

### 3. COMMENTS AND RESPONSES

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#### 3.1 COMMENTS AND RESPONSES ON THE SUMMARY

*Comment SU-1 (Fremont): Reference page S-9 of the Draft EIR. City staff is not in agreement with the following statement: "Visual Quality: Additional development will create an environment that is more built up which would allow the BART aerial structures less likely to contrast with or dominate their surroundings. Development and maturation of plantings around Central Park will contribute to a visually complex environment capable of visually absorbing the BART structures."*

**Response SU-1:** The statement quoted above by City staff, which is also found in Chapter 6, *Cumulative Impacts*, page 6-2 of the Draft EIR, is a summary of the Cumulative Impact analysis on page 3.8-26. As a summary statement, it is not as complete as the original text. Please refer to the original text on page 3.8-26 of the Draft EIR. In addition, the following is substituted as a more accurate summary:

**Visual Quality.** Now-vacant and underutilized areas along the project alignment are likely to be developed in the future. In general, the result of this additional development will create an environment that is more built up and, as a consequence the BART aerial structures are less likely to contrast with or dominate their surroundings. Even in Central Park, new civic buildings proposed at the park's north end would create a setting in which the BART aerial structure would be less obtrusive. In other areas of the park new and maturing landscaping will create a more visually complex environment that would be more capable of absorbing the proposed BART structures.

The above paragraph replaces the seventh paragraph on page S-9 and the second paragraph on page 6-2 of the Draft EIR.

It is important to note that any confusion about the meaning of the briefer statements in the *Summary* should be clarified by referring to the full text of the corresponding section of the Draft EIR.

*Comment SU-2 (Fremont): Reference page S-9 of the Draft EIR. Central Park has been conceptualized in zones of varying recreation activity intensity. The zone near Lake Elizabeth is considered a passive recreation zone. Some Civic Center build up near Stevenson Boulevard, such as a Police Building or Swim/Gym, will not serve to lessen the visual and aesthetic impact to passive recreation users nearer to Lake Elizabeth. (LS)*

**Response SU-2:** The City's Master Plan does not define "conceptualized" use areas of Central Park. It is recognized, however, that the area between the north shore of Lake Elizabeth and the softball complex, the soccer fields, and the animal shelter as well as the area along the eastern shore of the Lake at least as far as the SPTCo railroad tracks is to be considered a passive recreation area. Throughout the relevant sections of the Draft EIR, including Sections 3.7, *Fremont Central Park*, 3.8, *Visual*, and 3.13, *Noise*, the impact analysis recognizes the predominately passive uses in this area. For example, the visual analysis for the Proposed Project states that, "The aerial structure would be most visible and have the greatest impacts as it passes along the northern edge of Lake Elizabeth . . ." (page 3.8-19) The Draft EIR does not state or imply that the proposed build up of the Civic Center would lessen the visual impacts near Lake Elizabeth.

*Comment SU-3 (Fremont): Reference page S-9 of the Draft EIR. The above EIR statement (see SU-1) also contradicts several statements on page S-7. Considering the complete build-out of developments at the northerly side of Stevenson Boulevard opposite Central Park, and the maturing of the trees at Central Park, City staff contends the BART Design Options 2A and 3 will still have significant adverse visual impact in the surrounding area. (PW)*

**Response SU-3:** The text of the Draft EIR, pages 3.8-34 and 3.8-37 and the Summary (page S-18) identify significant residual impacts in the vicinity of Lake Elizabeth for Design Options 2-A and 3. There does not appear to be a conflict between the City staff's contention and the Draft EIR on this point.

*Comment SU-4 (Fremont): BART, as property owner, may be responsible for "investigation and cleanup."*

**Response SU-4:** The exact reference is unclear. This response assumes the comment refers to the phrase "cooperate with the investigation and clean-up" in the second row, third column under *Hazardous Materials*.

The word "cooperate" is accurate because the reference is to the potential impacts of BART construction activities on the investigation or clean-up of pre-existing contaminated sites for which other parties are responsible. See *Mitigation of Interruption or Delay of On-going Site Investigation/Remediation Activities*, page 3.3-16 of the Draft EIR.

As noted above, any confusion about the meaning of statements in the *Summary* should be clarified by referring to the full text of the corresponding section of the Draft EIR.

*Comment SU-5 (Fremont): Reference page S-12 of the Draft EIR. "Site characterization and remediation activities" may need to be implemented before any grading, excavation and/or dewatering is undertaken. The time frames may be significant to the project and/or community.*

*Much more than a "site-specific health and safety plan" will be required if soil and/or groundwater contamination is identified. A remediation plan, approved by the appropriate regulatory agencies, will be required to assure BART development will not negatively impact any required site remediation. Implementation of part or all of a site characterization and remediation plan may be required. (B&S)*

**Response SU-5:** The mitigations call for the characterization and remediation of areas identified on pages 3.3-17 through 3.3-20 as potentially effected by known and suspected contamination sites along the proposed alignment. The investigation and remediation of these areas would be conducted during project development, in accordance with applicable local, State and federal regulatory requirements. The steps in such a process include:

1. Develop a Work Plan for additional site characterization activities and submit it to the appropriate local and state regulatory agencies in order to secure the necessary permits to conduct the work.
2. Undertake additional soil sampling in areas of known contamination to further define the horizontal and vertical extent of contamination.
3. Install groundwater monitoring wells in locations where dewatering activities may be required to identify any potential groundwater contamination for water management purposes.
4. Remove contaminated soils in areas of proposed excavation and dispose of them off-site.
5. Import clean fill, as necessary.

(In some cases, it may be more efficient to coordinate steps 4 and 5 with the timing of project related excavation work.)

6. Document the remediation work for submittal to the local and state agencies issuing permits. This may include recommendations for further groundwater monitoring, if necessary.
7. Continue groundwater monitoring, if required.

See also Comment and Response HM-2.

*Comment SU-6 (Fremont): Reference page S-13 of the Draft EIR. Impact of a subway on groundwater flow would not be significant, in part, because flow direction is generally northerly near Lake Elizabeth. However, during construction, Mission Creek should not be diverted into Lake Elizabeth except during storm conditions.*

**Response SU-6:** The subway could inhibit groundwater flows if there is a westward component to the direction of groundwater movement in the project area. The Draft EIR properly identifies this as a potential impact and recommends mitigation measures that could be incorporated into the design of the subway structure.

The disposition of Mission Creek waters during construction would be addressed in the Erosion and Sediment Control Plan that would be prepared by BART and reviewed by the Alameda County and Fremont Public Works Departments. See pages 3.4-16 to 3.4-19 of the Draft EIR.

*Comment SU-7 (Fremont): Reference page S-13 of the Draft EIR. An aerial track may block the movement of wildlife which now occurs across both railroad tracks. Deer, fox, and opossum have been seen moving between Lake Elizabeth and the hills to the east. Raccoon, pheasant, and a variety of rodents are also common to the area.*

**Response SU-7:** The aerial structure would not add a significant new impediment to the movement of deer, opossum, fox, or raccoons between Lake Elizabeth and the hills to the east. At present these animals must cross two railroad corridors, pass through a residential area and cross Mission Boulevard. The ground beneath the structure will be open allowing free movement below the aerial structure. Movement would only be restricted when the alignment is at-grade or depressed.

*Comment SU-8 (Fremont): Reference page S-13 of the Draft EIR. New requirements to monitor, minimize and treat non-point source runoff have not been considered. Aerial structures and other impervious cover may add a significant and unacceptable burden to the City. (B&S)*

**Response SU-8:** The Draft EIR recognizes the potential for increased surface runoff from the project and identifies it as a significant impact (page 3.4-13). Potential impacts on surface water quality are also discussed (page 3.4-15). The mitigation section notes that the water quality degradation can "be mitigated to a level less than significant by proper management practices and special design considerations." The section goes on to note that the specific management practices that would be required by the Regional Water Quality Control Board as part of the non-point source NPDES permits are not known. The Alameda County Flood Control and Water Conservation District is the lead NPDES permit holder in the project area. The mitigation measure requires that BART coordinate management practices with the County to ensure compliance with future requirements.

*Comment SU-9 (Fremont): Reference page S-14 of the Draft EIR. Dewatering during the construction of a subway is unlikely to impact potable water supply because of the geologic composition. However, flow into Lake Elizabeth could be significantly impacted.*

**Response SU-9:** The referenced text on pages S-14 is a summary of the detailed analysis on pages 3.14-17 through 3.14-19. As noted, no significant impacts are expected relative to

dewatering activities, whereas the reduction of capacity of Lake Elizabeth and possible blockage of inflow channels during construction is considered potentially significant. It is expected that a feasible approach to construction will be developed and implemented so that the potential impact can be reduced to an insignificant level. The Draft EIR notes that the impacts could be mitigated by phasing construction during the summer when flood waters are not expected or, alternatively, the construction contractor could stage the work so that existing flows and storage capacities could be maintained.

*Comment SU-10 (Fremont): Reference page S-14 of the Draft EIR. An aerial would reduce available flight paths for the many water fowl which use Lake Elizabeth during migrations.*

**Response SU-10:** The aerial structure has the potential to affect existing flight paths of a few birds, although this is not identified as a significant impact in the Draft EIR because the Lake has a surface area of about 83 acres with ample open space along most of its shoreline, particularly the entire north shore, for bird flights.

*Comment SU-11 (Fremont): Reference page S-14 of the Draft EIR. The restoration of riparian habitat as well as the lost grasslands should be addressed. (B&S)*

**Response SU-11:** The restoration of riparian habitats is addressed under "Mitigation Measures" in the last row on page S-14 of the Draft EIR and the first row at the top of page S-15 of the Draft EIR. Revegetation of grassland habitat is addressed on page 3.5-24.

*Comment SU-12 (Fremont): Reference page S-15 of the Draft EIR. Wetlands will likely have to be replaced at a higher than one-for-one basis, both for any losses related to Central Park and for areas in the sag ponds which are negatively impacted. (B&S)*

**Response SU-12:** The Draft EIR, on page 3.5-26 indicates that the 1.5 acres of emergent seasonal wetlands lost by the project would be replaced by moving the wetland/flood control area to the west and that any jurisdictional (Clean Water Act Section 404(b)(1)) wetlands would be replaced on a minimum one-for-one basis. As noted in the Draft EIR, page 3.5-22, any fill placed in jurisdictional wetlands or waters of the United States in conjunction with the project will require a permit from the U.S. Army Corps of Engineers under Section 404(b)(1) of the Clean Water Act and its guidelines. The exact type of permit required (standard, nationwide or other) and the permitting conditions would be determined by the Corps of Engineers personnel after a process that considers many factors including the qualities of the aquatic site, the extent of potential degradation of the aquatic ecosystem, the appropriateness and practicality of measures to minimize harm to the aquatic ecosystem, and whether or not the project is in the public interest. The process for the consideration and issuance of standard Corps permits includes public review. It cannot be known whether wetlands would have to be replaced on a higher than one-for-one basis until the conclusion of the 404(b)(1) permitting process.

As noted in the Draft EIR, p. 3.5-26, "all jurisdictional wetland fill must be avoided, minimized, or compensatory mitigation provided on a minimum one-for-one functional replacement basis. The Proposed Project avoids jurisdictional wetlands where possible; where it is not possible, at a minimum one-for-one replacement will be provided."

*Comment SU-13 (Fremont): Reference page S-16 of the Draft EIR. Some summary items are not clear about establishing replacement sports fields prior to any disruption of existing fields. Section 3.7 provides more detail. However, it should be clear at all times that placement of temporary or alternate ball fields will be achieved prior to disruption of existing facilities to insure program continuity. BART should propose where the fields are to be temporarily or permanently replaced to insure they do not impact other planned developments. (LS)*

**Response SU-13:** For a full understanding of the details of statements contained in the Summary the reader is directed to the corresponding text of the Draft EIR.

The mitigation measures for the impacts of the softball fields are presented on pages 3.7-14 and 3.7-15 of the Draft EIR. The mitigation measure states that, "in advance of construction, BART would relocate and replace the two affected softball fields to another location within the Park to be developed in consultation with the City of Fremont." The mitigation measures go on to note that one potential solution would be to relocate the facility about 200 feet to the north into what is now a parking area and replace the parking along the BART alignment in the area between the existing and relocated ball fields. It also states that if timely replacement is not possible, BART would work to identify and lease temporary replacement fields at other locations so that league play could continue uninterrupted.

It is recognized that implementing plans for replacement of the softball fields may be difficult, and that it may not be possible to eliminate all potential disruption of the softball programs. If the City's plans for future projects in the Park such as the Golf Course, Swim Center, Police Administration Building have not been built in advance of the BART extension, additional options for siting the replacement ball fields may be available.

*Comment SU-14 (Fremont): Reference page S-17 of the Draft EIR. Propose what specific modification of softball fencing and lighting will be needed and how it may be accomplished without altering program. (LS)*

**Response SU-14:** See page 3.7-19 of the Draft EIR for discussion on potential modifications. Detailed plans for the reconfiguration of the ballfields would be developed during engineering design.

*Comment SU-15 (Queen): Page S-3 (Table S-1): Fatal Flaw, table misleads/misrepresents ridership by presenting only figures for the year 2010 in that 10,000 of the projected 21,900 boardings are from the current Fremont Station. The balance appears hard to justify from a cost per boarding perspective.*

**Response SU-15:** Table S-1 presents the future year (2010) ridership of BART in the Warm Springs Corridor including the Fremont Station and any additional stations for the project. The Table shows the projected ridership for BART under Alternative 1 - No Project and No Transportation Improvements (status quo) of 11,200 daily entries and exits. The Table also shows projected ridership for the Proposed Project (21,900 daily entries and exits) and the other alternatives. The Table does not mislead or misrepresent the ridership projections for the extension in comparison to the status quo. The EIR presents expected benefit in terms of ridership and the estimated cost of the project. The commentor's belief that it appears hard to justify the project from a cost per boarding perspective is noted.

### 3.2 COMMENTS AND RESPONSES ON THE PROJECT DESCRIPTION

*Comment PD-1 (MTC): As noted in the Draft EIR, MTC has an adopted rail extension program and financial plan (MTC Resolution No. 1876), which includes the Warm Springs Extension. This program and financial plan were updated in February 1991 based on information submitted by project sponsors including BART. MTC's update was based on BART's submitted project definition and cost for a two station (Irvington and Warm Springs), 5.4 mile extension. The proposed three station, 7.8 mile alternative in the Draft EIR is inconsistent with MTC Resolution No. 1876. A three station extension would require new revenue sources beyond those currently assumed in the financial plan for Resolution No. 1876 and would require revisions to Resolution No. 1876.*

**Response PD-1:** Within the terms and guidelines of the California Environmental Quality Act, funding for the Warm Springs Extension is not considered an environmental issue. At the current time, there is no designated funding source for the last segment of the proposed project (from Warm Springs Station to South Warm Springs Station). BART intends to work with MTC and other public and private funding sources to identify funds for the entire project. We are cautiously optimistic that funding will be found and be available for the entire length of the proposed project. Ultimately the BART Board will choose a project to implement that is feasible taking into account both environmental and economic factors.

BART agrees that the Proposed Project of 7.8 miles and three stations is not consistent with the Warm Springs Project as described in MTC Resolution 1876 and that the resolution would have to be revised to encompass the entire project.

*Comment PD-2 (MTC): It is unclear from the Draft EIR whether cost figures are in 1991 dollars (as stated in Table S-1) or in escalated dollars (as stated in Table 2-5 on page 2-49). If they are escalated figures, we ask that BART revise cost figures to 1991 dollars in the final EIR or include assumptions on annual inflation projections and annual expenditures.*

**Response PD-2:** The Capital Cost title in Table S-1 of the Draft EIR is corrected from (1991 dollars) to read (Escalated to Time of Expenditure). The Capital Cost was escalated based on assumptions of an annual inflation projection of five percent to midpoint of construction or procurement and eight percent for real estate acquisition to the time of acquisition.

*Comment PD-3 (Caltrans): In reference to the footnote on page 2-6 regarding Caltrans constructing an underpass for Warren Avenue, it should be noted that Caltrans does have plans for a new interchange at Mission Boulevard and the Interstate 880 Interchange. Precise improvements at Warren Avenue as a result of these plans have not been determined. Therefore, future improvements may or may not include an underpass at Warren Avenue.*

**Response PD-3:** Caltrans' comment that future improvements at Warren Avenue may or may not include an underpass is noted. The design option identified at the bottom of page 2-14 of the Draft EIR concerning Warren Avenue is included in the Draft EIR to respond to the current uncertainty as to what improvements will be made at this location.

