-4328-001-16)**
 - **Building at 675 Hegenberger Road (APN 042-4328-002-20)**
- (b) **To mitigate the temporary loss of private parking, BART will provide on-site replacement parking facilities (including fencing, as appropriate) for any on-site, off-street parking that is displaced as required for construction, in an amount equivalent to the parking affected. If on-site replacement parking facilities cannot be identified, BART will compensate the property owners for the use of the parking spaces during the construction period.**

- (c) **Actions identified in (b) above will reduce this potential construction-period impact on parking to a less-than-significant level as defined by CEQA.**

Construction - Visual Quality

Significant Effect: Construction lighting will cause light and glare that could potentially disturb residences or lead to safety issues on the road.

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

Facts in Support of Findings:

- (a) **The lighting used for construction work during night hours could cause light and glare effects in the surrounding areas and roads. Compliance with the Federal Aviation Administration's 7640 permit process will mitigate potential light and glare effects in and around the OIA area. Nonetheless, these effects remain a potentially significant temporary problem along the project corridor north of OIA.**
- (b) **BART will specify maximum lighting standards for staging areas and construction sites. The lighting will focus illumination downward to restrict light from extending beyond the construction boundaries. To achieve this, the light fixtures will be fitted with lenses, hoods, and reflectors to minimize spillover light and glare.**
- (c) **Actions identified in (b) above will reduce this potentially significant construction-period, light and glare impact of the Project to a less-than-significant level as defined by CEQA.**

Construction - Cultural Resources

Significant Effect: Construction of the Project could cause significant impacts and disturbance to significant archaeological resources.

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

Facts in Support of Findings:

- (a) **Three prehistoric sites (the Nelson sites), believed to be shell middens, lie within or adjacent to the Area of Potential Effect (APE) for the Project. Although Site N-321 is located outside the APE and will not be affected, the potential exists for encountering intact components of Sites N-322 and N-323 during ground-disturbing activities, such as trenching or asphalt removal.**

Other, previously unidentified archaeological sites may also exist in the project area.

- (b) If the guideway columns are sited within 500 feet of the known locations of the Nelson sites, BART will retain a qualified archaeologist to conduct subsurface testing to characterize the subsurface archaeological deposits. The methods of archaeological testing will be approved by the State Historic Preservation Office, and the testing will be performed prior to construction. Should potentially significant archaeological resources be found during testing or exploration, BART will retain a qualified archaeologist to prepare a cultural resources management plan for submittal to and approval by the State Historic Preservation Office. This plan will address the recovery of important data from the sites prior to and during construction, and will describe the research design, data recovery and analysis methodology, curation procedures, technical reporting requirements, and any other information deemed necessary by the State Historic Preservation Office. The plan will also include a Native American Coordination Plan to be executed in the event of the recovery of human remains during the course of the work.**
- (c) BART will retain a qualified archaeologist to conduct spot-checks during ground-disturbing activities in the project corridor. The archaeologist will have the authority to halt all construction activities in the vicinity upon the discovery of archaeological remains, pending an evaluation of the nature and significance of the materials found. If any materials found are determined to be potentially significant, a cultural resources management plan will be prepared and implemented as described in (b), above.**
- (d) Actions identified in (b) and (c) above will reduce this potential impact on archaeological resources generated by construction of the Project to a less-than-significant level as defined by CEQA.**

Construction - Utilities

Significant Effect: Construction of the Project could require temporary disruption of utility service due to the relocation of utility lines.

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

Facts in Support of Findings:

- (a) Existing service pipeline locations could be affected along the entire alignment due to the possible need to relocate gravity drainage piping for wastewater and stormwater service. There are drinking water pipelines along Hegenberger Road ranging in size from 6" to 20" in diameter; wastewater and stormwater lines in the vicinity of the alignment range in size from 6" to 66" in diameter.**

Utility service disruptions could occur if utility lines must be severed and reconnected to relocated pipelines.

- (b) To minimize disruption of utility service, all re-routed utility lines will be installed, and tie-in activities conducted, during off-peak service periods approved by the affected utility purveyor. No stormwater piping relocation tie-ins will be conducted during or within 24 hours of a rain event. All relocations of wastewater piping will utilize pumps and diverted flows to maintain full service capabilities.**
- (c) Actions identified in (b) above will reduce potential utility service interruptions during construction to a less-than-significant level as defined by CEQA.**

Construction - Geology

Significant Effect: Construction of the Project could cause unstable conditions during excavation due to shallow groundwater.

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

Facts in Support of Findings:

- (a) The Project could require significant temporary cut slopes to construct the tunnel segment. Excavation activities could encounter shallow groundwater that could create instability. The unstable conditions result from groundwater seeping into the excavation, or from upward forces from artesian water pressure, both of which weaken the excavation slopes. Construction workers in the excavations could be susceptible to harm by entrapment or being engulfed. People in buildings adjacent to excavations that encounter shallow groundwater could also be harmed if the excavation slopes fail and cause structural failure to nearby buildings.**
- (b) A temporary dewatering system will be designed and implemented during excavation and construction of structures that interface with the groundwater table. In addition, if the extracted groundwater is be sediment-laden or contaminated, the water will be handled and disposed of in accordance with local, state, and federal hazardous waste regulations.**
- (c) Actions identified in (b) above will reduce this potential impact of construction on slope stability to a less-than-significant level as defined by CEQA.**

Significant Effect: Settlement could occur due to construction of the Project.

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

Facts in Support of Findings:

- (a) Ground settlement could create strains and deformation for overlying structures. Construction of the Project could cause settlement in the following ways:**
 - (1) Lowering the groundwater table by dewatering can remove pore pressure and allow densification of the soil. These conditions can lessen the weight-bearing capacity of dewatered soils, which can cause settlement.**
 - (2) Excavations can cause ground deformation in areas behind the excavation by removal of lateral support.**
 - (3) Vibration from heavy equipment traffic or pile driving can cause settlement by “shakedown” of saturated, loose, sand layers and, to a lesser extent, unsaturated, loose sand layers.**
- (b) A settlement monitoring program will be implemented to detect potential construction-induced settlement at an early stage. If settlement is detected, additional support measures will be required to strengthen the affected adjacent structures. These additional measures could include shoring or grouting of affected underlying soil or strengthening of affected foundations.**
- (c) Settlement potentially caused by dewatering will be controlled by installation of a cut-off wall between the area needing dewatering and potentially affected structures. The cut-off wall may be sheet piling, a grout curtain, or an injection well array that will limit the amount of dewatering that takes place beneath structures adjacent to the construction corridor.**
- (d) In areas of loose sand layers underlying adjacent structures, alternative construction methods will be used that do not create significant vibration. For example, if pile-type foundations are selected, pre-construction design investigations will determine if loose sand layers are present beneath structures in close enough proximity to the construction corridor such that settlement could be induced by vibration from pile driving equipment. If loose sand layers are present, an alternative foundation design (e.g., drilled piers) will be used. By another example, movement of heavy equipment can cause significant vibration and cause settlement. In this case, the equipment traveling speed will be reduced to limit vibration.**
- (e) Actions identified in (b), (c) and (d) above will reduce this potential impact due to ground settlement to a less-than-significant level as defined by CEQA.**

Significant Effect: Stormwater erosion related to construction of the Project could cause significant sediment and stormwater pollution impacts.

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

Facts in Support of Findings:

- (a) **Construction activities for the Project could lead to erosion, sedimentation, or stormwater pollution. Excavations for utilities on embankments, temporary cut slopes for excavations, and temporary cut slopes for the tunnel segment could erode during storm events. The resultant high suspended solids content of the stormwater and the subsequent sedimentation when it enters a receiving waterway could adversely affect the environment and aquatic fauna. Points where runoff enters waterways are areas of greatest potential for impact. Sediment could also be released if entrained in dewatering activities.**
- (b) **BART will implement best management practices (BMPs) under General Permit Requirements for Storm Water Discharges Associated with Construction Activities, State Water Resources Control Board Water Quality Order 99-08-DWQ. These requirements will be implemented by developing an acceptable Stormwater Pollution Prevention Plan. The plan will contain BMPs that have demonstrated effectiveness at reducing stormwater pollution. Examples of BMPs that reduce erosion include, but are not limited to, precluding grading operations during the rainy season, hydro-mulching bare ground, installing silt fences, and placing hay bales to stop entrained sediments from reaching waterways.**
- (c) **Actions identified in (b) above will reduce the potential effects of stormwater erosion to a less-than-significant level as defined by CEQA.**

Construction - Hydrology

Significant Effect: Discharge of construction water could adversely affect water quality.

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

Facts in Support of Findings:

- (a) **Excavation activities for the Project will likely involve dewatering, or removal of groundwater from excavated materials during construction. To avoid impacts to aquatic habitat, such construction water is typically discharged to the sanitary sewer system. However, if unsuitable and untreated construction water is discharged directly to the sanitary sewer system, it could upset**

treatment processes at the wastewater treatment plant, resulting in exceedance of wastewater discharge limitations and deterioration water quality.

- (b) The East Bay Municipal Utility District (EBMUD) will be notified and will approve construction water discharges to the sanitary sewer system prior to discharge. If construction water from the Project is to be discharged to the sanitary sewer system, the water will be tested for the type and concentration of water quality constituents. If high salinity (in general, having a chloride concentration greater than 2,000 mg/l) is identified upon testing the excavation water, then one of the appropriate following mitigations will be implemented.**
- (1) Discharges to the sanitary sewer will be coordinated and scheduled with EBMUD to prevent plant upsets.**
 - (2) At the direction of the treatment plant personnel, coordination efforts will involve limiting the flow rate or total volume of groundwater discharged or allowing discharges only at times when total plant flows are large and adequate dilution of high salinity water can occur.**
 - (3) If required to meet influent standards imposed by the treatment plant, construction water will be pre-treated and tested as necessary.**
 - (4) Discharges may be routed to alternative areas or back into saline water bodies to prevent discharges to the sanitary sewer. For construction of subsurface excavations adjacent to saline water bodies, direct discharge back to the water body may be arranged only under special allowances from the Regional Water Quality Control Board (RWQCB) if the discharger demonstrates to the satisfaction of the RWQCB that the discharge is not causing pollution or otherwise impacting the environment. Alternatively, groundwater may be routed to temporary percolation basins on OIA property subject to prior authorization from the Port of Oakland.**
- (c) Actions identified in (b) above will reduce this potential impact from dewatering to a less-than-significant level.**

Construction - Biological Resources

Significant Effect: Construction activities could have temporary impacts on wetlands adjacent to the construction corridor.

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

Facts in Support of Findings:

- (a) **Construction of the aerial guideway for the Project could potentially affect wetlands between BART and the OIA. The aerial construction right-of-way is anticipated to be 50 feet wide in the Hegenberger Road median and 75 feet elsewhere. While no portion of this right-of-way will encroach on existing wetlands, there is the possibility of construction impacts on wetlands at tidal creek crossings and drainage areas adjacent to the construction corridor. As a worst-case scenario, if all tidal wetlands and other waters of the United States within the aerial guideway construction right-of-way were assumed to be affected, about 0.18 acre would be disturbed in the following areas.**

- **Arroyo Viejo Creek – 0.05 acre**
- **Elmhurst Channel – 0.03 acre**
- **Drainage north of I-880 – 0.10 acre**

Construction of the tunnel under Doolittle Drive and the at-grade guideway between Doolittle Drive and Air Cargo Road will not affect wetlands that were not already authorized to be filled by the U.S. Army Corps of Engineers pursuant to Permit Number 21590S issued to the Port for its ADP. Accordingly, in this segment of the project corridor, AGT construction will not disturb jurisdictional wetlands.

- (b) **Dewatering activities could potentially discharge salts, silts and clays into the adjacent wetland area at the Lew F. Galbraith Golf Course. In addition, dewatering could potentially alter adjacent hydrologic conditions, possibly affecting the wetland south of the golf course.**
- (c) **In areas where the construction rights-of-way are adjacent to tidal creeks, drainages or non-tidal wetlands, the following measures will be implemented:**
- (1) **Construction right-of-way will be narrowed to the extent possible to avoid or reduce temporary construction impacts. The jurisdictional wetlands will be staked by a qualified biologist and fenced, so that the construction corridor will be no closer than 5 feet from the staked wetland. To ensure that equipment and personnel do not enter the wetland, a solid fence a minimum of four feet tall will be constructed a minimum of five feet from the edge of the wetland. In addition, a qualified biologist will be retained by BART to monitor the site during construction to ensure implementation of Best Management Practices (provided in (2), below). This measure may involve temporary closure or narrowing lanes of Airport Drive to allow access for construction equipment and activities from the roadway side. Temporary closure or narrowing of lanes shall be coordinated with the port of Oakland. Access to and from OIA shall be maintained at all times.**

- (2) **Best Management Practices will be implemented to reduce construction-related impacts from sedimentation and contamination. Best Management Practices will include, but not be limited to, the flagging of all wetland areas adjacent to construction activities and the installation of silt fencing between wetland areas and all construction activities prior to the commencement of construction activities.**
- (3) **If dewatering into surface drainages is necessary, sediment basins or settling tanks will be used, located in upland habitats (avoiding all designated wetlands) immediately adjacent to the dewatered construction site but also within the designated construction right-of-way. All waters pumped from the site will first be discharged into these sediment basins/tanks, for settling of silts and sediments. Only after treatment will this cleaner surface water be discharged into surface drainages with approval of the Regional Water Quality Control Board.**
- (d) **Actions identified in (c) above will reduce the potential impact of construction on wetlands to a less-than-significant level as defined by CEQA.**

Significant Effect: Construction of the Project could remove trees that provide habitat for nesting birds.

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

Facts in Support of Findings:

- (a) **Construction of the AGT system will require removal of ornamental street trees, primarily those to be installed by the City of Oakland in the Hegenberger Road median as part of the gateway landscaping project. If construction or tree removal is conducted outside the breeding season, no action is necessary. However, removals during the breeding season could result in the direct or indirect loss of bird nests, eggs, or nestlings. It is not necessary to replace potential nesting habitat of common birds occurring on site because they are well adapted to nesting in developed areas.**
- (b) **If tree removal is required during the breeding season (February 1 to August 31), a preconstruction survey will be conducted to identify the presence, or lack thereof, of nesting bird species. Surveys will be performed by a qualified wildlife biologist no more than two weeks prior to the start of construction. If nests are identified, all construction activity, including pile driving, within 150 feet of the active nest will be postponed until the nest is vacated and juveniles have fledged (typically 3 to 4 weeks).**

- (c) **Actions identified in (b)above will reduce the potential impact of construction on nesting birds to a less-than-significant level as defined by CEQA.**

Construction - Air Quality

Significant Effect: Construction of the Project will generate temporary air emissions that could exceed the applicable standards for air quality.