*Comment PD-4 (Fremont): The cost information regarding subway and aerial options presented in the report is difficult to interpret and may be misleading. Based on City staff discussions with the EIR consultant, City staff concludes the additional cost of subway through Central Park lands is approximately \$40 million minus the cost to replace park land impacted by the aerial alternative. The \$60 million added cost mentioned in Table 2-6 includes costs associated with subway under Paseo Padre Parkway and includes no provision for replacing park land. Replacement of park land is mandated by State law, the Public Park Preservation Act of 1971. The minimum estimated park land replacement cost for the five acres under the structure would be approximately \$4,000,000 and could be higher if it is determined that a greater acreage is affected by the aerial alternative.*

**Response PD-4:** The cost information in Table 2-6 on page 2-50 of the Draft EIR was designed to be incrementally applied for ease of understanding. Section 1 of the table provides the project cost for each alternative and describes the main features of each alternative. Section 2 of the Table identifies additional costs associated with various design options. Section 2(a) addresses the additional cost of each of the Central Park design options. Section 2(b) identifies the incremental cost (either positive or negative) if the BART alignment were at-grade at Paseo Padre Parkway (with an aerial roadway over BART and the railroads). Thus for the proposed project, Section 2(a) shows an added cost of \$60 million to be subway under Lake Elizabeth and under Paseo Padre Parkway. Section 2(b) shows that for the Proposed Project there would be a cost savings of \$17 million if the BART alignment were at grade at Paseo Padre Parkway with an aerial roadway.

The Public Park Preservation Act of 1971 (California Public Resources Code, §5400 et. seq.) provides that no agency of the state or public utility shall "acquire ... real property ... in use as a public park, unless the acquiring entity pays or transfers to the legislative body of the entity operating the park sufficient compensation or land, or both,...to replace the parkland and facilities thereon".



The Draft EIR, on pages 3.7-11, and 3.7-19, indicates that the Proposed Project and Design Option 2A would physically take about 1,100 square feet of parkland for the support columns and would cover about 2.6 acres of parkland with the aerial structures. Design Option 3 would require a slightly larger amount of land for the support columns and would cover 2.7 acres of land within Central Park (page 3.7-23). BART recognizes that, under this law, it would have an obligation to compensate the City. Replacement land adjacent to the Park may be available from the parcel immediately south of Central Park East, portions of which would have to be acquired no matter which Design Option is selected.

BART understands the requirements of the Act and will provide for compensation under the terms of the Act. This will be done after the BART Board adopts a project for implementation. Also see comment and response CP-3.

*Comment PD-5 (Fremont): The cost of adequately mitigating the impacts of the Warm Springs extension are the responsibility of BART and the region as a whole, not the City of Fremont. While the City endorses the Warm Springs Extension, the major benefits of the extension accrue to the Bay Area region and not the City of Fremont. Since 9,249 of the 21,900 projected riders boarding at the four (4) Fremont stations are expected to have Santa Clara County origins or destinations, Santa Clara County should provide its proportionate share of the extension costs. If both sides approach these negotiations in a fair minded manner, agreement on financial participation by Santa Clara County should be possible.*

**Response PD-5:** The funding structure for all BART extensions has been developed in conjunction with the Metropolitan Transportation Commission as the regional transportation agency and is based on earmarked funding from various sources. This funding is intended to pay all the costs of the extension including the mitigation measures. Enhancements to an adopted project if requested by a local agency are possible but would need to be paid by the requesting agency.

The Draft EIR, on page 1-6, indicates that the purpose and need for the proposed Fremont-Warm Springs extension project are directly related to the current and anticipated growth in employment and population in the coming 15 to 20 years in southern Alameda County, in particular the City of Fremont. BART's Warm Springs Extension would provide improved transit service to better balance local and regional transportation demand now, and provide increased transportation capacity for future growth in areawide employment and population.

*Comment PD-6 (Fremont): Last year, the Fremont City Council suggested consideration of extending the depressed alignment of BART and the railroad lines from the Irvington Station southerly to approximately 750 feet south of an extended Blacow Road in order to mitigate impacts on a substantial number of residences south of the Irvington Station. The new Draft EIR does not address this option. Anticipated noise, vibration and safety impacts of BART (when added to the impacts of the existing railroads) generally between Washington Boulevard and Durham Road are*

*unacceptable and must be properly mitigated at BART's expense. A depressed alignment extending south from the Irvington station would be a desirable solution. We believe the 72" storm drain referenced in the Draft EIR poses an engineering challenge, but is not a reason to reject the concept of a depressed rail bed through this area. The City Council requests BART thoroughly address the feasibility of this option in their response to this letter.*

**Response PD-6:** It is not economically feasible to use the depressed alignment profile as a noise and vibration mitigation measure. The costs associated with the additional excavation and structures for the two railroad tracks along with BART's facilities and utility relocations within the railroad rights-of-way would not be justified when sound walls, resiliently supported ties and floating slabs would mitigate the noise and vibration with the proposed at-grade section for BART. Lowering or relocating the existing 72" storm drain and providing a pumping station is only a portion of the overall cost impacts.

In addition, the railroads have objected to the additional length and gradient of the depressed profile. These objections are based on their concerns for operational safety and costs.

The Draft EIR does indicate that the appropriate mitigation measures would be provided in this segment of the alignment including sound barriers, resiliently supported ties and use of floating slabs where required. These measures, as stated in the Noise and Vibration section of the Draft EIR on pages 3.13-27 through 3.13-34 would mitigate noise and vibration levels to below a level of significance.

*Comment PD-7 (Fremont): Reference page 2-4 of the Draft EIR. For the Proposed Project, "South of Walnut Avenue, existing poor load bearing soils in the tule pond will be excavated and replaced with soils suitable for construction ..." This is a complex engineering project and the necessary protections for the environment and habitat have not been addressed in the draft EIR. Use of drain wells should not be allowed. (B&S)*

**Response PD-7:** The Draft EIR recognizes that the work in the South Tule Pond area would have multifaceted environmental implications. To begin with, the EIR notes that the compressible soils that form the bottom of the pond would not make a suitable base for the placement of the BART embankment and suggests their replacement as a mitigation measure (p. 3.2-35). The hydrology issues associated with the construction of the embankment across part of the Tule Pond are addressed in section 3.4 and specific mitigations are presented on pages 3.4-10 and 3.4-17. The mitigation on p. 3.4-10 calls for replacement of the location of the stormwater volume by extending the pond. On page 3.4-17 the EIR recognizes that erosion and sedimentation could result in significant surface water quality impacts during construction, although these impacts could be reduced to less than significant levels with proper design and construction. The EIR calls for preparation of an erosion and sedimentation control plan for the entire project, including the Tule Pond area. It specifically suggests that sedimentation barriers be placed along the toe of the embankment to prevent sedimentation of seasonal wetlands.

Ecosystems issues related to the Tule Pond are addressed in section 3.5. The existing habitat is described on p. 3.5-12. Construction period mitigation of potential impacts on the open water areas of the Tule Pond are presented on page 3.5-25. Significant long term impacts to the emergent seasonal wetlands of the South Tule Pond are identified on page 3.5-22, while mitigation measures are described on page 3.5-26. The text notes that the habitat values lost during construction would be unmitigable and significant, but long-term significant impacts would be mitigated to a less than significant level.

These cross references will be added to the text of the Draft EIR (see Chapter 5 Draft EIR Revisions and Clarifications). As noted on page 3.4-10 of the Draft EIR, BART has initiated review coordination with the Alameda County Flood Control District. Final recommendations will be submitted to the Alameda County Flood Control District for their approval. The Flood Control District will have the opportunity to review the detailed design documents and to inspect the work during the construction phases of this segment of the Project. Drain wells will not be allowed if they affect the area's storm water collection system.

*Comment PD-8 (Fremont): Reference page 2-24 of the Draft EIR. A BART extension along Osgood Road, rather than parallel to the railroad rights-of-way, would encounter more areas of potential environmental contamination which could require soil characterization and remediation. (B&S)*

**Response PD-8:** Section 3.3.8 on page 3.3-24 of the Draft EIR discusses the hazardous materials impacts for the alternative alignment along Osgood Road and states that there are fewer known sites associated with hazardous materials that might have affected the subsurface located along the Osgood Road (Alternative 8) alignment.

*Comment PD-9 (Fremont): Reference page 2-42 of the Draft EIR. This section addresses planned modifications to the tule pond as part of the construction project. There is no mention of essential protective measures for the riparian habitat, deep water aquifer, and stormwater control. (B&S)*

**Response PD-9:** See Response PD-7.

*Comment PD-10 (Fremont): Reference page 2-43 of the Draft EIR. Propose where a construction storage yard would be located. Adverse visual impacts would occur if the yard is located within Central Park. (LS)*

**Response PD-10:** Every effort will be made to identify construction storage areas which will have a minimal impact on ongoing operations of the park and adjacent private property while still providing the contractors with a cost effective location for their operations. Construction staging and storage sites that are in close proximity to the actual construction will be required to minimize the requirement for transporting personnel, materials and supplies over the local road system continuously during the construction of the project. In response to this comment,

a new mitigation measure is identified as follows: Contractor's site plans will be reviewed by BART and the City of Fremont to control the locations and durations of storage.

*Comment PD-11 (Fremont): Reference page 2-47 of the Draft EIR. The section on Cost Comparisons does not include projected costs for characterization and remediation of areas with potentially significant environmental contamination. (B&S)*

**Response PD-11:** The estimated conceptual capital cost in Table 2-5 for the proposed project and alternatives does not include any allowance for mitigation. However, Table 2-6 presents the total estimated conceptual capital cost, the incremental costs associated with each design option, the estimated cost for BART vehicles and an allowance for mitigation including hazardous materials.

*Comment PD-12 (Keenly): Relocate the UPRR track to the west.*

*An enormous cost savings will result from relocating the UPRR track closer to the SPRR tracks. Many of the businesses, which are to be relocated due to lack of space for the BART alignment east of the UPRR right-of-way could (and should) be spared (see Figure 1, following pages). Keeping BART between the SPRR and the UPRR rights-of-way would require the Warm Springs and South Warm Springs Stations to be constructed below-ground, increasing the project cost significantly.*

*Instead of constructing the BART tracks east of the UPRR track as proposed, the UPRR track can be moved west, closer to the SPRR tracks (the average spacing center-to-center between the two SPRR tracks measures only 17 feet, thus the UPRR track can be relocated relatively close to the SPRR tracks). This idea is definitely more feasible now, considering that the property occupied by Truck Rail Services at Warren Ave. is up for sale. This piece of land can then be used in the relocation of the UPRR tracks to the west.*

*At the point where the BART aerial alignment crosses over the SPRR tracks just southeast of Central Park, the UPRR track would continue its path northeast along the original alignment just as if the track was not relocated.*

*Since the UPRR and the SPRR tracks parallel each other for most of the length where the BART Extension is to be constructed, an agreement might be negotiated where the two railroad companies may even share the SPRR tracks. This would be possible considering that the UP has only a single track line and the SP has a double track line for this segment. The conflicts between SP and UP trains would be minimal considering the relative infrequency of freight operations.*

*Since consideration is being given to a BART extension south of the Alameda County line into the City of Milpitas, this issue of track conflict will most likely need to be addressed at some point in the future. A Milpitas BART Extension with cost effective above-ground stations would not be*

*possible, due to the placement of relatively new housing developments directly east of the current UPRR right-of-way between Dixon Landing Rd. and Kato Rd.*

**Response PD-12:** The concept of relocating the UPRR is presented in the Draft EIR as a Design Option as described in section 2.3.2 OTHER DESIGN OPTIONS on page 2-15. BART has explored the potential for joint operation of the UPRR and SPTCo on one track. BART will continue to encourage such a plan for the future, however such a plan is not currently accepted by the railroads.

**Comment PD-13 (Podell):** *Please address the following questions in your final EIR for the Warm Springs Extension:*

1. *Please show us on an engineered plan how much property you will take from us based on the track alignment shown in the Draft EIR.*
2. *Please give us the area of the above described right of way taking in square feet.*
3. *Please give us the elevations of the top of the rail and distance in feet from the top of rail to the existing earth grade, at 100 foot increments, for all route alternatives, both aerial and subterranean, discussed in the Draft EIR, between Walnut Avenue and Stevenson Boulevard.*

*BART and BATC engineers have told us that it is possible to build a retaining wall along the side of the earthen berm which the tracks lie across our property. The retaining wall will reduce the amount of property you have to take from us from right-of-way.*

4. *Would you please produce an engineered plan with a retaining wall along the earthen berm on our property so as to reduce to the minimum amount the area of land you have to take from us for the right of way.*

**Response PD-13:** The Draft EIR was based on conceptual plans for all alternatives. Following the decision of the BART Board of Directors as to the specific project to be undertaken, detailed engineering will be undertaken on the selected alternative which will answer the specific engineering questions raised in this comment.

**Comment PD-14 (Podell):** *We estimate that the cost of our land will be in excess of \$700,000 an acre by the time you buy it. Please perform an economic cost analysis comparing the expansion of the water retention pond on your land adjacent to the north tule pond versus buying our land.*

*Please perform an economic cost analysis comparing the cost of constructing a retaining wall against the earthen berm on our property versus buying more land without the retaining wall.*

**Response PD-14:** Cost analyses of this level of detail are generally not required in the context of an EIR. Following the decision of the BART Board of Directors as to the specific project to be undertaken, detailed engineering will be undertaken on the selected alternative which will include the detail raised in this comment.

**Comment PD-15 (Allen):** Page 2-35: 2nd par., last sentence, change to read: "...would allow 2.25-minute spacings transbay." Last par., fourth line: Isn't board policy to have maximum Cruise speeds of 70 mph?

**Response PD-15:** The last sentence of the second paragraph of Section 2.5.2 on page 2-35 of the Draft EIR which reads:

Completion of the Capacity Expansion Program currently being implemented by BART, e.g., new C-car procurement, Daly City Turnback/Yard, electrical capacity expansion, automatic train control and wayside train control/system performance modifications and brake rate algorithm modifications, would provide 2.25-minute spacings on transbay lines.

is changed to read:

Completion of the Capacity Expansion Program currently being implemented by BART, e.g., new C-car procurement, Daly City Turnback/Yard, electrical capacity expansion, automatic train control and wayside train control/system performance modifications and brake rate algorithm modifications, would provide 2.25-minute spacings transbay.

The completion of the Capacity Expansion Program is designed to allow BART trains to travel at 80 miles per hour instead of their current maximum of 70 mph.

**Comment PD-16 (Allen):** Page 2-36: Last par., 9th line:

*Route 180 headways are about 15 minutes during commute hours and 30 minutes during the day. (Admittedly they should be every 15 minutes during the day, timed for good connections with BART trains. They should also be direct.)*

**Response PD-16:** The third paragraph sixth sentence (lines eight and nine) of Section 2.5.3 on page 2-36 which reads:

Route 180 has a scheduled headway of 10 minutes during the commute hours and 15 minutes during the rest of the day.

is changed to read:

Route 180 has a scheduled headway of 15 minutes during the commuter hours and 30 minutes during the rest of the day.

*Comment PD-17 (Milnes): UNDERGROUND CONSTRUCTION AT CENTRAL PARK. The DRAFT Environmental Impact Report indicates the height of the culvert top as it crosses Lake Elizabeth - would be at elevation of 48 feet. This would be approximately equivalent to the wintertime water surface elevation of the lake. An elevation of 48 feet for the top of the culvert would effectively preclude boating use of the easterly end of Lake Elizabeth. The top of the culvert should be no higher than 44 feet, as it passes under the lake, in order for this end of the lake to continue to function as it does now.*

**Response PD-17:** The Draft EIR does not explicitly indicate the height of the subway top. Plan and Profile drawings that show approximate elevations are available in a separate Design Appendix. The top of the subway box would be maintained at approximately the bottom of the lake area it passes through. (Also see Response CP-2.)

*Comment PD-18 (Milnes): One approach not discussed in the DRAFT Environmental Impact Report (in connection with the construction of a culvert for BART through the active portion of Central Park) is to fill-in the portion of the lake northeasterly of the BART crossing. To do so would reduce the water surface area of this 80+ acre lake by some ten (10) acres. Benefits to all parties could result:*

1. *BART would experience lower construction costs by virtue of not having to construct the culvert lower.
  - A. *There would be less excavation and backfill required; and*
  - B. *The extent to which ground water would be encountered during construction would be lessened.**
2. *The culvert could be constructed in an open trench type of construction, at least cost and least construction disturbance to the lake.*
3. *The risk of penetrating the clay layer over the Niles Cone gravel beds below the park would be lessened.*
4. *BART could utilize the portion of the lake to be abandoned for disposal of excavated soil from other project locations (so long as the material was of suitable quality for park use).*
5. *The City would have more usable land for park development.*

**Response PD-18:** This concept was considered at one time as an alternative to going under the finger of the lake. Because of the sensitivity to the size and character of the lake and the surrounding habitat, it was decided that this alternative not be pursued and instead an alternative alignment option bypassing the lake (Design Option 2S) was introduced that accomplishes many of the same benefits as suggested by the commentor without adversely impacting the lake and its immediately adjacent habitat.

*Comment PD-19 (Queen): Page 2-37, para 2: My report (ref #17) demonstrates that The MTC's Regional Travel Model and the forecasts is [sic] produces is based on assumptions and programming that must be reviewed by the scientific community, certified and then rerun relative to this EIR and the previous/related EIRs.*

**Response PD-19:** The MTC Regional Travel Model is accepted as the basis for projecting regional travel forecasts by local agencies in the region, as well as state and federal agencies. The model results represent the best projections available within the region.

*Comment PD-20 (Queen): Page 2-37, para 4: The net reduction of 37 percent in the approximate 10,000 existing patrons at the Fremont Station must be reflected in the tables in this section. Doing so would result in substantially reducing the patronage figures in the tables, and thus this section is invalid.*

**Response PD-20:** The patronage estimates shown in Table 2-2 of the Draft EIR reflect the reduction in ridership at the Fremont Station when new stations are added. The table projects the expected ridership at each station for the Proposed Project and each alternative including a "status quo" alternative. See Response SU-15.