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

Facts in Support of Findings:

- (a) **During construction, local particulate matter (PM₁₀) emissions are of concern. Mobile construction equipment, such as bulldozers, scrapers, graders, and haul trucks, as well as vehicle travel on paved and unpaved surfaces, will cause the majority of fugitive dust emissions while construction is underway. Exhausts from construction vehicles will add to the total PM₁₀ emissions.**
- (b) **The following practices will be implemented during the construction of the Project:**
 - (1) **All active construction areas will be watered twice daily.**
 - (2) **All trucks hauling soil, sand, and other loose materials will be covered or required to maintain at least two feet of freeboard**
 - (3) **Water will be applied three times daily to paved or applying non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas at the construction site.**
 - (4) **All paved access roads, parking areas, and staging areas, at construction sites, will be swept daily with water sweepers.**
 - (5) **Adjacent public streets will be swept daily with water sweepers if visible soil material is carried onto them.**
- (c) **Additional mitigation measures will further ensure that PM₁₀ impacts remain less-than-significant at construction sites.**
 - (1) **Exposed stockpiles will be enclosed, covered, watered twice daily or (non-toxic) soil binders will be applied.**
 - (2) **Hay bales, sandbags, or other erosion control measures will be installed to prevent silt runoff to public roadways and wetlands.**

- (3) California regulated diesel fuel will be used for all diesel powered equipment.**
- (4) Construction equipment will be properly tuned and maintained in accordance with manufacturer specifications.**
- (d) Actions identified in (b) and (c) above will reduce the potential impact of construction on air quality to a less-than-significant level.**

Construction - Energy

Significant Effect: Construction of the Project will involve consumption of energy, which could be used in a manner that is wasteful, inefficient, and unnecessary.

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

Facts in Support of Findings:

- (a) The total energy consumed for construction of the AGT system with the two intermediate stops is estimated to be approximately 740 billion Btu. Construction activities could have a potential to result in a wasteful, inefficient, and unnecessary use of energy.**
- (b) To promote energy conservation during construction, construction-period measures will be implemented including, but not limited to, those listed below:**
 - (1) Energy-efficient equipment and incorporate energy-saving techniques will be used in the construction of the Project;**
 - (2) Unnecessary idling of construction equipment will be avoided;**
 - (3) Material delivery will be consolidated as much as possible in order to ensure efficient vehicle utilization;**
 - (4) Delivery of materials will be scheduled during non-rush hours to maximize vehicle fuel efficiency;**
 - (5) Car-pooling by construction workers will be encouraged; and**
 - (6) Equipment and machinery, especially those using gasoline and diesel, will be maintained in good working condition.**
- (c) Actions identified in (b) above will reduce this potential impact of construction on energy resource to a less-than-significant level.**

Construction - Hazardous Materials

Significant Effect: Exposure to known contaminated sites or to accidental releases of hazardous materials could occur during construction of the Project.

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

Facts in Support of Findings:

- (a) The health and safety of construction workers and the general public could be adversely affected by exposure to hazardous materials along the project corridor. Soil removal for the AGT alignment could expose workers to contaminated soil, if excavation encounters contaminants released from nearby known or suspected hazardous waste sites. Additionally, exposure could occur if previously unknown contamination is encountered. There may be potentially contaminated sites that have yet to be identified at OIA facilities and elsewhere in the project corridor. Unintended releases of hazardous materials could occur from a tank rupture during removal or spills of materials used in construction. Typical hazardous materials that may be used during construction activities include motor oils, fuel, solvents, cleaning fluids, and lubricants. There is a potential for dermal contact and inhalation of contaminants from these exposures.**
- (b) The Project will require construction activities on at least five properties currently listed on the state regulatory database lists of contaminated sites: Environmental Innovations Corp. at 675 Hegenberger Road; CALTRANS property at 555 Hegenberger Road; Chevron service station at 451 Hegenberger Road; UNOCAL (Circle K) station at 449 Hegenberger Road/Edgewater; and Oakland International Trade Center at 625-655 Hegenberger Road.**
- (c) A Phase I Environmental Site Assessment will be prepared for the selected alignment and final station locations, according to established ASTM guidelines. As necessary, a soil and groundwater characterization program will be developed and implemented at all excavation locations in proximity to listed hazardous waste sites identified in the Phase I Site Assessment. The soil and groundwater characterization program will identify those excavation areas that will require development and implementation of appropriate remediation measures.**
- (d) Prior to the start of construction, a worker health and safety plan will be prepared and implemented for areas where contact with contaminated soil or groundwater is suspected. Documentation that all construction workers have reviewed and signed the plan will be required. The plan will identify, at a minimum:
 - (1) All contaminants that could be encountered during excavation activities;****

- (2) All appropriate worker, public health, and environmental protection equipment and procedures;**
 - (3) Emergency response procedures;**
 - (4) The most direct route to a hospital; and**
 - (5) The site Safety Officer.**
- (e) A Soil Management Plan will be prepared to identify the soil sampling and handling procedures necessary to avoid or minimize worker and public exposure and to avoid or minimize the potential for off-site migration of contaminants. The plan will also identify the range of pre-determined soil disposition options and the construction procedures to be implemented to minimize the excavation and excess handling of contaminated soil. The Regional Water Quality Control Board (RWQCB) will review and approve the Soil Management Plan.**
- (f) A Water Treatment and Handling Plan will be prepared presenting an engineering design for an on-site excavation water treatment system to reduce contaminant concentrations in excavation water to levels acceptable for permitted discharge. The plan will be reviewed and approved by either the RWQCB (for stormwater discharge) or by East Bay Municipal Utility District (for sanitary sewer discharge).**
- (g) Actions identified in (c), (d), (e) and (f) above will reduce the potential impact of exposure to contaminated soil and groundwater during construction to a less-than-significant level as defined by CEQA.**

Parks and Public Lands (Section 4(f))

Significant Effect: Construction of the at-grade segment of the AGT alignment along the Lew F. Galbraith golf course could require a temporary take of a small portion of the golf course property.

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

Facts in Support of Findings:

- (a) **The construction right-of-way along the golf course property would encroach into the golf course in some segments. There would be narrow strips of the golf course property, none of which includes any of the proposed holes, within the construction right-of-way. BART will obtain right of entry permission (a temporary construction easement) for construction activities with the Lew F. Galbraith Golf Course property from the Port of Oakland, the City of Oakland and the golf course operator. This easement will contain provisions to minimize impact on the golf course operation and provisions for BART to pay for the cost of clean up, grading, and restoration of the golf course property.**
- (b) **BART will consult with the Port of Oakland and the City of Oakland park officials regarding the construction plans and schedule of the project near the golf course. The Traffic Management Plan and other construction plans and schedules that would be prepared for the project shall be submitted to these agencies for review and BART will adjust its plans to minimize impacts to the proposed restoration of the golf course and other projects proposed by the East Bay Regional Park District and the Port of Oakland in the vicinity of the golf course.**
- (c) **Actions identified in (b) above will reduce the potential impact of the temporary use of golf course property during construction to a less-than-significant level as defined by CEQA.**

Significant Effect: The placement of columns supporting the AGT aerial structure in the Hegenberger Road median could obstruct the direct extension of the San Leandro Creek Trail across Hegenberger Road.

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

Facts in Support of Findings:

- (a) **The distance between the north and south legs of the San Leandro Creek Trail is about 300 feet. Because the maximum allowable span between two columns is 160 feet, the AGT guideway would have at least one column in this 300-foot segment of the alignment.**
- (b) **BART will require the contractor to place the columns so as to avoid precluding the extension of the San Leandro Creek Trail east of Hegenberger Road, and will assure that the columns do not block access to the trail from Hegenberger Road and will not impede sight lines for vehicles exiting the driveway of the trail parking facility onto Hegenberger Road that could create**

a safety impact. The column will also be placed to avoid the City of Oakland sewer lift station and cleanout located at the entrance to the trail.

- (c) BART will consult with the East Bay Regional Park District officials regarding the construction plans and schedule of the project near the San Leandro Creek Trail. These consultations will help mitigate construction-related effects on usage of and access to the trail.**
- (d) Actions identified in (b) and (c) above will reduce the potential impact to the San Leandro Creek Trail during construction and operations to a less-than-significant level as defined by CEQA.**

Significant Effect: Construction of the at-grade AGT alignment along Airport Drive could result in a temporary take of the stretch of the Bay Trail Extension if this trail is completed prior to the Project.

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

Facts in Support of Findings:

- (a) Construction of the at-grade AGT alignment segment could require temporary rerouting of the Bay Trail extension from Oyster Bay Regional Shoreline Park to Doolittle Drive. The temporary route would generally follow Davis Street (heading north) and Doolittle Drive (heading east). These streets are designated as scenic routes in the City of San Leandro General Plan.**
- (b) BART, in coordination with the City of Oakland, Port of Oakland, City of San Leandro, and the Bay Trail extension operator, will temporarily reroute the Bay Trail extension from Oyster Bay Regional Shoreline Park to Doolittle Drive.**
- (c) BART will place appropriate signs at the ends of the trail at Oyster Bay Regional Shoreline park and Martin Luther King Jr. Regional Shoreline Park indicating temporary rerouting of the Bay Trail Extension.**
- (d) BART will obtain a temporary easement for the construction activities within the right-of-way of the Bay Trail extension from the Port of Oakland, the City of Oakland and the Bay Trail extension operator. The easement will contain provisions for BART to pay for the cost of cleanup and reconstruction of the Bay Trail extension after construction of the Project.**
- (e) BART will consult with the East Bay Regional Park District officials regarding the construction plans and schedule of the project near the proposed Bay Trail Extension, and will submit the traffic management plan and other construction**

plans and schedules that would be prepared for the project to these agencies for review and BART will adjust its plans to minimize project impacts to the proposed Bay Trail Extension and other projects proposed by the East Bay Regional Park District and the Port of Oakland in the vicinity of the Bay Trail Extension.

- (f) Actions identified in (b), (c), (d) and (e) above will reduce the potential impact to the San Leandro Creek Trail during construction and operations to a less-than-significant level as defined by CEQA.**

Section 3.4 Findings Regarding Other Alternatives

As required by CEQA, discussion of possible alternatives to the Project, including a No Action Alternative, was contained in the DEIR/DEIS. With the adoption of the Project consisting of the AGT system with Design Option A and two intermediate stops, the BART Board makes the following findings regarding the rejection of the other alternatives and design options in favor of the Project.

3.4.1 No Action Alternative

The BART 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:

- (a) No Action Alternative would generate lower projected ridership than the Project. In 2020, the No Action Alternative would carry an average of 3,340 passengers daily; whereas, the Project would carry an average of approximately 14,000 passengers daily. In addition, the No Action Alternative would be capable of carrying about 500 persons per peak hour per peak direction. This level of service would not satisfy the minimum desired level of 700 passengers per hour per direction.**
- (b) No Action Alternative would result in longer travel times than the Project and would not satisfy the project objective of offering a competitive alternative by providing reliable travel time savings compared to driving to OIA. AirBART passengers and motorists are subject to the same variability in the in-vehicle travel time between the Coliseum BART Station and OIA. Between the BART station and Terminal 1 at OIA, the average one-way in-vehicle travel time is 11 minutes; however, trips can take as long as 25 minutes. Between Terminal 2 at OIA and the BART station, the average in-vehicle travel time is 9 minutes, but trips can take as long as 14 minutes. By comparison, because the AGT operates in an exclusive guideway, it provides a consistent one way in-vehicle travel time of approximately 9 minutes. The Project provides a consistent total trip time of approximately 14 minutes compared to the No Action Alternative’s average total trip time of 24.5 minutes.**

- (c) **Similarly, the No Action Alternative would not satisfy the project goal of providing a convenient and reliable form of ground access to OIA; i.e., one that offers reliable scheduled service between BART and OIA. Though the average wait time for AirBART passengers is 5 minutes, AirBART headway varies throughout the day. During the field surveys of AirBART service, passenger wait times were as long as 26 minutes at the Coliseum BART Station. Passengers waited as long as 35 minutes at OIA. Schedule reliability is likely to become worse due to increased traffic congestion in the future, making AirBART less appealing, particularly for air passengers. By comparison, the Project provides a consistent headway of approximately 3.8 minutes.**
- (d) **The No Action Alternative would not offer any beneficial effects for future traffic conditions on Interstate 880; whereas, the Project will increase transit ridership and reduce highway traffic, yielding improved traffic conditions.**
- (e) **The No Action Alternative would not offer any beneficial effects for future traffic conditions along Hegenberger Road; whereas, the Project will increase transit ridership and reduce local traffic, yielding improved operating conditions.**
- (f) **The No Action Alternative would not reduce daily vehicle miles traveled. As a result, there would be increases in regional emissions of oxides of nitrogen and carbon monoxide relative to 2000 emissions. Under the Project, daily vehicle miles traveled will be reduced by approximately 60,000 miles compared to the No Action Alternative in 2020. As a result, the following regional air emission reductions can be expected under the Project: oxides of nitrogen, 21.1 tons/year; reactive organic gases, 3.4 tons/year; carbon monoxide, 49.1 tons/year; and particulate matter, 0.4 tons/year.**
- (g) **Regional energy consumption would be greater with the No Action Alternative than with the Project. Under the No Action Alternative, the energy consumption for regional vehicular travel would be 6.56 billion BTUs per day in 2020. Under the Project, the energy consumption would be 6.28 billion BTUs per day in 2020.**
- (e) **The No Action Alternative would not serve as a catalyst for public and private ventures to economically revitalize the Project area. The continuation of AirBART service would not have the effect of promoting the City of Oakland Coliseum Area Showcase District or the Airport/Gateway Showcase District, which are efforts by the City to promote expanded job generation, retail opportunities, and mobility.**

3.4.2 Quality Bus Alternative

The BART 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:

- (a) **The Quality Bus Alternative would generate lower projected ridership than the Project. In 2020, the Quality Bus Alternative would carry an average of approximately 6,000 passengers daily; whereas, the Project would carry an average of approximately 14,000 passengers daily.**
- (b) **The Quality Bus Alternative would have longer travel times than the Project. The average total trip time in 2020 between the OIA and BART on the quality bus would be 20 minutes, which is a limited (4.5 minutes, or 18%) improvement compared to the No Action Alternative total trip time of 24.5 minutes. By comparison, because the AGT operates in an exclusive guideway, the total trip time for the Project is approximately 14 minutes, representing an improvement of 10.5 minutes (43%) compared to the No Action Alternative.**
- (c) **The Quality Bus Alternative would not provide reliable scheduled service between BART and OIA, given that it would need to operate in mixed traffic flow and would be subject to congestion on the roadways caused by Coliseum events, days of particularly heavy air travel, traffic accidents, and other such events. In addition, as passenger loading would vary throughout the day, even taking into account features designed to minimize dwell time (such as low-floor vehicles, telescoping ramps and raised boarding platforms, fare collection that is separate from the vehicle, and three vehicle doors), the Quality Bus dwell time would vary between 1 minute and 5 minutes depending on the passenger loads. By comparison, the Project dwell time is a consistent 40 seconds at the termini stations and 20 seconds at each intermediate station.**
- (d) **The Quality Bus Alternative would not provide as much flexibility as the Project to adjust the capacity throughout the day. The AGT would ordinarily operate with two-car trains to provide the needed capacity. However, in off-peak hours, the AGT can run one-car trains, thereby reducing capacity and reducing wear and tear on vehicles. QB buses have a fixed capacity at peak and off-peak hours.**
- (e) **The Quality Bus Alternative would drop off and pick up passengers at the OIA from an Airport station to be located in the future parking garage. This location would be inconvenient as Quality Bus passengers would have to cross seven vehicular traffic lanes that would separate the garage from the future terminals.**
- (f) **In 2020, the Quality Bus Alternative would divert about 200 pm peak hour vehicular trips from the roadways; the Project would divert about 500 pm peak hour vehicular trips. The Quality Bus Alternative helps reduce traffic congestion at intersections compared to the No Action Alternative, but the congestion improvements are less than those associated with the AGT Alternative.**

- (g) While the Quality Bus Alternative would stimulate 57 permanent direct and indirect jobs and 184 construction-period jobs, the Project would result in more than 68 permanent direct and indirect jobs and more than 689 construction-period jobs.**
- (h) By 2020, the Quality Bus Alternative would reduce daily vehicle miles traveled by 22,890 miles. As a result, the following regional air emission reductions can be expected compared to the No Action Alternative: oxides of nitrogen, 8 tons/year; reactive organic gases, 1.3 tons/year; carbon monoxide, 19.1 tons/year; and particulate matter, 0.2 tons/year. The benefits under the Project are substantially greater because of the 59,969 reduction in daily vehicle miles traveled. The corresponding air emission reductions for the AGT system compared to the No Action Alternative are oxides of nitrogen, 21.1 tons/year; reactive organic gases, 3.4 tons/year; carbon monoxide, 49.1 tons/year; and particulate matter, 0.4 tons/year. (These estimates are based on a two-station AGT system. The four-station system defined as the Project will yield even greater reductions in regional air emissions.)**
- (i) Regional energy consumption would be greater with the Quality Bus Alternative than with the Project. Under the Quality Bus Alternative, the energy consumption for regional vehicular travel would be 6.44 billion BTUs per day in 2020. Under the Project, the energy consumption would be 6.28 billion BTUs per day in 2020. (As above, these estimates are based on a two-station AGT system. The four-station system defined as the Project would further reduce the number of vehicles on the roads resulting in increased overall efficiency and yielding even greater reductions in regional energy consumption.)**
- (j) The Quality Bus Alternative would not provide the flexibility to include intermediate stations, and as a result it would not support the City of Oakland's plans for economic revitalization of the Hegenberger Road corridor. Intermediate stations were not incorporated into the QB Alternative because the delay introduced by stopping at the intermediate stations would make the in-vehicle travel time nearly identical to the No Action Alternative. In addition, a QB Alternative with intermediate stations would replicate the existing service provided by AC Transit. By contrast, the AGT system is sufficiently faster than AirBART to allow for the delay introduced by intermediate stops.**
- (k) Because the QB Alternative does not include intermediate stations, it would be less supportive than the Project of BART's system expansion policy, particularly two goals: (1) enhanced regional mobility, especially access to jobs; and (2) demonstrated commitment to transit-oriented growth and development.**

3.4.3 AGT Alternative Without Intermediate Stations

The BART Board of Directors hereby finds that this design option is not “feasible” as defined in Section 15364 of the state CEQA Guidelines for the following reasons:

- (a) This design option is not as supportive as the Project of the City of Oakland’s plans for economic revitalization of the Hegenberger Road corridor. The City plans call for transit-oriented commercial development centered around two intermediate AGT stations. The City’s Gateway Development Study seeks to improve the physical environment, create a positive image, attract new commercial and office development and improve community access in the area generally bound by Hegenberger Road, 98th Avenue, I-880, and Doolittle Drive. The Project fosters these physical and economic revitalization efforts by creating jobs, enhancing accessibility to the area at the intermediate stations, and better linking these new uses to OIA. Supporting local economic growth satisfies an identified project objective. These benefits would not be provided by the AGT Alternative without the intermediate stations.**
- (b) This design option would not maximize transit ridership on the AGT and on the BART system when compared to the Project. This design option would not be fully consistent with the BART Strategic Plan – 2000, which calls for using BART properties to first maximize transit ridership and then balance transit-oriented development goals with community desires; the addition of the two intermediate stations results in a project more consistent with these goals. Estimated average daily ridership on the AGT system in 2020 will increase from approximately 11,000 passengers for the 2-station AGT design option to approximately 14,000 passengers for the four-station AGT design option.**

3.4.4 AGT Alternative with Design Option B

The BART Board of Directors hereby finds that this design option is not “feasible” as defined in Section 15364 of the state CEQA Guidelines for the following reasons:

- (a) This design option would require the removal of additional off-street parking spaces along the portion of Hegenberger Road between Edgewater Drive and Airport Access Road, compared to the Project.**
- (b) This design option would lie within the Oakland Airport Business Park and would be inconsistent with the Port of Oakland’s Standards and Restrictions for that area. Option B would introduce transportation structures into the development setback, a use that would not be consistent with the Port’s Standards and Restrictions.**

- (c) **This design option would necessitate the partial acquisition of at least one additional parcel (the landscaped frontage of the Bank of America), the full acquisition of the Shell Gas Station, and the permanent taking of private off-street parking from the Circle K Gas Station. These property acquisitions are in addition to those identified for the Project.**
- (d) **The land acquisition identified above would result in a loss of employment for an estimated six additional employees, compared to the Project, and an additional reduction in property tax revenues of about \$5,500 annually.**
- (e) **This design option would result in a significant visual change in the corridor and an unavoidable sense of encroachment for building occupants within 60 feet. Buildings along the western portion of Hegenberger Road, between Edgewater Road and the Pardee Drive/Airport Access Road intersection, would be more significantly affected than by the Project.**
- (f) **This design option would potentially affect more adjacent tidal drainages during construction than the Project. Specifically, the alignment of Option B would potentially temporarily disturb 0.16 acre of San Leandro Creek adjacent to the construction corridor.**
- (g) **This design option would create significant AGT vehicle passby noise and vibration impacts for additional commercial properties compared to the Project: the Bank of America building near the Hegenberger Loop, the Francesco's restaurant property north of Pardee Drive, and the Warehouse Union building south of Pardee Drive.**
- (h) **During construction, this design option could temporarily interfere with access to the businesses along the west side of Hegenberger Road between Edgewater Drive and Pardee Drive, to a greater degree than would be expected for the Project. The construction right-of-way would require the removal portions of the landscaped frontage of the Bank of America property and off-street parking for at least five commercial properties.**
- (i) **During construction, this design option could create vibration impacts for three additional commercial properties, compared to the Project.**
- (j) **The construction right-of-way for this design option would encounter two additional hazardous material sites currently listed on the state regulatory database, compared to the Project.**