*Comment PD-21 (Queen): Page 2-47, para 4: FATAL FLAW. While Table 2-5 summarizes the cost in escalated dollars, the table does NOT display the cost of bond financing. If one assumes for the purposes of conveying the point that the bonds are issued at say 8 percent for 20 years, then the total cost is a little more than twice the principle amount. In other words, the \$690 million project really costs \$1.4 billion! This is about \$176.9 million per mile for the 7.8 mile project.*

*It is my understanding that the above cost does NOT include certain mitigation costs including traffic, intersection and related costs, etc. These items must be specifically laid out and the costs presented, including the cost of borrowing money.*

**Response PD-21:** The sources for financing the Warm Springs Extension are not all determined at this time. In particular it has not been determined what portion (if any) would be financed through bonds. Table 2-6 provides cost information for alternatives, design options, vehicles and mitigations. Each of these items are specifically laid out and the costs presented.



*Comment PD-22 (Queen): Page 2-48, para 4 and page 2-51, Table 2-7: the total annual incremental operating and maintenance costs for the Proposed Project and alternatives in 1991 dollars...?*

*Fatal Flaw. What does the sentence mean? I don't want to see "incremental" cost figures. I want to see a table that shows annualized cost figures that have been escalated for inflation for the years 1990 through 2010.*

*Fatal Flaw. Also, what is the taxpayer getting for this? I want to see tables showing train frequency, cars per train, headway, et al.*

**Response PD-22:** The incremental annual O&M cost represents the cost of providing service on the extension additional to the service which is currently being provided. In other words, the cost of operating Alternatives 1, 2 or 3, no service expansion alternatives, is deducted from the cost of operating the build alternatives to show the incremental added cost for the extension. The O&M costs are shown in current dollars for ease of understanding and comparative purposes. O&M costs increase with inflation for the duration that service is provided, a table showing those costs escalated for each year does not contribute to any improved understanding of the project. The operating plan for the Warm Springs Extension is presented in Section 2.5.2, Operations Plan, on page 2-35 of the Draft EIR and describes peak and off peak service frequency on each of the lines that connect to Fremont.

*Comment PD-23 (SPTCo): Sheet 3, Drawing 3D, Proposed Project - 800' VC is too short; must be at least 1230'. Need alignment details for SPTCo track relocation (degree of curve, spiral length, superelevation, etc.)*

*Sheet 4, Drawing 4B, Proposed Project - Need alignment details for SPTCo track relocation (degree of curve, spiral length, superelevation, etc.)*

*Sheet 11, Drawing 3, Alternative 4 - Need alignment details for SPTCo track relocation (degree of curve, spiral length, superelevation, etc.)*

*Sheet 12, Drawing 4, Alternative 4 - 500' VC is too short; must be at least 795'. Need alignment details for SPTCo track relocation.*

*Sheet 17, Drawing 3D, Alternative 5 - 800' VC is too short; must be at least 1230'. Need alignment details for SPTCo track relocation.*

*Sheet 18, Drawing 4B, Alternative 5 - Need alignment details for SPTCo track relocation.*

*Sheet 62, Drawing 3D, Alternative 11 - 800' VC is too short; must be at least 1230'. Need alignment details for SPTCo track relocation.*

*Sheet 63, Drawing 4B, Alternative 11 - Need alignment details for SPTCo track relocation.*

*Sheet 73, Drawing 3J, Option 2S - 800' VC is too short; must be at least 1230'. Need alignment details for SPTCo track relocation.*

*Sheet 82, Drawing 15, Section H - Require 15'-0" minimum from ROW Line to centerline SPTCo track to accommodate signals, signs and ditches. 10" High Pressure Petroleum Pipeline belongs to Santa Fe Pacific Pipelines, not Southern Pacific.*

*Sheet 84, Drawing 17, Section Q - Need ditches for surface drainage along cut at right of SPTCo track, and on two benches above it. Underdrains should handle only sub-surface drainage. Need drainage quantities and piping details.*

*Sheet 85, Drawing 18, Section R - Box structure for SPTCo track should be no closer to centerline of SPTCo track than 10'0" on both sides; otherwise, this structure becomes the limiting clearance for wide loads on this main line. (This is 1' greater than the 9' minimum asked for in Drawing No. CZ 299 on June 4, 1990.)*

**Response PD-23:** Comments noted. These comments have been given to the BART Engineering Department for action. Following the decision of the BART Board of Directors as to the specific project to be undertaken, detailed engineering will be undertaken which will provide the information desired by this comment.

**Comment PD-24 (UPRR):** *Union Pacific Railroad also opposes the Irvington station alternatives which places Union Pacific Railroad (and Southern Pacific, as well) in a depressed trench running beneath the station. Although a long subway is not utilized, the railroad must pass under vehicle and pedestrian access bridges. The problems of security and derailment remain. Exhaust smoke may be a problem for pedestrians and motorists as the trains build up power to pull out of the depressed area. In both alternatives, trains entering the depressed area experience a buildup of dynamic forces which could cause a derailment. As the front part of the train is applying power to pull out of the depressed zone, the back end of the train is still running downhill. These opposing forces sometimes lead to derailments. It is better to avoid them altogether if possible.*

**Response PD-24:** For these alternatives, the design of the alignment and profile for the railroads will be fully consistent with the freight railroad design criteria with regard to gradients and profiles and operating speeds. The track alignments for the railroads in other alternatives (such as 6, 7, 8, 9 and 10) do not require depressing the railroad tracks. Security would probably be improved by the presence of BART by making access more difficult (since the BART right-of-way will be enclosed by fences). A derailment in a depressed trench would have more restricted access than currently exists at the station site. Since the alignment is generally in an open cut exhaust smoke will dissipate with the prevailing winds.

*Comment PD-25 (Johnson): The Warm Springs Station Site is also a good one, although the residential area served is not large, the access to the south on I-880 is good. Traffic using Fremont Blvd. and Grimmer Blvd. to enter the station and Warm Springs Blvd. and Mission Blvd. to return will find easy access to the station. This pattern should be encouraged and a 4-way stop at Grimmer Blvd. and Old Warm Springs Blvd./Lopes Court should be corrected. The South Warm Springs station should probably be built when BART is extended into Santa Clara County.*

**Response PD-25:** Alternatives 4, 5 and 9 as described in Chapter 2 Project Description of the Draft EIR terminate at the Warm Springs Station leaving the South Warm Springs Station to be constructed at some future time when desired.

*Comment PD-26 (ACTA): Our principal comment concerns Alternative No. 3. This alternative is for widening and adding HOV lanes to I-880 in Alameda County. We question why widening and adding HOV lanes to I-880 is presented as an alternative when the Measure B funded portion of I-880 improvements is scheduled for completion in 1996. Measure B will fund widening of I-880 to eight lanes from the Santa Clara County line to the Alvarado/Niles Interchange in Union City, a distance of thirteen miles. This work includes provision for ramp metering and HOV lanes. It is our understanding that these features must be operational upon completion of this widening stage.*

**Response PD-26:** Alternative 3 (No Project plus Transportation Systems Management) includes the HOV lanes on I-880 in Alameda County rather than in Alternative 2 (No Project plus Programmed Transportation Improvements) because the 1990 State Transportation Improvement Program (STIP) did not show continuous HOV lanes on I-880 between SR 238 and the Montague Expressway, a gap was shown between Mowry and Mission (approximately 5 miles).

*Comment PD-27 (PH-UPRR): It [the commentator is referring to Alternative 4] puts the Union Pacific and the Southern Pacific very close together in a long tunnel. And we just do not think that that is, environmentally, a good idea. To get the trains under the station, the front half goes down and then the front half goes up. The back half is still going down while the front half is still going up. It puts in motion a set of forces on the train. As the locomotive is going up the hill, it's putting out more smoke; it's making more noise. And if, unfortunately, there should be a derailment in a tunnel like that, the logistics of trying to clean it up would really be a nightmare.*

**Response PD-27:** Mitigation measures are limited. These problems are not associated with Alternatives 6, 7, 8, 9, and 10.

*Comment PD-28 (PH-UPRR): The alternative, the proposed project station at Irvington is a little bit different and it's better. It [the commentator is referring to the Proposed Project] keeps the Union Pacific and the Southern Pacific on opposite sides and it isn't, as I understand it, in such a long tunnel. But nonetheless, we don't like being down in a hole and having to go down the hole and then go up the other side. As recent events, unfortunately, have called to our attention, we really*

do have to think about all the things which impact on trains. And this is one of them what we call the buff forces, the train going different--one side going downhill, one side going uphill.

**Response PD-28:** See Response PD-27.

**Comment PD-29 (PH-Allen):** There were errors in the EIR. For example, it said that the 180 runs on 15-minute headways on commute hours, 30 minutes during the day. Well, that's what they are is about 30 minutes during the day. It said every 15 minutes and the EIR is wrong there, and somebody should take a good look at it.

**Response PD-29:** See Response PD-13.

**Comment PD-30 (PH-Keenly):** And a couple of interesting things about the proposed project that we should consider is possibly moving the Union Pacific Railroad tracks west of where they are located now although I know the Union Pacific Railroad Company wouldn't like to see that. By doing this, we could probably not have to remove three-quarters of all the commercial buildings that are located on the east side right now, the east side of the Union Pacific Railroad tracks. Most of these buildings are probably less than ten years old. Actually, one, I think is just now being completed. It runs right next to the UPRR tracks, and it's probably going to be moved. I don't think anyone's moved in there yet.

**Response PD-30:** See Response PD-12.

### 3.3 COMMENTS AND RESPONSES ON SOILS, GEOLOGY AND SEISMICITY

**Comment G-1 (Fremont):** Reference page 3.2-13, Figure 3.2-4 of the Draft EIR. The graphic of "Regional Faults" and the Project Corridor is misleading. This is, in part, due to the scale. In reality, faults are not a single, solid line that have clear, sharp edges. There are several fault traces, which are discussed in the narrative. It would be more informative for the general public who may try to understand the "Seismicity" section, to have more accurate, and thus more revealing graphics. (B&S)

**Response G-1:** Figure 3.2-4 is provided to establish the generalized location of the "Project Corridor" relative to the major faults within 50 miles of the Warm Springs Extension project. The Hayward Fault zone crosses the project corridor at its northern end. This is clearly illustrated in Figures 3.2-5 and 3.2-6, and is discussed extensively in the accompanying text.

**Comment G-2 (Fremont):** Reference Page 3.2-28 of the Draft EIR. Walnut Avenue will be built on embankment with a 54 foot crest, per BART Design Criteria, with sideslopes of 2:1. Fremont staff has concern with the 2:1 slope (vs. 3:1) in terms of maintenance of erosion control plants on the site slopes. Will jute-matting be provided for the side slopes? What is BART's experience in other areas with embankment having slopes of 2:1? (PW)

**Response G-2:** The Draft EIR shows the conceptual design for the embankment adjacent to Walnut Avenue to have side slopes of 2:1, however, this is not the final design for this structure. The BART Design Criteria requires that all slopes conform to recommendations of the appropriate geotechnical report. This will certainly be the case for this embankment which is near the Hayward Fault.

It has been the practice in normal BART construction to use a 2:1 slope for embankments and other fills and to provide slope protection as required. However, the embankment near Walnut Avenue, as well as at other comparable sections of the Warm Springs Extension, will be designed in accordance with BART design criteria as referenced above.

*Comment G-3 (Fremont): Reference page 3.2-33 of the Draft EIR. The second paragraph mentions the adverse effect of groundshaking liquefaction differential settlement on the two subway options (Design Option 1 and 2S) on the proposed alignment at Central Park. What are the mitigations? The statement seems to considerably disfavor the subway option. Are not the design considerations addressed in the BART Extensions Program Design Criteria sufficient to mitigate these impacts?*

**Response G-3:** The specific potential for groundshaking liquefaction differential settlement along the Warm Springs Extension corridor for the selected alternative will be developed during engineering design by BART's Engineering Consultants based on BART Seismic Design Criteria as discussed under *Mitigation of Seismic Shaking and Associated Potential Ground Failure* on page 3.2-33 of the Draft EIR. Mitigation measures for geologic impacts associated with the Design Options 1 and 2S include: removal or recompaction of shallow deposits of liquefiable soils, provision of dynamic compaction, vibra-compaction or grouting. BART Seismic Design Criteria call for the development of specific information (e.g., soil type and liquefaction potential) for each location containing liquefiable soils to establish specific design parameters and the proper type of mitigation for each location.

The steps in such a process include:

1. Undertake additional soil sampling in areas of expected liquefaction.
2. Conduct engineering analysis of samples and determine preferred technique for stabilizing condition.
3. Implement stabilizing techniques.

*Comment G-4 (Fremont): Reference page 3.2-33 of the Draft EIR. What were the design considerations used in the Trans-Bay Tube between San Francisco and Oakland? (PW)*

**Response G-4:** The BART Transbay Tube is a completely different structure in concept, design, and construction and should not be compared with the cut and cover construction proposed under the lake. The main part of the Transbay Tube was constructed as a precast concrete tube with a metal shell that was floated out in sections and sunk into position on the bottom of the bay. Twin shield driven tubes were used for the San Francisco end of the Transbay connection to reduce street interference and disturbance to the Ferry Building. At the Oakland end of the Transbay Tube cut and cover construction in a braced trench was used at the Oakland Mole.

*Comment G-5 (Fremont): Reference page 3.2-35 of the Draft EIR. All construction should comply with the requirements in the Uniform Building Code and Uniform Fire Code enforced at the time of construction. (B&S)*

**Response G-5:** BART will comply with the requirements of the Uniform Building Code and Uniform Fire Code for all construction of the Extension.

*Comment G-6 (Fremont): Reference page 3.2-36 of the Draft EIR. What is the extent of review by the City's Building and Safety Department with regards to compliance with UBC requirements in the design of the facilities?*

**Response G-6:** All of BART's facilities are designed to be in accordance with the applicable State and Federal requirements for fire/life safety, exiting and selection of construction materials and assemblies. The California PUC has the responsibility to monitor and assure conformance to these rigorous standards. Although BART is not required to obtain building permits from local municipalities, an opportunity for technical review of the contract plans and specifications will be provided to the City of Fremont.

The Fremont Fire Department will be afforded review opportunities as requested. BART will work with the Fremont Fire Department on the proposed Extension in the same manner as on the existing BART Fremont Station.

*Comment G-7 (Fremont): Reference page 3.2-36 of the Draft EIR. Provisions should be made to accommodate City of Fremont requirements, such as the City of Fremont Grading, Excavation and Sedimentation Control Ordinance. (PW)*

**Response G-7:** It is BART's practice and intent to follow local requirements (such as the City of Fremont Grading, Excavation and Sedimentation Control Ordinance) as much as possible during design and to supply design review opportunities to the City at various stages of the development of the designs for comment by the City Staff.

*Comment G-8 (Schriever): I attended the public hearing on the Draft EIR held on Monday, August 12, and spoke briefly concerning some seismic considerations. In particular, I quoted the following paragraph from page 3.2-28 of the Draft EIR:*

*The subway portions of Design Options 1 and 2S do not cross the fault trace. Since fault rupture is restricted to areas along the fault, there is no potential for fault rupture impact on the subway structure.*

*I argued that contrary to the assumptions of the Alquist-Priolo Special Studies Zones Act, there is a real possibility that the fault rupture might be drawn to the long, deep cut containing the subway structure since it would be adjacent to and roughly parallel with the existing fault trace. Similarly, the fault rupture might be drawn to the Irvington station since the building and the tracks are to be placed in a deep cut that intersects the existing trace of the Hayward Fault just outside the station.*

**Response G-8:** The location of fault rupture would be controlled by the location of the fault plane of the Hayward Fault. The fault plane is a zone of weakness which extends to great depths beneath the earth's surface. Expression of the fault rupture would be controlled to a limited extent by surficial conditions, but would not significantly affect the strike (orientation) of the fault. It is therefore highly unlikely for the fault to change orientation by approximately 30 degrees because of the cut prepared for the below-grade section of the proposed alignment.

**Comment G-9 (Schriever):** *I also made reference to the following paragraph from page 3.2-33 of the Draft EIR:*

*The subway structure proposed in Design Options 1 and 2S could also be adversely affected by strong groundshaking and liquefaction. Differential settlement along the tunnel in response to liquefaction or tectonic settlement could result in significant trackway deflections or displacements. Such effects could impact train operation. Cracking of the subway structure could cause significant groundwater seepage into the subway tunnel.*

*My comment was that to describe the leakage of water into the tunnel as "groundwater seepage" was a gross understatement of the risk to be expected. In fact, given the relatively unlimited supply of water in Lake Elizabeth, the tunnel could easily be flooded by water flowing through a crack in the subway structure. My point is that there is a significant probability that the passengers on a train trapped in the tunnel during a severe earthquake could be drowned whether or not the fault rupture actually crosses the subway structure.*

**Response G-9:** The probability of the subway segment severing or cracking in a seismic event to the point of permitting penetration of large quantities of water is considered extremely small based on using BART's design criteria for underground structures. The shear mass or dead weight of the subway structure is sufficiently great that any movement would be dispelled uniformly through the entire subway structure, which would minimize any probability of the structure being fractured. As quoted above, the Draft EIR identifies the potential for

significant groundwater seepage. The design criteria would limit water intrusion to seepage from small cracks.

BART would utilize the following design criteria for a subway alignment through the Park and Lake Elizabeth:

- Design for maximum credible earthquake with a maximum ground acceleration of 0.7g which is the maximum acceleration expected along the Hayward fault.
- Design for dynamic earth pressure caused by the earthquake.
- Preclude use of any expansion joints in the underground structures.

See also response G-3.

*Comment G-10 (Schriever): Next I made reference to the calculation presented in the following two paragraphs from pages 3.2-29 and 3.2-30 of the Draft EIR:*

*The seismic design criteria and emergency procedures would not reduce the potential impacts of surface rupture where the tracks cross the fault traces to an insignificant level. The maximum expected horizontal displacement of ten feet would likely cause significant displacement of the tracks. Displacement of the tracks could result in derailment of passing trains causing risks of personal injury and damage to equipment. The probability of such an event is the combined probability of a rupture event and passage of a train over the ruptured section of track.*

*The probability of a magnitude 7.0 earthquake (considered capable of causing fault rupture at the ground surface) on the southern East Bay segment within the period 1990 to 2020 is estimated to be 0.23. The probability of a train passing any of the three identified alignment Crossings of the HFZ is a function of trip frequency, train length and train speed. Assuming 84,280 trips per year, an average train length of 5 cars (350 ft.) and a train speed of 38 miles per hour, the probability of a train passing across three fault zones with assumed width of 200 feet is estimated to be 0.08. The combined probability of an earthquake event occurring while a train is within the fault zone is approximately 0.02, or a 1-in-50 chance."*

*As I pointed out at the hearing, this analysis ignores the fact that the train is moving and therefore may Cross a fault Zone at any time after fault rupture occurs until the train has been brought to a stop.*

*First consider the calculation of the probability of finding some portion of the train within a fault zone at the time the earthquake occurs based on the assumptions made in the Draft EIR. A train*



350 feet in length traveling at 38 miles per hour or 55.7 feet per second will have some portion of the train within a fault zone 200 feet in width for:

$$(350 + 200) / 55.7 = 9.87 \text{ seconds.}$$

Given 84,280 trips per year across 3 similar fault zones the probability of finding some portion of a train within any fault zone would be:

$$(9.87 \times 84,280 \times 3) / 31,536,000 = 0.079$$

where 31,536,000 is the number of seconds in a year. In my opinion the analysis should end at this point since, sooner or later, such an earthquake is virtually certain to occur. But to continue With the analysis as presented in the Draft EIR, assuming the probability of such an earthquake is 0.23 then the combined probability is:

$$0.079 \times 0.23 = 0.018$$

or approximately 1-in-50.

Now consider the calculation of the probability of the train entering the fault zone after the earthquake has occurred. Assume that the train is traveling at 38 miles per hour or 55.7 feet per second, that the brakes are applied immediately after the earthquake is detected and that braking occurs at the rate of 0.1 times the gravitational acceleration of 32.2 feet per second per second then the train will travel for:

$$55.7 / (0.1 \times 32.2) = 17.3 \text{ seconds}$$

before coming to a stop. Repeating the calculation presented above with 17.3 seconds substituted for 9.87 seconds, the probability of the train entering any fault zone after the earthquake occurs is 0.139. Thus the probability of a train being caught in the process of crossing any one of the three fault zones when the earthquake occurs is:

$$0.079 + 0.139 = 0.218$$

or approximately 1-in-5.

Suppose that Design Option 1 is adopted and the tracks are placed in a subway structure through Central Park. A similar calculation can be used to estimate the probability of a train being caught in the tunnel under Lake Elizabeth when the earthquake occurs. According to the description on page 2-11 of the Draft EIR, "BART would be in a subway structure for an additional 1.5 miles of its length." Assuming the trains are traveling through the tunnel at 38 miles per hour or 55.7 feet per second and that the tunnel is 1.5 miles or 7920 feet in length, the trains will spend:

$$7920 / 55.7 = 142 \text{ seconds}$$

*of each trip in the tunnel. Assuming 84,280 trips per year, the probability of catching a train in the tunnel when the earthquake occurs is:*

$$(142 \times 84,280) / 31,536,000 = 0.38$$

*or approximately 1-in-3.*

*Finally, the probability of a train being severely impacted by the earthquake (being caught in the process of Crossing any one of the three fault zones or traveling through the tunnel under Lake Elizabeth) is:*

$$0.218 + 0.38 = 0.60$$

*or approximately 1-in-2. Should the earthquake occur during rush hour, it is virtually certain that at least one train would be severely impacted.*

*In conclusion, this analysis indicates the Draft EIR is in error by an order of magnitude when it suggests that the probability is only 1-in-50 that a train would be severely impacted by the fault rupture. Furthermore, the operation procedure "that all trains proceed in manual operation at a maximum speed of 25 miles per hour to the nearest station" recommended on page 3.2-29 of the Draft EIR cannot possibly have any mitigating effect. Were it implemented without regard to track conditions, the probability that a train would be severely impacted would increase to a virtual certainty.*

**Response G-10:** The commentor points out that the probability presented on page 3.2-30 of the Draft EIR considers the probability of a BART train being within any fault zone but does not consider the probability of a BART train entering the fault zone immediately after the earthquake. The commentor assumed a braking rate of 3.2 feet per second per second (where BART emergency braking rate is 4.4 feet per second per second). Additionally, the commentor used the time it takes to stop to calculate the probability of a train entering the fault zone after an earthquake when the correct calculation considers the distance needed to stop and the time it takes to cover that distance at the train's normal speed. This probability is developed as follows: assume that the train is traveling at 38 miles per hour (or 55.7 feet per second), that the emergency brakes are applied immediately after the earthquake is detected and that the emergency braking rate (as defined in the BART Design Criteria) is 3.0 mphps (or 4.4 feet per second per second). Then the train will travel for 12.7 seconds ( $55.7/4.4 = 12.7$  seconds) before coming to a stop, or 355 feet ( $\frac{1}{2} \times 4.4 \text{ feet/s/s} \times 12.7 \text{ secs} \times 12.7 \text{ secs} = 355 \text{ feet}$ ). A train within 355 feet of the fault zone would not be able to stop before entering the zone. The time that the train is not in the fault zone but would enter the fault zone even with emergency braking is 6.4 seconds ( $355/55.7 = 6.4$  seconds). The probability of a train being outside the three fault zones but not being able to stop without entering the zone is 0.05 ( $(6.4 \times 84,280 \times$

.3)/31,536,000 = 0.05). The addition of 0.08 (the probability a train is within the fault zone) and 0.05 (the probability that a train cannot stop before entering the fault zone) is 0.13, which is the probability of a train being caught in the process of crossing any one of the three fault zones. The combined probability of an earthquake event occurring while a train is within the fault zone or unable to stop without entering the fault zone would be 0.03 ( $0.13 \times 0.23 = 0.03$ ), or approximately 3 in 100.

The last two sentences of the second paragraph on page 3.2-30 of the Draft EIR which currently read:

Assuming 84,280 trips per year, an average train length of 5 cars (350 feet) and a train speed of 38 miles per hour, the probability of a train passing across the three fault zone with assumed width of 200 feet is estimated to be 0.08. The combined probability of an earthquake event occurring while a train is within the fault zone is approximately 0.02, or a 1-in-50 chance.

are changed to read:

Assuming 84,280 trips per year, an average train length of 5 cars (350 feet), a train speed of 38 miles per hour and an emergency braking rate of 4.4 feet per second per second, the probability of a train entering or passing across the three fault zones with assumed width of 200 feet is estimated to be 0.13. The combined possibility of an earthquake event occurring while a train is within the fault zone or unable to stop without entering the fault zone is approximately 0.03, or a 3-in-100 chance.

As discussed in Response G-9, the probability of the subway segment severing or cracking in a seismic event to the point of permitting penetration of large quantities of water is considered very, very small, based on using BART's design criteria for underground structures. The probability of a train being severely impacted by the earthquake (being caught in the fault zone or unable to stop without entering the fault zone), as described above, does not include traveling through the subway under Lake Elizabeth.

As described on page 3.2-29 of the Draft EIR, the operation procedures for trains to proceed at a slow speed in manual operation to the nearest station assumes traction power is functioning and allows an operator to visually inspect the track in front of him. The Draft EIR also states that if fault rupture results in track failure, power is automatically cut off, providing additional protection for the train following a seismic event.

*Comment G-11 (Schriever): At the first two public meetings I spoke out against the concept of running the BART tracks in a tunnel underneath Lake Elizabeth. My hope was that I might awaken some opposition to the tunnel being promoted by the Fremont City Council based on one or more of the following considerations:*

1. *A tunnel under Lake Elizabeth would be extremely vulnerable to damage from a major earthquake on the Hayward Fault. A crack in the tunnel could cause a train to be trapped within the tunnel and, at the same time, allow water from Lake Elizabeth to flood the tunnel so that all of the passengers on the train might be drowned.*
2. *Building a tunnel under Lake Elizabeth would increase the cost of the Warm Springs Extension by something like \$50 million dollars (now estimated at \$60 million dollars, see page S-3 of the Draft EIR). Considering how desperately such funds are needed for improvements to our schools, for example, spending this money on a tunnel would be an incredible waste of the community's limited resources.*
3. *The visual impact on the passengers of replacing a view of Lake Elizabeth with a view of the dirty wall of a tunnel such as we now experience when riding BART into the West Oakland station would be much more objectionable to many more people than any aesthetic loss that might occur if the BART tracks were carried on an aerial structure over Central Park.*

*At this point I sense that the tide has turned. The proponents of a tunnel have been quieted and several opponents stood up at the last public hearing to express their concerns. In this regard, I hope the BART Board won't take the machinations of the Fremont City Council seriously.*

**Response G-11:** Refer to Response G-9 concerning point 1. The commentator is correct in noting in point 2 that the cost of subway under Lake Elizabeth is on the order to \$50 million more than an aerial alignment. The commentator is also correct in noting in point 3 that passengers would experience a loss of views of Central Park if BART passes beneath the park in a subway. Note, however, that Section 3.8, Visual and Aesthetic Quality, predicts significant visual impacts of an aerial alignment in the area around Lake Elizabeth.

**Comment G-12 (PH-Schriever):** Page 3.228 of the Environmental Impact Report makes a statement:

*The subway portions of Design Options 1 and 2-S do not cross the fault trace. Since fault rupture is restricted to areas along the fault, there is no potential for fault rupture impact on the subway structure.*

*Now, I just don't agree with that. How ever convenient it may be to make that statement, it seems to me that when you make a trench in the ground parallel to a fault, a deep trench, and a long trench, and you have an earthquake, it seems to be quite probable that the rupture may break through into that trench rather than follow the old rupture. I don't think there's anything that guarantees, as suggested elsewhere in this report, that by passing legislation that you can guarantee that the fault will break where it broke before. Even if it's state legislation.*

**Response G-12:** Refer to response G-8.

*Comment G-13 (PH-Schriever): In the section on the probability of an earthquake causing a train to derail, the arithmetic there is correct, but I don't consider that discussion complete. What is calculated there, it says:*

*The combined probability of an earthquake event occurring while a train was within the fault zone is approximately 1 in 50.*

*And I guess that's probably true if the train is, in fact, always going 38 miles per hour and you have three fault zones and the other assumptions that are made there, you, in fact, get that number. It turns out if the train's going twice as fast, the probability is half as much. It would be 1 in 100. So if you could just make the trains go fast enough, the probability would be practically zero. What's ignored there is the time it takes to stop the train in anticipation of the bent track. That is completely left out of the calculation. And if that's put in there, then you will get probabilities that are somewhat higher than what's anticipated there. And that probability, we're talking about ten seconds roughly, that the train could be within the fault zone, in any one fault zone.*

*I don't know how long it takes to stop a train, but they don't stop real fast. And even if you had a communication system that would sense the earthquake and put on the brakes automatically, the train could very easily take 30 seconds to stop or a minute or something like that, without throwing the passengers through the door. And when you compare that to the ten seconds that you've already allowed, you could see that the probability could very well be five times as great as anticipated there, that you could get an impact from a moving train relative to the fault.*

**Response G-13:** Refer to response G-10.

*Comment G-14 (PH-Schriever): I think that the discussion is just inadequate when it comes to discussing the environmental impact on human beings relative to the subway aspects of both the Irvington Station and the Central Park. It mentions liquefaction in there occurring with respect to the tunnel and it assumes that the tunnel is not ruptured and then says, well, it could be cracked and there could be water infiltration. Well, with a lake there to supply the water, there could be a lot of water infiltration and everybody on the train could drown by the time you got your rescue efforts going.*

**Response G-14:** Refer to responses G-3 and G-9.

### 3.4 COMMENTS AND RESPONSES ON HAZARDOUS MATERIALS

*Comment HM-1 (Fremont): Hazardous Materials Mitigation: Contrary to several statements in the Draft EIR, operation of the BART track and facilities will involve the management of hazardous materials. Examples include the vehicle wash and maintenance pit near the end of track at the*

*Santa Clara County line. Construction operations will also involve a variety of hazardous materials which will require appropriate management. Examples include contaminated soil and water.*

**Response HM-1:** The paragraph under **Impact of Exposure to Hazardous Materials**, on page 3.3-14, which reads:

Operation of the project would not involve the use or storage of hazardous materials; however, there is a potential exposure to hazardous materials due to underground fuel pipelines located along portions of the proposed alignment. Ruptured or leaking fuel pipelines could contaminate surrounding soils or groundwater and create a potential health and safety risk. In addition, the proposed BART alignment would be located adjacent to the existing SPTCo and UPRR tracks which could expose BART patrons to hazardous materials spills in the event of a train accident or collision involving a SPTCo or UPRR train carrying hazardous materials. Trains from both rail companies carry hazardous materials on the track on a daily basis.

is deleted and replaced with the following:

Operation of the project would involve the use and storage of hazardous materials in and adjacent to the car wash and inspection pit adjacent to the tailtrack area south of the terminal station. The car wash would use a 1 percent solution of oxalic acid stored in a holding tank. Containers of a 10 percent oxalic acid solution would be stored on-site. Hazardous materials used in the emergency maintenance pit would include 80 or 90 weight lube oil, isopropyl alcohol and solvents for degreasing. The solvents may contain mineral spirits, 1,1,1 trichloroethane or xylene. These hazardous materials would be transported, stored and handled in conformance with standard BART procedures and applicable laws and regulations.

There is a potential of exposure to hazardous materials due to underground fuel pipelines located along portions of the proposed alignment. Ruptured or leaking fuel pipelines could contaminate surrounding soils or groundwater and create a potential health and safety risk. In addition, the proposed BART alignment would be located adjacent to the existing SPTCo and UPRR tracks which could expose BART patrons to hazardous materials spills in the event of a train accident or collision involving a SPTCo or UPRR train carrying hazardous materials. Trains from both rail companies carry hazardous materials on the tracks on a daily basis.

*Comment HM-2 (Fremont): BART, as property owner, may also be responsible for investigation and clean-up. Site characterization and remediation activities may need to be implemented before any grading, excavation and/or dewatering is undertaken. The time frames may be significant to the project and/or community. An approved remediation plan will be required to assure BART*

*development will not negatively impact any required site remediation. The draft EIR does not document the incorrect assumption of no negative impacts. The Draft EIR identifies the potential for exposure of citizens and constructions workers to contaminated soil and/or groundwater.*

**Response HM-2:** The mitigation of the potential exposure of workers and the public to potentially hazardous materials was discussed on pages 3.3-20 and 3.2-21. The mitigations call for the characterization and remediation of areas identified on pages 3.3-17 through 3.3-20 as potentially impacted by known and suspected contamination sites along the proposed alignment. The investigation and remediation of these areas should be conducted during project development. The steps in such a process, as stated in response SU-5, include:

1. Develop a Work Plan for additional site characterization activities and submit it to the appropriate local and state regulatory agencies in order to secure the necessary permits to conduct the work.
2. Undertake additional soil sampling in areas of known contamination to further define the horizontal and vertical extent of contamination.
3. Install groundwater monitoring wells in locations where dewatering activities may be required to identify any potential groundwater contamination for water management purposes.
4. Remove contaminated soils in areas of proposed excavation and dispose of them off-site.
5. Import clean fill, as necessary.

(In some cases, it may be more efficient to coordinate steps 4 and 5 with the timing of project related excavation work.)

6. Document the remediation work for submittal to the local and state agencies issuing permits. This may include recommendations for further groundwater monitoring, if necessary.
7. Continue groundwater monitoring, if required.

**Comment HM-3 (Fremont):** Reference pages 3.3-2 and 3 of the Draft EIR. The local enforcement agency is, primarily, the Environmental Protection Division of the City of Fremont. It is a misnomer to say "The City of Fremont Hazardous Materials Division."

**Response HM-3:** Comment noted. Line 5 of the second paragraph on Page 3.3-2 is changed to read "... the local level for the project site include: the Environmental Protection Division of the City of Fremont;".