3.4.5 AGT Alternative with Design Option D

The BART Board of Directors hereby finds that this design option is not “feasible” as defined in Section 15364 of the state CEQA Guidelines for the following reasons:

- (a) **Design Option D would result in significant environmental impacts to wetlands, requiring the temporary disturbance by construction activity within 0.72 acre of jurisdictional wetlands in the Fuel Farm marsh and the permanent filling of 0.003 acres for guideway column foundations located within wetlands. The Project alignment does not include Design Option D and avoids all construction within wetlands and permanent fill of wetlands.**
- (b) **Reconfiguration of the airport terminal has made Option D no longer feasible. The straight in alignment required by the reconfigured airport terminal design is not compatible with the Option D alignment. At the time that the DEIR/DEIS was prepared, the Port of Oakland's ADP provided for the Airport AGT Station to be sited at the center of the new consolidated terminal. The Port has subsequently made design refinements to the OIA terminal layout to include an AGT station adjacent to the new parking garage.**
- (c) **Construction of the AGT station and guideway under this design option would require temporary traffic lane closures closer to the terminal building than would be required for the Project.**
- (d) **As Option D curves into the OIA terminal area, the construction corridor would potentially impact existing sewer and water lines.**
- (e) **Although there are no trees in the Option D alignment, Option D construction activities could disturb nesting birds in the wetlands area. Abandonment of nests would be a significant effect.**

3.4.6 AGT Alternative with Median Option

The BART Board of Directors hereby finds that this design option is not considered "feasible" as defined in Section 15364 of the state CEQA Guidelines for the following reasons:

- (a) **The Final EIR fully evaluates the environmental impacts of an alignment along the Hegenberger Road median between Elmhurst Channel and Coliseum Way, referred to as the "Median Option." The Median Option would require the AGT guideway to cross from the west side of Hegenberger Road into the Hegenberger Road median at Elmhurst Channel, and to return to the west side of Hegenberger Road at Coliseum Way. The Median Option is an alternative design option to a segment of the Project alignment traveling along the west side of Hegenberger Road between Elmhurst Channel and Coliseum Way, which was identified as "Option A" in the Final EIR.**
- (b) **As described in the Final EIR, the Median Option and Option A have the same significant or potentially significant impacts. The Option A alignment was included in the Project because it would avoid design complications and reduce the intensity of certain impacts associated with crossing to the median**

of Hegenberger Road under the Median Option. The Median Option would not introduce any new impacts, but it would increase the intensity of some impacts during the construction and operation phases. The Median Option is currently considered infeasible in that it would not promote the project goals and objectives (including a comfortable connection, minimizing parking displacement and minimizing environmental consequences of construction and operation) for the following reasons:

- (1) The Median Option would require three "straddle bent" transition structures over Hegenberger Road for the guideway to cross to the median and then out again. Eliminating the approximately 1,600 feet of median guideway would remove design complications associated with crossing two intersections (with left-turn lanes) and numerous left-turns at driveways.**
- (2) The Median Option would affect passenger ride quality due to the change of direction and resultant lateral forces on the AGT vehicle as it makes the transition to the median alignment.**
- (3) During construction of the Median Option, the intensity of impacts on traffic conditions would increase. Construction of the Median Option would require closure of two lanes of traffic, compared to one lane of traffic for construction of the Option A alignment along the west shoulder of Hegenberger Road.**
- (4) During construction of the Median Option, the intensity of noise impacts on commercial properties east of Hegenberger Road would increase compared to Option A.**
- (5) During construction of the Median Option, the intensity of temporary impacts to on-street parking supply would increase. Construction in the median would entail enlarging the median and moving the existing lanes outward, likely taking the street parking on the east side of Hegenberger Road.**
- (6) During construction of the Median Option, the intensity of temporary hydrology impacts may increase. This design option would require additional utility relocation and therefore may cause greater potential for stormwater-related erosion during utility relocation.**
- (7) The Median Option would increase the intensity of permanent impacts on parking supply, requiring the removal of 25 curb parking spaces on the east side of Hegenberger Road.**

- (c) **Incorporation of Option A in the Project alignment does not introduce any new impacts, but increases the intensity of some impacts on existing businesses along the west side of Hegenberger Road compared to the Median Option. Potentially intensified operational impacts from the Option A segment include increased visual impacts, operational noise and ground-borne vibration experienced at locations along the west side of Hegenberger Road adjacent to the Option A segment. Temporary construction-related impacts that would intensify with Option A include effects on off-street parking, construction noise and construction vibration. Option A would also increase the potential for worker exposure to hazardous materials at one contaminated site, which the Median Option would avoid.**
- (d) **The City of Oakland has indicated its support for the AGT alternative with the Median Option. It is the City's position that the Median Option better supports its redevelopment objectives in the vicinity of the Median Option segment and its Hegenberger Streetscape Improvement Program.**
- (e) **BART staff will continue to analyze both Option A and the Median Option through the preliminary engineering stage and will continue to work with the City of Oakland to reach agreement on and implement a refined alignment that satisfies the City's concerns.**

Section 4

Overriding Considerations

The Final EIR indicates that if the Project is implemented, certain significant effects may be unavoidable. As required by the State CEQA Guidelines, Section 15093, the BART Board of Directors finds that the unavoidable significant effects described in Section 3 of this document are acceptable due to the overriding considerations described below.

Statements of Fact in Support of Overriding Considerations

- 1) The Project will represent the culmination of over 30 years of study, which have documented the desirability and need for an efficient intermodal connector linking the OIA and the BART regional rail system.**
- 2) In November 2000, the voters of Alameda County approved a sales tax increase to finance transportation improvements and a list of transportation projects. The Project was among the list of recommended projects.**
- 3) The Project will provide a reliable, scheduled transit service that would be unaffected by increasing congestion along the streets between OIA and the Coliseum BART Station.**
- 4) Because the Project will operate in an exclusive right-of-way, it will complete the one-way trip in approximately 9 minutes with an average headway of 3.8 minutes, thereby providing travel time savings compared to other alternatives and those who drive.**
- 5) The Project will provide flexibility to increase transit vehicle frequencies during periods of increased travel demand.**
- 6) The Project is the most effective of the AGT design options. While the QB alternative is the most cost effective alternative, it is not as successful as the AGT alternative in achieving other project goals.**
- 7) The Project will avoid wetland impacts that would result from AGT Design Option D, which would require the alignment to traverse wetlands near the airport.**
- 8) As a convenient, safe, comfortable and reliable connection between BART and OIA, the preferred alternative will divert motorists from their automobiles onto transit. In 2020 during the p.m. peak hour on Interstate 880, vehicles per hour would be reduced from an estimated 9,130 in the northbound direction to 8,980 and from 9,340 in the southbound**

direction to 9,170. As a result, the Project will reduce the congestion expected in 2020 on the freeway.