The first two lines of the fifth paragraph on Page 3.3-3 is changed to read "**Environmental Protection Division of the City of Fremont.** For facilities located within City of Fremont boundaries, the Environmental Protection Division of the City of Fremont (City) is the ..."

*Comment HM-4 (Fremont): Reference pages 3.3-2 and 3 of the Draft EIR. The City does not issue business plans. The City does review business plans submitted by regulated facilities and issue Hazardous Material Permits for approved sites. This extends beyond enforcement of underground tank regulations. (B&S)*

**Response HM-4:** Comment noted. The second sentence in the fifth paragraph on page 3.3-3 which reads:

The City issues business plans, which are required by state law, submitted by facilities that use or store hazardous materials above a certain quantity.

is changed to read

The City reviews business plans, which are required by State Law, submitted by regulated facilities that use or store hazardous materials above a certain quantity and issues Hazardous Material Permits for approved sites.

*Comment HM-5 (Fremont): Reference page 3.3-7 of the Draft EIR. Item 13 is misleading. Fremont Wire & Plating is the subject of enforcement action by the City through the Superior Court. Appropriate site closure is required, but has not been adequately addressed. (B&S)*

**Response HM-5:** Comment noted. The status of Site 13 in Table 3.3.1 on Page 3.3.7 is changed to read "Appropriate site closure is required, but has not been adequately addressed."

*Comment HM-6 (Fremont): Reference page 3.3-8 of the Draft EIR. For Item 27, free product was identified and a treatment facility is in place. This site is contiguous to one of the proposed BART stations. (B&S)*

**Response HM-6:** Comment noted. The status of Site 27 in Table 3.3.1 on Page 3.3-8 is changed to read "Treatment facility is in place."

*Comment HM-7 (Fremont): Reference page 3.3-14 of the Draft EIR. The report should mention the regulated materials associated with the carwash and maintenance/inspection pit. There will be additional construction-related regulated materials (e.g., solvents, welding materials, cleaners, fuels, compressed gases, and hazardous wastes).*

**Response HM-7:** The paragraph under **Impact of Exposure to Hazardous Materials**, on page 3.3-14, is revised as detailed in response HM-1.



*Comment HM-8 (Fremont): Reference page 3.3-16 of the Draft EIR. BART, as property owner, may be responsible for investigation and clean-up. There is no indication of an intent to apply "the innocent land owner" exemption. Site characterization and remediation activities may need to be implemented before any grading, excavation and/or dewatering is undertaken. The time frames may be significant to the project and/or community.*

*Much more than a site-specific health and safety plan will be required if soil and/or groundwater contamination is identified. A remediation plan, approved by the appropriate regulatory agencies, will be required to assure BART development will not negatively impact any required site remediation. The Draft EIR does not document the assumption of no negative impacts, which we believe is incorrect. Implementation of part or all of a site characterization and remediation plan may be required.*

*The Draft EIR identifies the potential for exposure of citizens and construction workers to contaminated soil and/or groundwater. However, there is no plan to detect possible exposures (3.3-20). A plan for the appropriate sampling and testing of excavated soils and extracted groundwater should be developed. Results would need to be available in a timely manner to allow for implementation of needed protective measures. The use of an on-site certified laboratory could help with this task. (B&S)*

**Response HM-8:** See Response HM-2.

*Comment HM-9 (Fremont): Reference page 3.3-18 of the Draft EIR. Fremont Wire & Plating has been ordered to implement an approved Closure Plan. As of this date, this has not been done and the case has been referred to enforcement. (B&S)*

**Response HM-9:** The last sentence in the second paragraph on Page 3.3-18 which reads:

No information regarding site investigations was available for site 11; the City of Fremont has granted closure for site 13 (Figure 3.3-1 and Table 3.3-1).

is changed to read:

No information regarding site investigations was available for site 11; Site 13 has been ordered to implement an approved closure plan, however as of this date, this has not been done and the case has been referred to enforcement (Figure 3.3-1 and Table 3.3-1).

*Comment HM-10 (UPRR): Second, in the event of a derailment, cleanup will be very difficult. If hazardous materials are involved, the problem will be multiplied.*

**Response HM-10:** A derailment on one of the railroads adjacent to an Irvington Station would either be in a subway or depressed trench, either of which have more restricted access than currently exists at the station site. Mitigation measures are limited. These problems are not associated with Alternatives 6, 7, 8, 9 and 10.

### 3.5 COMMENTS AND RESPONSES ON HYDROLOGY

*Comment H-1 (Fremont): Reference page 3.4-4 of the Draft EIR. The tule pond, formerly called Tyson's Lagoon, is misleadingly identified as "a natural depression formed along the Hayward Fault." The tule pond referred to in several areas of the Draft EIR is part of a series of interconnected sag ponds directly related to the Hayward Fault. No consideration has been given to the potential negative impacts of the proposal to fill portions of one. Because there are at least two direct connections between the sag ponds and the deeper aquifer (source of our drinking water), this is a serious consideration. Such impacts, as well as flood control, storm water runoff, maintenance of the specialized riparian environment, and possible geologic instability should be addressed.*

*The California Regional Water Quality Control Board (RWQCB) sampled the largest tule pond in May 1988 as part of a background study. Up to 26,000 parts per billion (ppb) of Total Fuel Hydrocarbons were identified. This level of contamination is consistent with those generally attributed to the effects of non-point discharge.*

*A study of this important issue was undertaken by Patrick L. Williams of Lawrence Berkeley Laboratory which includes the identification of an abandoned well (45/1W-28601) in the largest tule pond.*

**Response H-1:** The portions of the tule pond potentially impacted by the proposed project are currently integrated into the area's stormwater collection system and, therefore, receive potentially contaminated urban runoff. Implementation of the project would not include a change in this use.

A "natural depression formed along the Hayward Fault" is a descriptive phrase for a "Sag Pond" as used in the geology section of the Draft EIR. The Hydrology setting section, on page 3.4-4 describes the functional role of the north and south tule pond for storing and draining storm water runoff from the Pond's 672-acre drainage area. The potential negative impacts of filling a portion of the South tule pond is specifically described in Hydrology impacts on page 3.4-10. The biological importance of the Tule ponds area described in the Ecosystems section related to open water habitats (page 3.5-10), wildlife (page 3.5-11) and emergent wetlands (page 3.5-12). Mitigation for ecosystems impacts at the tule pond is described on pages 3.5-25 and 3.5-26. The issues related to the potential geologic instability in the vicinity of the tule pond is described on pages 2.3-19 and 2.3-20 (Setting) and page 3.2-25 (Impacts). Mitigation, which includes the proposed embankment across the south tule pond, is described on page 3.2-28.

The filling of a portion of the south tule pond, proposed by the project, would be conducted under the provision of a Section 404 permit issued by the U.S. Army Corps of Engineers. The impacts of the filling of the pond on surface and subsurface water quality would be mitigated by the permit requirements. The design and construction of the wetlands replacement area would be regulated by the provisions of the Section 404 permit.

*Comment H-2 (Fremont): Reference page 3.4-4 of the Draft EIR. Wetlands will likely have to be replaced on a higher than one-for-one basis, both for any losses related to Lake Elizabeth and for areas in the sag ponds which are negatively impacted by construction. This replacement must be of the same quality. The Draft EIR seems to imply that merely digging a nearby hole would be adequate. This is not the case. Development must proceed in such a way as to avoid augmenting contamination at and beneath the area. Storm water runoff could be channeled directly to the "B Line."*

**Response H-2:** The Draft EIR on page 3.5-24 describes mitigations for vegetation replanting in Lake Elizabeth following any vegetation loss during the construction period. See Response SU-12 for a discussion on wetlands replacement. See also Response H-1.

*Comment H-3 (Fremont): Reference page 3.4-4 of the Draft EIR. The tule pond is used as a surge pond for the area's stormwater collection system. Use of drain wells should not be allowed. (B&S)*

**Response H-3:** See Response PD-7.

*Comment H-4 (Fremont): Reference page 3.4-5 of the Draft EIR. Staff is concerned with the potential flooding due to inadequate sizing of the culverts for the major storm drain line storm drain lines that runs under the UPRR and SPTCo. tracks that will be utilized for the at-grade BART extension. Will improvements on the existing culvert facilities be made? Mitigations recommended in page 3.4-13 appear ineffective and inadequate. "Pervious" pavements are not an acceptable method for storm drainage. (PW)*

**Response H-4:** As stated on page 3.4-12 of the Draft EIR, the BART Extension Program Design Criteria Manual requires that all drainage lines crossing BART system at-grade track beds be designed to pass the peak runoff for a 100-year storm event. The improvements to the culverts would be made by means of a cooperative drainage program negotiated between BART, the Alameda County Flood Control and Water Conservation District (ACFCWCD), and the City of Fremont Public Works Department.

*Comment H-5 (Fremont): Reference page 3.4-13 of the Draft EIR. New requirements to monitor, minimize and treat non-point source runoff have not been considered. Aerials and other impervious cover may add a significant and unacceptable burden to the City. The draft EIR does not address this issue. (B&S)*

**Response H-5:** The mitigation of water quality degradation associated with pollutants in urban runoff, presented on pages 3.4-14 and 3.4-15 addresses the current and expected requirements of the National Pollutant Discharge Elimination System program for non-point source urban runoff. BART will meet the requirements currently being developed by the ACFCWCD, and recognizes that a variety of "best management practices" may be required of ACFCWCD and BART under the terms of the ACFCWCD NPDES permit. These are described under mitigations on pages 2.4-14 through 3.4-16 of the Draft EIR.

*Comment H-6 (Fremont): Reference page 3.4-18 of the Draft EIR. Localized groundwater pumping for a subway at Lake Elizabeth is unlikely to impact deep aquifer production wells. The capture zone of such dewatering activities can be easily controlled. (B&S)*

**Response H-6:** Comment noted.

*Comment H-7 (Fremont): Reference page 3.7-14 of the Draft EIR. Mission Creek water quality is significantly worse than Lake Elizabeth. Mission Creek water should not be diverted into Lake Elizabeth except for storm retention purposes. Diversion would further impact contact recreation activity (boardsailing). (LS)*

**Response H-7:** Construction activity is not anticipated to redirect Mission Creek water into Lake Elizabeth. The Draft EIR is only trying to make clear that during construction provisions for handling water runoff would need to be provided.

*Comment H-8 (Podell): What volume of water retention replacement in cubic yards does BART have to provide to the Alameda County Flood Control District for the Warm Springs Extension?*

**Response H-8:** If any volume of water retention area is used for project purposes, the volume will be replaced so that there will be no loss in volume. More detailed engineering will be done to define exact measurements.

*Comment H-9 (Podell): Why specifically in terms of hydraulic and general engineering can't BART expand the large tule pond on the north side of Walnut, on the BART parking lots, rather than disrupt our project and buy expensive high density multi-family housing land. Why specifically in terms of hydraulic and general engineering can't BART expand the large tule pond on the undeveloped land surrounding it on the north side of Walnut.*

**Response H-9:** Possible expansion of the tule pond adjacent to the Fremont BART station was discussed with the Alameda County Flood Control District who informally indicated this was not an acceptable option. See also response H-8.

*Comment H-10 (ACTA): In addition to considering the planned I-880 work as an alternative, it is our view that certain described impacts are speculative. In particular, comments about localized*

*flooding and erosion due to construction (section 3.4.3) are issues we will address during design development and active construction of the I-880 widening project.*

**Response H-10:** Alternative 3 includes other highway improvements in addition to the I-880 project. It is possible that some of them could result in some flooding or erosion impacts. These potential impacts would be evaluated in project level environmental documents to be drafted by the implementing agencies.

### 3.6 COMMENTS AND RESPONSES ON ECOSYSTEMS

*Comment EC-1 (Fremont): Reference page 3.4-10 of the Draft EIR. The plan to enlarge the south end of one of the tule ponds to "makeup" for filling part of the northern end refers to the loss of riparian habitat and the necessary concurrence by the Corps of Engineers and the California Department of Fish and Game. This is a serious issue and must be adequately addressed. (B&S)*

**Response EC-1:** The impacts and mitigation related to the loss of stormwater storage capacity from filling a portion of the South tule pond is described on page 3.4-10 of the Draft EIR. The impacts and mitigation for the loss of emergent seasonal wetlands that would result from this same construction activity are described on pages 3.5-22 and 3.5-26. As noted in the Draft EIR, BART's concept for the replacement of lost storage includes excavation to expand the south pond westward. This plan has been reviewed by the ACFCWCD which has agreed to work with BART on the implementation details. The habitat loss associated with filling a portion of the South tule pond would be addressed by establishing a similar hydrological regime in the enlarged portion of the pond and replanting the wetland vegetation lost from filling a portion of the pond. It should be noted that all of this mitigation work will be performed under terms of a Section 404 permit (Corps of Engineers) and would require review by the California Department of Fish and Game.

*Comment EC-2 (Fremont): Reference page 3.5-8 of the Draft EIR. City staff have personally observed deer (not listed), striped skunk, raccoon and opossum in the proposed route area. (B&S)*

**Response EC-2:** Comment noted. Table 3.5-1 is corrected to add Mule deer.

*Comment EC-3 (Fremont): Reference page 3.5-10, 11 of the Draft EIR. See Comment No. 1 under "Hydrology" above. (B&S)*

**Response EC-3:** See responses to comments H-1, H-2 and PD-7.

*Comment EC-4 (Fremont): Reference page 3.5-15 of the Draft EIR. Cooper's Hawks are common to Stiver's Lagoon and probably nest there. This is an exceedingly secretive predatory bird. (LS)*

**Response EC-4:** Cooper's hawks are found on the project area as stated on pages 3.5-2 and 3.5-15. The impacts to Cooper's hawks from the proposed project alignment through the riparian forest were discussed and found to be significant. The City of Fremont Department of Leisure Services suggests that "Cooper's hawks are common to Stiver's Lagoon and probably nest there." While there is no conclusive evidence to support nesting by Cooper's hawks in the riparian habitat, the possibility raises concern about noise and BART train movement through this small remnant riparian forest. This is discussed further in response N-2, which indicates that further investigation conducted during preparation of the Final EIR substantiates the Draft EIR conclusion that operating impacts from frequent train passage could deter Cooper's Hawks from roosting in adjacent riparian areas (Draft EIR page 3.5-19).

*Comment EC-5 (Fremont): Reference pages 3.5-18 of the Draft EIR. Under the section on impacts related to the Riparian Forest, there is a discussion which emphasizes the design of the aerial structure will minimize loss of riparian forest area and displacement of this habitat area by the support structures. It is therefore concluded that this loss would be considered less than significant. However, this conclusion does not take into consideration the fact birds and wildlife will avoid the rail corridor after construction because of the noise of the trains, and, therefore, the movement pattern and location of wildlife habitat areas will substantially change in the area devoted to the rail corridor. (CDD)*

**Response EC-5:** The second paragraph on page 3.5-19 of the Draft EIR states:

Operating impacts from increased noise from frequent train passage could deter species such as Cooper's hawks, black-shouldered kites, and northern harriers from roosting in the trees. Noise could also deter migratory birds from resting and foraging in the riparian forest. These are considered significant impacts given the rarity of this habitat.

This issue is also discussed in the noise section on page 3.13-23 and in response N-1. The Draft EIR section states that available literature on noise and wildlife indicates that loud impulsive noises will scare animals and possibly disrupt breeding while loud unvarying noise can mask communication between animals, disrupting some activities. Considering the characteristics of BART noise (and not the rarity of riparian habitat) the noise section concludes that the impact of BART noise on wildlife, if any, would be minor and temporary. However, further research conducted for the preparation of response N-2 indicated a potential for impacts on Cooper's Hawks should any nest in the riparian area.

*Comment EC-6 (Fremont): Reference page 3.5-23 of the Draft EIR. Tri-colored Blackbird is regular daily visitor in Central Park in small numbers in summer. Currently it is unknown if they nest in Central Park. (LS)*

**Response EC-6:** As stated in Table 3.5-1 and on pages 3.5-11 and 3.5-14 of the Draft EIR, Tri-colored blackbirds were once found in large numbers in the natural marsh before it was

flooded and changed into Lake Elizabeth and occasional individuals may visit the lake. On page 3.5-23, it was stated that, if present, draining the small arm of the Lake would temporarily impact these birds. However, as stated on page 3.5-11, these birds normally nest in large colonies, and it is unlikely that they have nested on the Lake without being noticed. They have, however, nested in the area outside the project area in recent years as discussed on page 3.5-11.

*Comment EC-7 (Fremont): Reference page 3.5-24 of the Draft EIR. Curtailing tilling to preserve Ground Squirrel and Burrowing Owl colonies will present some conflict for weed abatement regulations and will impact higher costs for repeated mowing. Uncontrolled tall plant growth apparently discourages and displaces both species populations. Encouragement of Ground Squirrel colonies would create maintenance impact where the colonies might abut developed turf or structures. (LS)*

**Response EC-7:** The City of Fremont Department of Leisure Services states that (1) ground squirrels may cause damage to playing fields and structures; (2) curtailing tilling to enhance burrowing owl habitat conflicts with weed abatement; and (3) uncontrolled plant growth apparently discourages and displaces both species (ground squirrels and burrowing owls).

Burrowing owls may depend on ground squirrel burrows for nest sites, and their breeding populations may be limited by suitable burrows (Coulumbe, Condor (73):162-176, 1971). Hence, encouraging ground squirrel populations, at least in some areas of Central Park, is an essential component of burrowing owl conservation. (1) Ground squirrel control is certainly necessary where their activity threatens the integrity of buildings or playing fields. (2) Although curtailing tilling may conflict with weed abatement, a diversity of habitat types, specifically tall grass-forb vegetation intermixed with short-grass areas, provides preferred burrowing owl habitat. (3) Whereas short-grass areas provide preferred nesting habitat (Zarn, BLM, 1974), tall grass-forb habitats provide preferred foraging habitat (Haug and Oliphant, J. Wild. Manag. 54:27-35, 1990). Although not under BART's control, curtailing tilling in portions of the Central Park grassland as a mitigation measures by the City of Fremont would help provide areas of high ground squirrel abundance (and hence abundant nesting burrows for owls) and preferred burrowing owl habitats.

*Comment EC-8 (Fremont): Reference page 3.5-25 of the Draft EIR. This section states the loss of habitat quality for migratory birds due to noise from train passage through the forested area may be mitigated to a less than significant level by sound walls. How would sound walls mitigate the noise immediately above the corridors? Birds would still avoid that area above and adjacent to the train corridor where the highest level of noise and vibration occur. Birds and wildlife may approach closer to a corridor with sound walls than one without walls; however, there would still remain an overall loss of habitat quality and quantity which would not occur with implementation of one of the subway design options. (CDD)*

**Response EC-8:** Sound walls would be effective mitigation because they would reduce the noise levels in the adjacent riparian forest habitat. The impact would occur because 1) without mitigation, the noise would reduce the quality of this habitat as a roosting place for certain shy species and 2) this is a rare habitat type and there would be limited opportunities for noise-sensitive species to relocate themselves.

It is correct that the subway design options would avoid the potential noise impacts on animals. However, Design Option 1 would make a wider swath through the riparian forest, taking out more trees and further reducing its value for a number of years until the tree cover returns.

*Comment EC-9 (Fremont): Reference page 3.5-26 of the Draft EIR. Under the section on Rare, Threatened, and Endangered Species and Species of Special Concern, a mitigation monitoring program is mentioned. What agency would be responsible for monitoring the implementation of mitigation measures? To whom would BART be reporting implementation of project mitigation measures? (CDD)*

**Response EC-9:** The California Environmental Quality Act (Section 21081.6) requires that the lead agency adopt a reporting or monitoring program to ensure compliance during project implementation. As lead agency, BART is responsible for implementing the mitigation measures. Section 21081.6 states reporting or monitoring is required. However, the BART program includes both monitoring and reporting. BART will monitor the mitigation measures and report results to the BART Board of Directors on a quarterly basis.

*Comment EC-10 (Fremont): This is the first time the City has heard of installing taller power line supports in or adjacent to Stiver's Lagoon. What is the construction impact on Stiver's Lagoon habitat from tower development? (LS)*

**Response EC-10:** If taller power line supports are necessary as suggested on page 3.8-20, only the towers closest to and on either side of the track alignment would need to be replaced. This would include towers on the east side of the UPRR and immediately to the east of the SPTCo tracks. These towers are in ruderal-forb grassland and not in known burrowing owl use areas. Hence, their replacement with larger towers would not pose significant construction or operation impacts.

*Comment EC-11 (Podell): What is the area in square feet that BART has to provide for wetlands replacement? What is the area in square feet that you have identified on our property as wetlands replacement? What portion of the area you have identified on our site as wetlands replacement is for Flood Control District water retention replacement. What portion of the same area is for wetlands replacement.*

**Response EC-11:** See Response EC-1. Any wetlands development as a result of the project will be replaced on at least a one-for-one basis. There will be no net loss of designated wetlands. Following the decision of the BART Board as to the specific project to be



undertaken, detailed engineering on the selected alternative will answer the question raised in this comment. The Draft EIR is based on conceptual engineering for all alternatives.

*Comment EC-12 (PH-Hoch): I also have for you some additions to the bird list and one correction on it which I'll give you in a few minutes. Additions to Table 3.5-1 of 7/91 Draft EIR. These are birds seen by Alice Hoch in the area of the proposed BART extension (from the present Fremont BART station to South Fremont), birds which are not already listed on 3.5-1. I have not included rare birds which I have seen there. "X" in front of name denotes additions. Northern Shrike is an error. It should be Loggerhead Shrike.*

**Response EC-12:** Table 3.5-1 is amended to include Horned grebe (*Podiceps auritus*), Eared grebe (*P. nigricollis*), Clark's grebe (*Aechmophorus clarkii*), white pelican (*pelecanus erythrorhynchos*), Chestnut-backed chickadee (*Parus rufescens*), Loggerhead shrike (*Lanuis ludovicianus*) (replaces Northern shrike), Northern oriole (*Icterus galbula*), Black-headed grosbeak (*Pheucticus melanocephalus*), and House sparrow (*Passer domesticus*).

The American white pelican is a CDFG Species of Special Concern. White pelicans have been observed during the nonbreeding season on Lake Elizabeth (Alice Hoch, Ohlone Audubon Society). Once a common breeder on large lakes in California, destruction of nesting islands and breeding habitats have resulted in widespread population declines. Adverse impacts from draining a small arm of Lake Elizabeth would be temporary and not significant.

### 3.7 COMMENTS AND RESPONSES ON LAND USE AND ECONOMIC ACTIVITY

*Comment LU-1 (Fremont): Potential Displacement: The proposed project will impact 83 businesses and 17 residences. While all these businesses and residents ultimately may not have to be relocated, they will all be concerned about how they will be affected by the extension. The City Council requests BART contact all affected parties once the project alignment is selected to provide information on anticipated impacts and available assistance.*

**Response LU-1:** Once the project alignment is selected and the Final Environmental Impact Report is certified by the BART Board of Directors, BART will begin a program of acquisition meetings. All affected parties will be invited to attend the meetings at which time BART staff and BART's relocation consultants will be available to discuss individual concerns about the acquisition and relocation processes. BART's relocation and acquisition brochures entitled "When BART acquires your Property," "Residential Relocation" and "Business Relocation" will also be distributed. BART will follow all the requirements of the "California Uniform Relocation Assistance and Real Properties Acquisition Policies Act" as to the acquisition property and relocation of affected parties.

*Comment LU-2 (Fremont): Reference page 3.6-13 of the Draft EIR. In the discussion on the land use designations under the Warm Springs Station section, it should be noted that the BART*

*station is in an area designated a Study Area by the Fremont General Plan which extends from South Grimmer Boulevard to Brown Road. The City or any other party may initiate a study for a potential change in land use in this area. (CDD)*

**Response LU-2:** A new, fourth, sentence is hereby added to the 3rd full paragraph on page 3.6-13, following the phrase "...inclusive land use category":

The area extending south of Grimmer Boulevard to Brown Road is designated a study area in the General Plan. The City or any other party could initiate a study for a potential change in land use in this area.

*Comment LU-3 (Fremont): Reference page 3.6-18 of the Draft EIR. The last sentence on the page under Potential for Growth is incorrect. No proposal or study is currently being considered to change land use designations around the proposed Irvington BART station. (CDD)*

**Response LU-3:** The last sentence on page 3.6-18 is hereby deleted.

*Comment LU-4 (Fremont): Reference page 3.6-22 of the Draft EIR. The last paragraph on the page mentions a Warm Springs BART Area Specific Plan. Since Shapell has withdrawn its study for potential land use change, no specific plan is proposed at this time. The area is more correctly called a Study Area on the General Plan, and no land use change is being assessed at this time. However, other land uses could be evaluated for the area in the future, as discussed above. Additionally, it should be clarified that the NUMMI plant is not the only industrial use in that area which could limit the potential for residential land use. (CDD)*

**Response LU-4:** The last two sentences of the last paragraph on page 3.6-22 which read:

Although Shapell has withdrawn its request, this area is still being assessed to determine whether a viable residential community can be created. A major constraint would be the nearby NUMMI plant, which has expressed concern that residential land use would be incompatible with the operation of an automobile manufacturing plant.

are revised to read:

Although Shapell has withdrawn its request for a General Plan amendment, the General Plan identifies the area generally bounded by South Grimmer Boulevard, I-680, Mission Boulevard/Brown Road and the railroad corridor as a Study Area for a potential change of land use. Any party could initiate a land use study of the area, although no change is being assessed at present. Existing industrial operations in the area, including NUMMI, have expressed concerns about changing land use designations adjacent to industrial operations to allow residential development.

*Comment LU-5 (Fremont): Reference page 3.6-30 of the Draft EIR. Under Neighborhood Planning Goals, the first sentence describes particular designations on the General Plan as "specific plan areas." These are more correctly termed potential plan areas. Additionally, a reference is made to a study commissioned by the City regarding residential land use in the Warm Springs BART station area. A preliminary study was initiated by Shapell Industries and later withdrawn prior to completion and approval. The area is now designated a Study Area, although no land use change is presently being considered. (CDD)*

**Response LU-5:** The phrase "specific plan" in the first and last lines of the bottom paragraph on page 3.6-30 is hereby changed to "study plan."

See, also Responses LU-2 and LU-4.

*Comment LU-6 (Fremont): Reference page 3.6-31 of the Draft EIR. The reference made to the Irvington BART Station Concept Plan is incorrect. What was actually adopted in March 1990 were approved plans and specifications for street widening in the Irvington area, with final designs for plazas and central places. However, design and street improvements related to the BART station were to be considered at a later date, when plans were available, to ensure that the BART station design fits into the community and neighborhood. The footnote at the bottom of the page should also be revised. (CDD)*

**Response LU-6:** The second full paragraph on page 3.6-31 which reads:

The development of a BART station in Irvington is very important to the redevelopment potential of this area. To this end, the Irvington BART Station Concept Plan was created and adopted in March 1990. The plan addresses issues of land use, urban design, site design and circulation associated with the development of an Irvington BART Station. It is fairly specific and addresses issues such as parcels available for new development and recommended land uses for them, orientation of the station structure, and circulation for pedestrians and automobiles between the station and the surrounding areas.

is replaced with the following:

The development of a BART station in Irvington is very important to the redevelopment of this area. Recent plans for redevelopment actions in the area have been approved with flexibility for future integration of the proposed Irvington Station. In March 1990, plans and specifications for street widening in the Irvington area, with final designs for plazas and central places were approved. However, design and street improvements related to the BART Station were to be considered at later date, when plans were available, to ensure that the BART station design fits into the community and neighborhood.

Footnote 2, page 3.6-31 is hereby deleted.

*Comment LU-7 (Fremont): Reference page 3.6-36 of the Draft EIR. The discussion on this page related to BART station areas, site planning and architecture is very limited, and should be expanded. The discussion related to the need for station design to address the issue of negative land use impacts caused by traffic congestion is appropriate. (CDD)*

**Response LU-7:** The analysis of station land use impacts is commensurate with the detail of the project description and the station design concepts presented in the Draft EIR in Figures 2-4 and 2-10 for Irvington Station, Figures 2-5 and 2-15 for the Warm Springs Station and Figures 2-6 and 2-16 for the South Warm Springs Station. The criteria defining potentially significant land use impacts and the analysis of potential impacts on pages 3.6-35 and 3.6-36 of the Draft EIR, are appropriate to the information presently available regarding station design.

It should be noted that detailed station design would be undertaken once the BART Board adopts a project and that the City of Fremont will be given design review and comment opportunities at various stages of the design process.

*Comment LU-8 (Fremont): Reference page 3.6-38 of the Draft EIR. Under the section on Station Area Real Estate, regarding the discussion on the presence of a station and the minimal affect on real estate trends, this may be true in the long-term, but station development could constrain and adversely affect investment in real estate in the area in the short-term during periods of construction.*

**Response LU-8:** Construction impacts on a specific area or property are usually localized and of very short duration. Investment in real estate generally responds to longer term market conditions including such things as proximity to the station in anticipation of the opening of revenue service. BART recognizes that station construction may be disruptive to surrounding residential and commercial activities as discussed on page 3.6-43 of the Draft EIR under Neighborhood Construction Impacts, appropriate mitigations are suggested to minimize disruption in the area.

*Comment LU-9 (Fremont): Reference page 3.6-38 of the Draft EIR. Additionally, neighborhood goals could be positively or adversely affected depending on the design and architecture of the resulting stations. The site design and architecture of the BART stations should fit into the community and neighborhood, and not be of a standard, generic type. (CDD)*

**Response LU-9:** BART proposes to develop their design and architectural treatment at each station with sensitivity to the surrounding community. It is not intended that new stations will be "generic" but rather reflect positive urban design elements and architectural treatments compatible with the station environs.

*Comment LU-10 (Fremont): Reference page 3.6-12 of the Draft EIR. Under Neighborhood Impacts, it is stated the Proposed Project would impact neighborhood areas minimally since most of the BART alignment would be located on or adjacent to an existing railroad ROW. It cannot be assumed BART will minimally impact a particular neighborhood until a site plan and station design are developed. Station design will be an important consideration in determining whether or not there are such impacts on the community. (CDD)*

**Response LU-10:** The Draft EIR discusses in the appropriate sections of the document, visual, transportation, and displacement, impacts related to neighborhoods. The functioning of the neighborhood in proximity to a station is already influenced by the pre-existing railroad corridor. The station design as noted in response to the previous comment is intended to be sensitive to the surrounding community. Within the context relative to the functioning of the neighborhood the Draft EIR is correct in its assessment that BART will minimally impact neighborhood areas.

*Comment LU-11 (Fremont): Reference page 3.6-43 of the Draft EIR. Under Neighborhood Mitigation Measures, the second item listed related to construction traffic control criteria should include the City as an agency to be consulted in addition to local business associations prior to construction being undertaken by BART. (CDD)*

**Response LU-11:** Page 3.6-43, the second item listed under Neighborhood Mitigation Measures is changed to read: "Construction traffic control criteria should be developed in consultation with the City of Fremont and local business associations before any construction activity is undertaken by BART. A traffic control plan could be prepared in accordance with these criteria."

*Comment LU-12 (Queen): LAND USE CHANGES: It appears that BART's policy is consistent with that of the Association of Bay Area Governments Commission (ABAG), the Metropolitan Transportation Commission, and the Bay Vision 2020 Commission to convert industrial space, to high-density housing or high-density commercial space. Doing so, causes the replacement of well-paid skilled jobs with minimum-wage unskilled jobs resulting in public deficits in the form of unrealized housing subsidies (currently valued at \$152.5 million in San Francisco), See document presented to the "Embarcadero Plaza Citizen Advisory Committee," March 26,1991, (ref #13).*

**Response LU-12:** The future land use patterns assumed for the preparation of this EIR are those shown in the Fremont General Plan.

*Comment LU-13 (Queen): International Trade: It is my position that local officials are using the ploy of developing major projects under the guise of non-existent public benefits to allow rezoning of waterfront and industrial land in order to circumvent federal law regarding ocean commerce and the abandonment of rail freight services (see ref #22). Doing so is indefensible considering the fact that many experts including consultants to MTC have indicated that international trade, particularly in ocean commerce, will quadruple. It has long been my argument that pursuing ocean commerce*

*and freight transportation will create well-paying jobs for substantial numbers of Bay Area residents (see ref #3). The "best use" of land must be protected and fully addressed in this EIR.*

**Response LU-13:** The Warm Springs Extension has no connection with international trade and does not require abandonment of rail freight services.

*Comment LU-14 (Queen): LAND USE: SBDC's previous reports show that tourism (food service, retail, etc) essentially generates minimum wage jobs which then creates demands on taxpayers to provide public subsidies in the form of housing, health services, et cetera (see ref #13). The Bay Area must make best use of its industrial and waterfront properties. Converting them to retail, housing and commercial is essentially cutting our own throats.*

**Response LU-14:** Since there are many locations in the Bay Area where concentrations of jobs are remote from concentrations of housing, it makes good sense to convert some of the unused industrial land to residential land, in order to help achieve a better job/housing balance.

*Comment LU-15 (Queen): Page 1-7, para 1: "Because the increase in employment (in Alameda County) will exceed the number of new households (built in Alameda County), areawide commuters will require greater access to employment centers in southern Alameda County."*

*Fatal Flaw: A housing-to-jobs ratio of at least 1:1 must be planned. Otherwise NEW residents will be forced to commute to work, possibly over long distances and at considerable cost considering that the non-auto transportation facilities (bus, rail, etc.) will not be in place.*

**Response LU-15:** The sentence quoted in the comment indicates that employment growth is expected to exceed housing growth in southern Alameda County. Since there are more employed residents than there are jobs in Fremont, the greater increase in employment growth will, in fact, decrease the imbalance between employment demand and available employment in Fremont. In other words, the housing to jobs ratio is expected to get closer to the 1-to-1 balance desired by the commentor.

*Comment LU-16 (Queen): Page 3.6-1, box "Notes on Population Estimates": FATAL FLAW. This EIR should have waited until the 1990 census figures were available. To do otherwise essentially misrepresents the data conveyed throughout the whole EIR. This EIR must be updated to reflect the 1990 census figures.*

**Response LU-16:** We do not agree. At this time, complete 1990 census data are not yet available. Some variables, such as population and number of households, are now available (but were not available at the time this draft was prepared). Other variables, such as household income, will not be available until 1992. We compared the 1990 estimated population that was used in this EIR to the 1990 population figure that is now available from the U.S. Census and discovered that the difference was very small. The actual census number was four percent lower

than the estimated population figure used in the EIR. This small difference cannot be interpreted to constitute a fatal flaw in the analysis.