- 9) The Project will promote transit and maximize transit ridership. The AGT system generates the highest projected ridership and increases new transit ridership, with an average annual ridership of approximately 5 million passengers in 2020, compared to 1.2 million passengers with continuation of the existing AirBART service. More than 13 percent of future air passengers in 2020 will use the AGT system, compared to a projected 5.1 percent using the AirBART service. The enhanced accessibility to OIA provided by the Project will encourage greater use of the BART system, thereby satisfying the project objective of maximizing BART ridership.**
- 10) The linkage of OIA to the regional rail network will reduce automobile trips to OIA, creating the benefits of reduced parking demand and traffic congestion along the terminal curbside.**
- 11) The Project supports the City of Oakland's efforts to revitalize economic activities in the Coliseum Area and in the Airport/Gateway Area. Both of these areas are targeted as "showcase" districts to promote expanded job generation, retail opportunities, and entertainment and recreation activities. In addition, the City's Gateway Development Study seeks to improve the physical environment, create a positive image, attract new commercial and office development and improve community access in the area generally bound by Hegenberger Road, 98th Avenue, I-880, and Doolittle Drive. The Project fosters these physical and economic revitalization efforts by creating jobs, enhancing accessibility to the area at the intermediate stations, and better linking these new uses to OIA. Supporting local economic growth satisfies an identified project objective.**
- 12) The Coliseum BART Station is specifically designated in the City of Oakland's General Plan as a Transit Oriented District, slated to become a major intermodal transfer point, connecting BART, Amtrak, and the airport. In addition, a Capitol Corridor Station, serving commuter rail passengers between Sacramento and San Jose, will be constructed within one block of the Coliseum BART Station. The Project is designed to be functionally and physically integrated with the Coliseum BART Station, further enhancing the BART station's intermodal role.**
- 13) The City of Oakland, the Port of Oakland, the San Leandro Chamber of Commerce, the Airport Area Business Association, and the Coliseum Neighborhood Council have registered their support of the AGT Project. (See Volume 2, Responses to Comments on the DEIR/DEIS.)**
- 14) The "straight in" alignment, terminating at the planned airport parking garage is specifically designed to accommodate planned development at OIA.**
- 15) In addition to supporting local economic strategies and redevelopment programs, the Project supports BART's own Strategic Plan - 2000 and the District Resolution 2837**

(Station Area Development Implementation Policy). These documents set forth BART's policy to (1) provide safe, clean, reliable and customer friendly transit in order to increase mobility and accessibility, strengthen community and economic prosperity, and preserve the Bay Area environment; and (2) work cooperatively with local jurisdictions, redevelopment agencies, developers, and other public and private sector entities to promote land use policies that encourage intensive, high quality development on and around station properties.

- 16) The Project provided the highest level of regional job growth, both permanent employment related to operation of the system and temporary construction jobs. The Project will create new permanent jobs for station agents, mechanics, and maintenance workers, as well as indirect jobs that would benefit the local and regional economy.**
- 17) By diverting passengers from automobiles to transit, the Project will create a net air quality benefit including a reduction in regional air emissions. Compared to the No Action Alternative in 2020, the AGT system will reduce oxides of nitrogen by more than 21.1 tons/year; reactive organic gases, 3.4 tons/year; carbon monoxide, 49.1 tons/year; and particulate matter, 0.4 tons/year. (These estimates are based on a two-station AGT system. The four-station system defined as the Project will yield even greater reductions in regional air emissions.)**
- 18) The Project will create a net regional energy consumption benefit. Under the No Action Alternative in 2020, the regional transportation energy use (from vehicles traveling to OIA) is projected to be 6.56 billion Btus per day. The Project will reduce the regional vehicle miles traveled and shift energy consumption from private automobiles to public transit. Both of these changes result in energy savings; regional transportation energy use with the AGT system is projected to be 6.28 billion Btus per day. (As above, these estimates are based on a two-station AGT system. The four-station system defined as the Project would further reduce the number of vehicles on the roads resulting in increased overall efficiency and yielding even greater reductions in regional energy consumption.)**



Section 5

Findings of Conformity to the Air Quality State Implementation Plan

Section 5.1

Adoption of Findings

The BART Board of Directors, having reviewed and considered information in the Final EIR for the Project and other information as identified herein, hereby makes and adopts the following findings concerning the Project's conformity to the air quality state implementation plan for the San Francisco Bay Area.

Section 5.2

Findings Regarding Air Quality Conformity

5.2.1 No Interference with Applicable Bay Area Air Quality Implementation Plan

Finding: BART hereby finds that the Project does not interfere with implementation of any Transportation Control Measure contained in the applicable Bay Area air quality implementation plan (consisting of the *1982 Bay Area Air Quality Plan* as amended and supplemented by the *San Francisco Bay Area Maintenance Plan (1993)* and the *1999 San Francisco Bay Area Ozone Attainment Plan*).

Facts in Support of Findings:

- (a) The Project is identified in the 2001 Regional Transportation Plan.
- (b) 28 federal Transportation Control Measures (TCMs) are contained in the applicable Bay Area air quality implementation plan. The strategies sought by these measures include the reduction of private automobile trips, the encouragement of transit, the promotion of high-occupancy vehicular trips, and low cost improvements to the existing transportation network that improve traffic flow. The Project in encouraging transit and providing a reliable alternative to automobile trips is consistent with the TCMs in the applicable Bay Area air quality implementation plan.
- (c) Specifically, TCM #3 seeks to expand and improve public transit beyond committed levels, TCM #6 seeks to continue efforts to obtain funding to support long-range transit improvements, and TCM #9 seeks to expand

commute alternatives. The Project promotes use of transit and the Project will make BART more convenient for individuals who work at OIA. The Project is therefore consistent with the purposes of TCMs #3, 6, and 9.

5.2.2 Use of Latest Planning Assumptions

***Finding:* BART hereby finds that the air quality conformity analysis is based upon the most recent planning assumptions currently in force.**

Facts in Support of Findings:

- (a) The transportation, air quality, and other relevant analyses in the Final EIR are based upon growth forecasts for 2005 and 2020, prepared by the Association of Bay Area Governments, along with air quality analyses and projections used in the air quality plans identified in the Final EIR.**

5.2.3 Latest Emissions Model

***Finding:* BART hereby finds that the air quality conformity analysis is based upon the latest motor vehicle emission estimation model available at the time the analysis was prepared.**

Facts in Support of Findings:

- (a) The air quality conformity analysis for the Project utilized the EMFAC7G motor vehicle emissions model developed by the California Air Resources Board (CARB). At the time the conformity analysis was prepared in 2001, EMFAC7G was the latest version of this model that had been released by CARB and approved by the U.S. Environmental Protection Agency (EPA) for use in California.**

5.2.4 Consultation Procedures

***Finding:* BART hereby finds that conformity of the Project was determined in accordance with applicable conformity consultation procedures.**

Facts in Support of Findings:

- (a) In preparing the conformity analysis (and the other analyses that comprise the Final EIR), BART staff and consultants consulted with a number of governmental agencies, as identified in Section 7 of the Final EIR. In particular, the Metropolitan Transportation Commission (MTC) and the Bay Area Air Quality Management District were contacted and consulted in connection with the transportation and air quality conformity aspects of the**

Project. Public outreach was accomplished through public scoping meetings and a public hearing, along with distribution of the draft environmental documents to interested groups and individuals for review and comment.