*Comment LU-17 (Queen): Page 3.6-6, Table 2.6-4: The following categories must be added to the table: Average Worker Per Household; Net Commute In/Out; Average Cost Per Passenger, Per Mile by weekday totals, weekend totals, and yearly totals. "Mean Household Income in Constant 1988 Dollars" must be replaced with "Mean Household Income." The difference is substantial. The currently displayed figure of \$35,609 would be replaced with \$21,780 for 1980 and the figure of \$45,100 would be replaced with \$27,734 for the year 2000.*

**Response LU-17:** The data presented in Table 3.6-4 is appropriate for the Land Use and Economic Activity section. Displaying the mean household income in constant dollars permits an accurate view of the actual change.

*Comment LU-18 (Queen): Page 3.6-45, Table 3.6-11 and Pages C-1 through C-12, Potential Displacements: These tables must be updated to display the number of employees (business) and residents (housing) that are being displaced. This section must also discuss the "Relocation Mitigation Measures" in terms that are specific and easily understood, i.e., a table by parcel showing relocation efforts necessary and estimated costs.*

**Response LU-18:** The level of detail found in the Draft EIR is sufficient to identify the effects of the proposed project and the alternatives. No persons or businesses will be required to move until the relocation procedures have been completed. Response LU-1 describes the process BART will follow for property acquisition and relocation of affected parties.

*Comment LU-19 (Lum): The other issue that was not addressed is the fact that the value of our home will be severely affected and will be very difficult if not impossible to sell during the construction phase and after that. How will BART compensate for this?*

**Response LU-19:** The question of impacts of the BART extension on property values is not addressed in the EIR since there is no clear indication of what effect there would be on values. The determination of property values is caused by many factors. Consequently, it is not possible to examine a single factor (e.g. the BART extension) and determine, in advance of the project, what will be the change in property values due solely to that factor.

*Comment LU-20 (PH-Hirsch): The Irvington Station will be the last component of the redevelopment of Irvington which I'm sure most of the people here are familiar with, where we actually widen the streets and improve the existing surrounding area. This will allow us to make the BART station area into a major transportation center and for a lot of senior people that live in the area that don't have other transportation alternatives, this will work out extremely well for them and will also allow for the completion of the circulation in the area.*

**Response LU-20:** Assuming the selection of a project including an Irvington Station, station frontage on both Washington and Osgood will be improved including street widening as appropriate. Additionally, AC Transit proposes to make the Irvington Station a key transfer point which is included in the BART station design concept.

*Comment LU-21 (PH-Queen): Now, there's another section that's called 15131. And essentially it reads:*

*Social economic impacts...*

*Of which you don't see a darn thing bit in this EIR, do you? Not a thing. Nothing about costs to speak of, nothing about social economic impacts. But anyway:*

*Social economic impacts shall be considered when a change of cause and effect to actual physical changes can be demonstrated.*

*Well, I can demonstrate that this project, the way it's going to be designed, is going to substantially increase density of population. The thing you've got to keep in the back of your head is density.*

*Secondly, that's going to impact traffic. Thirdly, that's going to impact air quality. And finally, that's going to impact our children.*

**Response LU-21:** Section 15131 of the CEQA Guidelines indicate that economic or social information may be included in an EIR or may be presented in other manners if the Lead Agency so desires. The section also states that:

(a) Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes resulting in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

Section 3.6 of the Draft EIR addresses **Land Use and Economic Activity**. The impacts section, beginning on page 3.6-31, addresses the potential for redistribution of regional population growth, employment impacts, the potential impacts on land use and real estate development and the potential impacts on municipal revenues, neighborhoods and displacement. As the commentor speculates, the EIR analysis indicates that increased population densities may occur at locations along the project corridor. These changes would be consistent with the Fremont General Plan.



The data used in the projections of traffic and air quality impacts contained in the EIR is based on land use projections that assume changes in population and employment density throughout the study area that are consistent with the newly adopted *Fremont General Plan*. The traffic and air quality analysis for all of the Alternatives is presented for 1998 and for 2010. For both target years a growth in traffic volume was assumed based on estimates of the rate and amount of new development in the City, as guided by the General Plan.

### 3.8 COMMENTS AND RESPONSES ON FREMONT CENTRAL PARK

*Comment CP-1 (Fremont): Subway Option through Central Park: Central Park is a unique and very special resource. The Park is just as important to Fremont and Southern Alameda County as Golden Gate Park is to San Francisco, and it should receive the same sensitive treatment a BART extension through Golden Gate Park would receive. The extension must go under Central Park and Lake Elizabeth in a subway configuration at BART's expense. This a firm and absolute requirement of the City of Fremont (well supported, we believe, by State law). The City will pursue all means necessary to ensure this requirement is met.*

*The Draft EIR outlines seven goals and objectives of the Proposed Project (pages 1-8 to 1-10). The Proposed Project incorporating the aerial option through Central Park would not meet three of the seven goals and accompanying objectives. These goals are as follows:*

- *"Goal 2 - Improve Environmental Quality. Transportation improvements should increase accessibility and efficiency while minimizing adverse environmental effects."*

*The Proposed Project may meet the increased accessibility and efficiency goal, and help to improve air quality, but it would not meet the objectives of minimizing the impacts on existing development and existing natural resources.*

- *"Goal 3 - Compatibility with Adjacent Land Uses and Planned Development. Transportation improvements should be compatible with adjacent land uses and should be consistent with planned regional development."*

*The Proposed Project would displace and disrupt existing land uses in Central Park and result in significant adverse environmental impacts.*

- *"Goal 7- Support Community and Institutional Goals. The transportation system planning process should maximize community acceptance and political and institutional support."*

*The Proposed Project would not be consistent with local goals and objectives included in the Fremont General Plan and would not be acceptable to the City if it includes an aerial structure in Central Park.*

*The Draft EIR clearly demonstrates the need to build BART as a subway through Central Park to avoid significant adverse environmental impacts. The Draft EIR concludes a BART aerial option will have significant, unavoidable adverse land use impacts on the park, especially sailboats, and the recreational value of the northeasterly portion of the lake.*

*The aerial option also has negative visual and noise impacts on this portion of the park and does not conform with the City of Fremont General Plan. In addition, the aerial option for the proposed project alignment would have significant, unavoidable impacts on the valuable wildlife habitat in the riparian forest east of Lake Elizabeth and is, therefore, unacceptable. These significant impacts must be mitigated by the selection of a subway option on either the proposed project design option 1 (subway) alignment or design option 2S (subway) alignment.*

**Response CP-1:** The City's strong preference for a subway Design Option (1 or 2S) is noted and acknowledged.

In the introductory paragraph to the Goals and Objectives on page 1-8, it is stated that the Goals and Objectives form a "broad overall framework...for the assessment and evaluation of Alternatives." The Goals and Objectives cannot be read as rigid rules, nor can they be treated as independent and unrelated. Inevitably, decisionmakers must weigh competing goals and make difficult choices among valid objectives in approving large and complex projects such as the Warm Springs Extension. Although the Proposed Project would have certain environmental benefits (Goal 2), would be compatible with adjacent land uses and planned development in most locations (Goal 3), and would support a number of important community and institutional goals (Goal 7), the aerial alignment would not be as effective in achieving these goals and objectives in the Central Park area as would the subway options. However, the subway options are much more costly and may fall short of achieving Goals 4 and 5:

- **Goal 4.** Provide Transportation Services That Make Efficient and Effective Use of Financial Resources.
- **Goal 5.** Provide Transportation Services Which are Financially Attainable.

With respect to Goal 2, the environmental quality goal, it is important to note that it is highly unlikely that a project of the magnitude of the Warm Springs Extension could be designed so as to eliminate all environmental impacts. As required by CEQA, and in conformance with the BART's Objectives for the project, mitigation measures are proposed throughout the EIR. The mitigation measures would reduce impacts to below a level of significance or, in many cases, eliminate them. Where impacts cannot be eliminated or reduced to below a level of significance through mitigation the EIR specifically identifies the residual impacts. This permits the decision makers and the public to understand the level of impact of each of the possible Alternatives.

From BART's perspective, the Design Options are correctly treated in the EIR as alternatives rather than as mitigation measures. Each of the Design Options in Central Park has

substantially different design features from the others. They vary in length, structural requirements, construction methods and, of course, cost. They also have substantially different environmental effects. By assessing the Design Options as Alternatives, the EIR provides BART's decision makers and the public with complete and detailed information on the full range of environmental impacts associated with each of the Design Options.

Since different Alternatives and Design Options have different effects, some Alternatives may, naturally, avoid adverse environmental effects that others create. It is an oversimplification of the environmental analysis to contend that the subway options must be selected because they "mitigate" the adverse effects of the aerial options. As stated in the Draft EIR, the aerial options have adverse land use and visual effects on Central Park that the subway options do not have. However, the subway options have other potentially adverse impacts that the aerial alignments avoid. Examples include the impacts related to geology, seismicity and hydrology. They also have significantly different construction period impacts than the aerial structures.

*Comment CP-2 (Fremont): Reference page 3.4-11 of the Draft EIR. The existing lake bottom is at elevation 44.0, and the low water elevation is at 48.5. High water elevation is at 51.5. The plans indicate the top of the subway structure is about 48.5, yielding a water depth ranging from zero to 3 feet. This is inadequate for boating use of the easterly end of Lake Elizabeth. The top of the subway structure should be no higher than elevation 44.0 in order to permit boating. (PW)*

**Response CP-2:** During detailed design of a subway option (if selected by the BART Board), BART will refine the proposed profile of a subway alignment through the Park and Lake Elizabeth to maintain the same water depth that currently exists within the Lake. The precise elevation of the structure will be determined during the course of preliminary engineering.

*Comment CP-3 (Fremont): Reference page 3.7-11 of the Draft EIR. Under State law, BART would be obligated to replace the amount of park land traversed by the corridor through Central Park with actual land elsewhere in the City. If the affected area is 33 acres, as mentioned in the Noise and Vibration chapter as the acreage affected by the residual noise impacts, then BART would be responsible for replacement of a minimum of 33 acres. This should be discussed in the document, and a determination made as to whether such land is actually available for replacement and the estimated cost of the replacement land stated. The cost of the land would then need to be added to the cost of the Proposed Project and the cost of all alternatives incorporating the aerial structure (revise also Tables 2-5 and 2-6). (CDD)*

**Response CP-3:** The Public Park Preservation Act of 1971 (California Public Resources Code, §5400 et. seq.) provides that no agency of the state or public utility shall "acquire...real property...in use as a public park, unless the acquiring entity pays or transfers to the legislative body of the entity operating the park sufficient compensation or land, or both,...to replace the parkland and facilities thereon".

BART understands the requirements of the Act and will provide for compensation under the terms of the Act. This will be done after the BART Board adopts a project for implementation.

*Comment CP-4 (Fremont): Reference page 3.7-11 of the Draft EIR. The Draft EIR states that the aerial structure of the Proposed Project will not significantly reduce the amount of land available within the park for recreational or civic purposes. This may be correct if the only consideration is the amount of acreage traversed by the structure. However, the aerial structure would have a significant adverse effect on recreational activities, the continuity and interrelationship of the park land use, and the overall quality of the recreational experience in the park. The aerial structure proposed would physically bisect the park and the interrelated uses such as walking trails, ball fields and concession areas. It would also result in the removal or relocation of two softball fields, and create a need to change some sailing activities in Lake Elizabeth. (CDD)*

**Response CP-4:** The Draft EIR's concluding statement regarding the direct impacts on Central Park would appear to be consistent with this comment. It says,

When the aggregate impacts on recreational activities, visual impacts, and noise impacts are considered together with the City's finding that an aerial structure would not conform with the General Plan, it is concluded that the implementation of the Proposed Project on an aerial alignment through Central Park would result in a significant adverse land use impact.

*Comment CP-5 (Fremont): Reference page 3.7-11 of the Draft EIR. Open areas below aerial structure cannot be used for the same recreational activities as before. Park visitors with kites, balls, Frisbees, etc., would be impacted. These activities might disrupt train service. Open areas below tracks would not be useful for the same existing or future purposes. (LS)*

**Response CP-5:** The potential impacts on recreation in Central Park are well recognized in the Draft EIR. It should be noted, however, that the land beneath the BART aerial structures is very open and that in some communities the right-of-way under the aerial structures has been landscaped and developed as parkland. This can be seen in the Draft EIR, Figure 3.13-2, which illustrates an aerial structure without a noise barrier. Recreational activities regularly observed in the linear park beneath this segment of the aerial structure include walking, jogging, bicycling, rollerskating, skateboarding, picnicking, sunbathing, reading, throwing frisbees, casual baseball and football, dog exercising, golf practice, and napping. Based on the level of use of this linear park, it could be argued that the potential impacts on many park activities are conservatively overstated in the Draft EIR.

*Comment CP-6 (Fremont): Reference page 3.7-12 of the Draft EIR. The passby effect on pedestrians is inadequately valued. Twenty minutes is a very quick pace for the Lake pathway. Serious walking is 30 minutes, casual strolling is 40 minutes. Three hundred foot impact zone is apparently derived from noise standards. Visual impact from line of sight vehicle traffic on*

*Stevenson Boulevard is a minimum of 1,400 feet. Using that as a currently acceptable visual disturbance distance, 7,700 feet of the lake edge pathway is within this distance of the proposed aerial structure. With a 30 minute lap, pedestrians would experience nine trains at one minute duration each when they are inside the 1,400 foot envelope. This means 30 percent of their walking experience would be exposed to the visual impact of a moving train. (LS)*

**Response CP-6:** Assuming that walkers take 30 to 40 minutes to circle the lake, (rather than 20 to 30 minutes) they would be within the noise impact zone for 8 to 10 minutes, and could expect to hear two to four (rather than one to three) BART trains pass during that time.

The commentor suggests that it is appropriate to undertake a separate calculation regarding the frequency with which BART trains might be seen by walkers. However, we are unable to verify the calculations presented in the comment. Our calculations indicate that there would be about 5,230 feet of pathway within 1,400 feet of the Proposed Project alignment. Of this length, views of the BART structure would be blocked by the island in Lake Elizabeth for approximately 300 - 400 feet, reducing the amount of pathway within this zone of impact to about 4,930 feet. A person walking the path in a clockwise direction would be in view of the aerial structure for approximately 2,960 feet while a walker traveling counter-clockwise would have a view of the aerial structure for about 1,970 feet. A person walking clockwise would be within this viewing "window" for 9 - 12 minutes of their walk, during which time 4 - 5 trains would pass if it were the peak hour or 2 - 3 trains would pass if it were the off-peak time. (Fewer trains would pass if it were a weekend or holiday.) Since it would take a train 20 to 55 seconds to travel across the 2,000 feet of structure within the frame of view, a train would be visible for a maximum of 4.5 minutes during a 40 minute clockwise walk around the Lake.

It should be noted, however, that the aerial structure would be visible beyond the 1,400 foot impact zone suggested in the comment. The photo from the end of Sailway Drive used in the photo-simulation was taken approximately 2,000 feet from where the aerial structure in the proposed project would cross the Lake. The Draft EIR concludes, in the Visual Section, page 3.8-31, that the aerial structure would have significant residual impacts on the north side of the lake, because of "the sensitivity of views into this area from nearby and more distant areas around the lake."

*Comment CP-7 (Fremont): Reference page 3.7-12 of the Draft EIR. The Draft EIR mentioned most walkers would circle the lake on the walking trail in 20 to 30 minutes. This would be an extremely fast pace. The document also states there would be only a minor to moderate effect on recreational walking in the area, and interference with conversation would only be for 2 to 10 seconds. The impact of this intrusion into the park area is grossly underestimated. The resulting impact would be significant on the quality of the recreational experience. (CDD)*

**Response CP-7:** The Draft EIR authors did not find a significant adverse effect on recreational walking around Lake Elizabeth because of the minor to moderate level of exposure by individual walkers to the effects of BART. The extensive pedestrian activity on paths provided

along the existing BART alignment, and even beneath aerial structures that lack modern noise barriers, provides support for this conclusion.

It should be noted that, based on their respective Criteria of Significance, the *Central Park: Land Use and Recreation, Visual and Noise* impacts sections of the Draft EIR have all identified significant adverse effects associated with an aerial structure through the Park.

*Comment CP-8 (Fremont): Reference page 3.7-13 of the Draft EIR. Construction storage is proposed for open space between Walnut and Paseo Padre. Much of this open space is within Central Park. Impact analysis should address the presence of storage yard in Central Park. (LS)*

**Response CP-8:** Every effort will be made to identify construction storage areas which will have a minimal impact on ongoing operations of the park and adjacent private property while still providing the contractors with a cost effective location for their operations. Construction staging and storage sites that are in close proximity to the actual construction will be required to minimize the requirement for transporting personnel, materials and supplies over the local road system continuously during the construction of the project. Contractor's site plans will be reviewed by BART and the City of Fremont to control the locations and durations of storage.