5.2.5 Currently Conforming Transportation Plan and Transportation Improvement Program

Finding: BART hereby finds that as of the date of this conformity determination, there exist a currently conforming transportation plan and a currently conforming Transportation Improvement Program (TIP).

Facts in Support of Findings:

- (a) The current 2001 TIP was adopted by MTC on September 27, 2000, by Resolution No. 3300, and was last amended on March 15, 2002 (Amendment 01-32), by MTC Resolution No. 2432. The current Regional Transportation Plan (RTP) was last updated by MTC on December 19, 2001, by Resolution No. 3427.
- (b) On March 15, 2002, by Resolution No. 3432, MTC found that the 2001 RTP and 2001 TIP (as proposed to be amended by Amendment 01-32) conform to the State Implementation Plan and applicable transportation conformity budgets, and that they provide for the timely implementation of transportation control measures from the applicable air quality implementation plan.
- (c) By letter dated March 18, 2002, the U.S. Department of Transportation (USDOT) found that “both the 2001 RTP and the TIP as amended through Amendment 32 conform to the applicable state implementation plans, and we accept this air quality determination in accordance with the provisions of 40 CFR 51 and 93 and with USDOT's January 2, 2002, guidance . . .”

5.2.6 Project comes from a Conforming Transportation Plan and Program

Finding: BART hereby finds that the Project comes from a conforming transportation plan and conforming transportation improvement program.

Facts in Support of Findings:

- (a) The Project is included in the 2001 RTP last updated by MTC on December 19, 2001. As noted above, on March 15, 2002 MTC determined that the 2001 RTP conforms to the applicable State Implementation Plan, and USDOT approved this conformity finding on March 18, 2002.

- (b) **The Project is included in the 2001 TIP adopted by MTC on September 27, 2000, by Resolution No. 3300, and last amended on March 15, 2002 (Amendment 01-32), by MTC Resolution No. 2432.**

5.2.7 Project does not Cause or Contribute to New CO or PM₁₀ Violations

***Finding:* BART hereby finds that the Project does not cause or contribute to any new localized CO or PM₁₀ violations or increase the frequency or severity of any existing CO or PM₁₀ violations.**

Facts in Support of Findings:

- (a) **The Final EIR evaluated three roadway segments in the vicinity of the AGT. These roadway segments were selected on the basis of the highest p.m. peak-hour volumes, because local CO impacts are a function of motor vehicle traffic. Following EPA guidance, the three most congested intersections were also evaluated. The intersections were selected based on vehicle p.m. peak-hour volumes at the intersection and the level of service at each intersection.**
- (b) **The Final EIR indicates that the Project, as compared to the No Action Alternative, will result in reduced CO concentrations at each of the intersections and roadways evaluated. There are no violations of state or federal ambient CO air quality standards at any of these locations under existing conditions, or in the future in 2005 or 2020. In all cases, the 1-hour and 8-hour CO concentrations predicted for the Project are lower than those predicted for the No Action Alternative.**
- (c) **There are no approved models available to calculate PM₁₀ concentrations from motor vehicles. Therefore, a quantitative analysis of local PM₁₀ concentrations is not required as part of the Final EIR or the transportation conformity assessment. Nevertheless, local PM₁₀ levels were qualitatively evaluated in the Final EIR on the basis of the project-specific regional analysis. A net decrease in regional PM₁₀ impacts resulting from the Project can reasonably be interpreted to suggest that the Project would be unlikely to cause localized exceedances of PM₁₀ air quality standards.**

The Final EIR indicates that the Project, as compared to the No Action Alternative, will reduce regional vehicle miles traveled by an estimated 33,682 per day in 2005 and by 59,969 per day in 2020. As a result, the Project will reduce emissions of PM₁₀ by 0.4 tons/year in 2005 and by 0.4 tons/year in 2020, compared to the No Action Alternative. This projection of future emissions suggests that the Project is unlikely to cause localized exceedances of PM₁₀. (These estimates are based on a two-station AGT system. The four-station system defined as

the Project would further reduce the number of vehicles on the roads resulting in increased overall efficiency and yielding even greater reductions in regional air emissions.)

5.2.8 Compliance with PM₁₀ Control Measures

***Finding:* BART hereby finds that the Project complies with PM₁₀ control measures in the applicable implementation plan.**

Facts in Support of Findings:

- (a) No specific PM₁₀ control measures are required by the Bay Area air quality plan for on-road motor vehicles for this Project.**
- (b) To ensure that Project construction does not produce any significant PM₁₀ impacts, BART will implement construction mitigation measures intended to control fugitive dust. Specifically, BART shall require that its contractor implement the following practices during the construction of the Project and related facilities:**
 - (1) Water all active construction areas twice daily.**
 - (2) Cover all trucks hauling soil, sand, and other loose materials or requiring all trucks to maintain at least two feet of freeboard**
 - (3) Apply water three times daily to paved or applying non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas at the construction site.**
 - (4) Sweep all paved access roads, parking areas, and staging areas, at construction sites, daily with water sweepers.**
 - (5) Sweep adjacent public streets daily with water sweepers if visible soil material is carried onto them.**
- (c) The Port of Oakland requires that the following measures be included within the plans and specifications for construction projects at the airport. These additional mitigation measures will further ensure that PM₁₀ impacts remain less-than-significant at construction sites.**
 - (1) Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles.**
 - (2) Install hay bales, sandbags, or other erosion control measures to prevent silt runoff to public roadways and wetlands.**

- (3) **Require that the construction contractor use California regulated diesel fuel for all diesel powered equipment.**
- (4) **Require that the construction contractor use construction equipment that is properly tuned and maintained in accordance with manufacturer specifications.**

5.2.9 Reduction of Motor Vehicle Emissions in Support of the Regional Transportation Plan and the Regional Transportation Improvement Program

Finding: BART hereby finds that the Project results in a reduction of regional motor vehicle emissions, thereby facilitating the achievement of projects and schedules in the Regional Transportation Plan and the Regional Transportation Improvement Program, as required by the State Implementation Plan.

Facts in Support of Findings:

- (a) **The Final EIR indicates that the Project, as compared to the No Action Alternative, will reduce regional vehicle miles traveled by an estimated 33,682 per day in 2005 and by 59,969 per day in 2020. (As noted previously, these estimates are based on a two-station AGT system. The four-station system defined as the Project would further reduce the number of vehicles on the roads resulting in increased overall efficiency and yielding even greater reductions in regional air emissions.)**
- (b) **As a result of the reduction in regional vehicle miles traveled, emissions of oxides of nitrogen, reactive organic gases, carbon monoxide, and particulate matter PM₁₀ under the Project are less than those under the No Action Alternative for all analysis years (2005 and 2020).**
- (c) **Emissions from the No Action Alternative for all years of analysis reflect the regional forecasted growth, as defined by the Association of Bay Area Governments. These regional forecasts, in turn, are used in the air quality management plans to derive emissions budgets. Because the Project results in a net regional emissions reduction, the Project will have a beneficial effect on the regional emissions budget.**

Exhibit I: Project Map