*Comment CP-9 (Fremont): Reference page 3.7-13 of the Draft EIR. The conclusion that the implementation of the Proposed Project with an aerial alignment through Central Park would result in a significant adverse land use impact is correct. It would also be appropriate to suggest implementation of Design Option 1 or Design Option 2S, with the subway through Central Park as a mitigation measure for the adverse land use impact. (CDD)*

**Response CP-9:** See Response CP-1.

*Comment CP-10 (Fremont): Reference page 3.7-14 of the Draft EIR. Explain why Lake edge pedestrian access cannot be completely mitigated throughout construction period. Fencing, earthen alternate routes, and flag controllers could ease the construction impacts. Temporary route alternations (sic) or surface degradation would probably be tolerable. Any significant closure of the lake circumference would substantially impact park visitors. (LS)*

**Response CP-10:** The fourth Mitigation Measure on pages 3.7-14 and 3.7-15 indicates that temporary walking paths around the Lake would be created and maintained throughout the construction period.

*Comment CP-11 (Fremont): Reference page 3.7-14 of the Draft EIR. Where in Central Park are temporary and permanent replacement ball fields to be located? Any site further north might present home run or foul ball conflicts with Stevenson Boulevard. Where do we replace displaced parking and maintain convenient access to sports facilities? (LS)*

**Response CP-11:** This is specifically addressed in the first and second mitigation measures on the bottom of page 3.7-14 and the top of page 3.7-15. The first mitigation measure states that, "In advance of construction, BART would relocate and replace the two affected softball fields at another location within the Park to be developed in consultation with the City of Fremont." The mitigation measures go on to note that one potential solution would be to relocate the facility about 200 feet to the north into what is now a parking area and replace the parking along the BART alignment in the area between the existing and relocated ball fields. It also states that if timely replacement is not possible, the BART would work to identify and lease temporary replacement fields at other locations so that league play could continue uninterrupted.

It is recognized that implementing plans for replacement of the softball fields may be difficult, and that it may not be possible to eliminate all potential disruption of the softball programs. It should be noted that if the City's plans for future projects in the Park such as the Golf Course, Swim Center, Police Administration Building have not been built in advance of the BART extension, additional options for siting the replacement ball fields will be available.

*Comment CP-12 (Fremont): Reference page 3.7-15 of the Draft EIR. A temporary Lake pathway is a mitigation which must be maintained. (LS)*

**Response CP-12:** See Response CP-10.

*Comment CP-13 (Fremont): Reference page 3.7-16 of the Draft EIR. The loss of land for regional transportation purposes does not present the same local value as use of land for recreation or Civic Center purposes. (LS)*

**Response CP-13:** The finding that the Proposed Project would have a significant adverse effect on Central Park does not seem to contradict this statement.

*Comment CP-14 (Fremont): Reference page 3.7-16 of the Draft EIR. The statement that the impacts of the structure and train activity on recreational walking, jogging and bicycling around the lake would be reduced to less than significant levels, but not eliminated, is misleading and an incorrect conclusion. The trails may remain intact, but the experience of the participants would be negatively impacted by the physical intrusion of the aerial structure and train passbys. (CDD)*

**Response CP-14:** The Draft EIR authors do not agree. The conclusion of a less-than-significant impact is supported by the analysis. It does not mean that there would be no impact; it means that this effect cannot be classified as a significant adverse environmental impact. As noted in Response CP-5, there is extensive pedestrian activity on paths provided along the existing BART alignment. In some cases, these paths run directly underneath aerial structures that lack modern noise barriers, and still have high levels of usage. There are paths beneath the BART aerial structure at the locations illustrated in the Draft EIR on Figure 3.13-2. To conclude that the addition of BART overcrossings of some of the paths in Central Park would

significantly affect recreational walkers would contradict clear and convincing evidence to the contrary that is exhibited in other Bay Area communities where walking paths, bicycling paths and mini-parks have been successfully developed in the BART right-of-way directly beneath the aerial structures.

*Comment CP-15 (Fremont): Reference page 3.7-17 of the Draft EIR. Why would ball fields be lost during construction? Why wouldn't they be temporarily supplied nearby and then reconstructed after development of BART line? The text and summaries should consistently show sports programming will remain intact throughout development and operation phases of the project. (LS)*

**Response CP-15:** If the mitigation measures on pages 3.7-14, 3.7-18, 3.7-20 or 3.7-22 are implemented the ball fields will *not* be lost during construction. The construction zone for the subway would pass directly through the ballfields, taking them out of service. It is for this reason, that their loss is identified as an impact on page 3.7-17.

BART has consistently recognized the need to mitigate for the temporary or permanent loss of the softball fields, as reported in several locations in this section and in the Summary.

*Comment CP-16 (Fremont): Reference page 3.7-17 of the Draft EIR. Why is it suggested a subway route would make it more difficult to maintain pedestrian routes during construction phase? Will the entire trench for subway be open and exposed at one time? Can subway be accomplished in phases so pedestrian access can be temporarily re-routed in phases? (LS)*

**Response CP-16:** The construction area for the subway would be wider than for the aerial structure. Construction of the subway would also be much more difficult and of greater duration than the aerial structure. It is not known how much of the subway would be open and exposed at one time. Based on the increased complexity of the subway construction the EIR concludes that it would be more difficult to maintain pedestrian access during the construction period.

*Comment CP-17 (Fremont): Reference page 3.7-18 of the Draft EIR. Alignments 2A and 3 are suggested as having higher impact because they would interfere with three sports fields. Compute and discuss minor radius reductions north of Stevenson Boulevard which would eliminate impact on any outfields. Train speed reductions would not present as significant an impact in close proximity to a station. (LS)*

**Response CP-17:** As requested BART has re-analyzed aerial Alignments 2A and 3 presently shown in the Draft EIR to see what possibilities exist to eliminate any impacts on the three sports fields.

Due to limitations in BART alignment, profile and curve characteristics, it is not feasible to avoid all three fields and the lake, and still avoid unreasonable restrictions for train operations. The actual position of the existing Fremont Station is the controlling factor for the alignment



north of Stevenson Boulevard. Adjustments in alignments north of Stevenson Boulevard do not avoid the problem of affecting the sports fields and the lake. It would be possible to adjust the Design Option 2A alignment to miss the sports fields. However, this could push that alignment into the Lake.

The area of the curve with the speed restriction is, unfortunately, not adjacent to the Station: it is about half-way (actually 0.4) between the existing Fremont Station and the proposed Irvington Station.

*Comment CP-18 (Fremont): Reference page 3.7-19 of the Draft EIR. Why is the land impact of alignment 2A so much less than BART's proposed project? See footnote. It may have been incorrectly interpreted that land between UPRR and SPRR is not a part of Central Park? (LS)*

**Response CP-18:** The reference to "five acres" should be deleted; it is from an earlier version of this section and was a result of an incorrect interpretation of the Plan and Profile drawings. The 1st sentence in the sentence 2nd full paragraph on page 3.7-19 which reads:

Again, like the Proposed Project alignment, the BART structure for Design Option 2A would cover about 115,000 square feet (2.6 acres) of land in the park while the proposed BART alignment would occupy about five acres.

is corrected to read:

Again, like the Proposed Project, the BART structure for Design Option 2A would cover about 115,000 square feet (2.6 acres) of land in the park.<sup>1</sup>

(Note: the footnote does not change.)

As indicated in the previous paragraph, the land in Central Park East is considered in this calculation.

*Comment CP-19 (Fremont): Reference page 3.7-20 of the Draft EIR. One brief sentence is inadequate to cover the issue of the future Central Park Golf Course. Alignment 2A would impact land acreage available for golf. Alignment 3 would probably eliminate any possible golf development. What impact would errant golf balls have on any of the surface or aerial alignments? Can BART aerial track be caged to prevent access of errant balls? These issues should be addressed. Alignment 2A or 3 could displace golf development. If so, this might create a substantial cumulative impact in that the 30 acres proposed for golf might then be subject to use for civic structures or intensive recreational uses. (LS)*

**Response CP-19:** At the time this Draft EIR was being prepared, there was no information about the design and layout of the proposed Golf Course in Central Park East. Since publication of the Warm Springs Extension Draft EIR, the City has released a Draft EIR on

the Golf Course. It indicates that the proposed project is an executive 9-hole golf course incorporating some of the existing wetlands, additional wetland mitigation areas and potential burrowing owl habitat protection. The conceptual diagram shows the approximate location of the BART extension at a location consistent with the alignment of the Proposed Project and Design Option 1. In addition, the Golf Course Draft EIR contains a conceptual diagram for an 18-hole Golf Course (Figure 3-8), but it is used to illustrate the crossing of Mission Creek and is not referenced as a project alternative.

Since it remains true that the golf course has not been approved, designed, funded or built, it also remains impossible to quantify the potential impacts of the Warm Springs Extension Alternatives on the potential golf course alternatives. Based on the Project Description in the Golf Course Draft EIR, it can be generally concluded that the Proposed Project and Design Option 1 would have no impact on the proposed golf course. Design Option 2A and Design Option 3 would seriously constrain the design options for the golf course as these alignments would bisect the site. Design Option 2S would have no long term impact on the golf course, but could have a construction period impact, if the golf course were to be completed in advance of construction of the BART extension.

BART trains could be protected from errant golf balls by 1) designing the golf course to minimize the exposure potential and 2) installing protective nets in zones of exposure.

The potential for substantial cumulative impacts if the golf course does not go forward is exaggerated. To begin with, there are no known or proposed alternative projects for development of this area that are considered feasible. In addition, the site has potentially significant environmental constraints to development including wetlands, special status species habitat, poor access, high noise levels from trains, a highly linear site configuration. In addition, most of the site is within Central Park and is shown on the Fremont General Plan as remaining in park uses.

*Comment CP-20 (Fremont): The City has made a substantial asset investment in the Softball Complex building. The complex houses program staff, a meeting room, public toilets, and snack bar. What impact results when a four field complex is fractured to smaller components? Will the City have to provide duplicate services at several locations? Will the split result in loss of profitability for snack concessions and subsequent cancellation of service?*

**Response CP-20:** The Draft EIR indicates that the aerial structure with the Proposed Project would split the 4-field softball complex. This is recognized as a significant impact in the Draft EIR and mitigation, including relocation of the fields is suggested. It is assumed that new concessions would be built at the replacement ballfields. If new temporary facilities are provided and if the snack bar is managed efficiently, it is unlikely that there would be a significant loss of profitability.

*Comment CP-21 (Fremont): The Public Park Preservation Act of 1971 will require replacement of park acreage lost due to development. Leisure Services believes that the severance of recreational continuity in Central Park and the loss of some forms of recreation activity in the vicinity of a track superstructure will require substantial acreage replacement in compliance with this law. (LS)*

**Response CP-21:** See Response CP-3.

*Comment CP-22 (Milnes): AERIAL CONSTRUCTION AT CENTRAL PARK: The DRAFT Environmental Impact Report does not address the adverse impact an aerial structure over Lake Elizabeth would have on sail boating. The San Francisco Bay Bridge causes area of absolute calm to exist beneath the bridge wherein sailboats become literally "dead in the water". The trees on the island in Lake Elizabeth have the same tendency. Construction of an aerial bridge over Lake Elizabeth can be expected to act in a similar fashion, substantially reducing the recreational value of the portion of the lake northeasterly thereof.*

**Response CP-22:** The Draft EIR directly addresses this concern. On page 3.7-12 it states that, "The overhead structure (with the Proposed Project) might also affect the localized wind patterns in the arm of the Lake and could reduce the quality of the (sailing) course."

The impacts on recreational boating activities are recognized as residual impacts after mitigation (page 3.7-16).

*Comment CP-23 (Olson): The Central Park impact of aerial or subsurface was viewed as a tradeoff of money and aesthetics. One recurring theme was that BART had made previous commitments to Fremont for the subsurface route and was balking at the cost of this plan citing the fact that Oakland paid for their underground BART facilities. Although one newspaper reporter assessed that about half the people sided with the proponents for underground and the other for the lower cost aerial route(s). Our perspective was that only a portion of the general public's concerns about the subsurface route were directly related to money. In addition, some were related to safety of a subsurface tunnel. However, it was pointed out by two people (Director Glenn and one of the citizens who was a structural engineer) that the tunnel was safer than an aerial BART track. The other issues were the noise and to a lesser extent the vibration. More than one individual expressed concern about the aerial solutions on the noise impact in the park. This is substantiated by the Draft EIR in which the range of impacts is said to be within 300 to 1,200 feet of the BART tracks depending upon the sound criteria selected. The impact on the wildlife such as the Burrowing Owl habitat, the wetlands and the baseball fields did not merit significant comment. We believe that most people recognize that relocation or rehabilitation of the owls and preservation of the wetlands are manageable activities as has been demonstrated elsewhere in the Bay Area. The affected playing fields can be moved and rebuilt where necessary. The issues are the cost to reduce noise and retain the aesthetics of Central Park.*

**Response CP-23:** Although this comment is based on the 1990 Draft EIR and public hearing, it is still applicable to this Draft EIR. It should be noted that the potential impacts on Central Park area assessed in much greater detail in the present Draft EIR as are the issues related to noise, vibration, wildlife, and wetland impacts. The present Draft EIR also considers a broader range of alternatives, in greater detail, than the 1990 Draft EIR. This information will be useful to the BART Board in evaluating alternatives. The Board, however, will not make a decision based solely on environmental factors but will also consider the economic feasibility of all the choices before it.

*Comment CP-24 (PH-Fremont): While the new draft EIR is an improvement over the document which was published last years, we were disappointed the draft EIR didn't do a better job of specifying the subway options as appropriate mitigation in Central Park.*

**Response CP-24:** See Response CP-1.

*Comment CP-25 (PH-Fremont): Central Park is a unique and very special resource. The park is just as important to Fremont and southern Alameda County as Golden Gate Park is to San Francisco, and it should receive the same sensitive treatment a BART extension through Golden Gate Park would receive.*

**Response CP-25:** The City's strong preference for a subway design through Central Park is noted. See Response CP-1.

*Comment CP-26 (PH-Boissier): I don't know that anybody's addressed the impacts that the construction of this elevated train would have on recreational use at the lake as it pertains to sailing. In the BART newsletter I received here tonight, it establishes temporary sailing courses on the lake, and unfortunately, with the raised train tracks, these would become permanent changes to the racing courses on the lake and would probably render the east side of the lake useless, as far as sailing is concerned, due to air turbulence. We noticed a significant difference in the sailing on the lake after this building was built. The wind tumbles across the lake and moved our finish line for the races.*

*The sailing club gave quite a bit of input into the design of the lake back in the '60s when it was built, as we were happy to see it expanded a couple of years ago. It allowed us to have regattas, open regattas, and bring in other sailing clubs to sail with us. A lot of them can't believe we have our own lake to sail on. We're so lucky to have a lake. A lot of sailing clubs don't have a lake to sail on and kind of dwindled. But what we'll end up with is a severe reduction in the amount of the lake that we could use for sailing and possibly it would be a safety hazard to new sailors due to severe wind shifts, particularly down near the island.*

*And I would think that any landscaping that could be large enough to cover the train tracks would certainly be detrimental to the flow of the wind down the lake. We think it would be a serious*

*mistake to render the lake useless for sailing when sailing was instrumental in getting the lake built in the first place among all the other uses that the lake's there for. That's all.*

**Response CP-26:** The concerns of the sailing club are noted and they will be contacted for their input into the establishment of sailing courses on the lake for use during the construction period. The Draft EIR on Pages 3.7-11 and 3.7-12 addresses the concerns of the sailing club indicating that sailing activities in Lake Elizabeth would be adversely affected and the overhead structure might also affect the localized wind patterns in the arm of the lake and could reduce the quality of the course. A mitigation measure is suggested on page 3.7-15 to have BART work with the City and sailing clubs to establish new temporary and permanent sailing race courses on Lake Elizabeth. See Response CP-22.

*Comment CP-27 (PH-Forney): I am here as a representative, specifically, of Fremont Soccer, boys, girls and adults. And the eastern alignment, the eastern-most alignment elevated, as an example, would deprive the soccer organization, all of the kids, specifically, in this city, of two of our fields, six and eight.*

**Response CP-27:** The investigations for the preparation of the Draft EIR concluded that none of the proposed alignments would interfere with the soccer fields. Design Option 3 would pass very close to at least one of the fields, but would not interfere with its continued use.

*Comment CP-28 (PH-Pohle): I also would like to make a comment that I noticed that the E.I.R. for the Central Park Golf Course is now out. And upon reading some of the comments that are made in that E.I.R. report and your E.I.R., you made very, very little reference and any mitigation for the golf course at Central Park. You have not addressed that at all. And I am requesting that the BART, whoever it is that's going to be doing this final E.I.R., make some mitigating circumstances there because I find it very conflicting.*

*There's going to be -- the way I read the E.I.R. from the Central Golf Course is going to be on either side of the train tracks, and if you've got BART going there, I find that a little bit difficult for golfers to go on the other side where BART is. And I think BART knew that this golf course was in the plans so I'm a little confused here.*

**Response CP-28:** See Response CP-19.

### **3.9 COMMENTS AND RESPONSES ON VISUAL AND AESTHETIC QUALITY**

*Comment V-1 (Fremont): Reference page 3.8-29 of the Draft EIR. The mitigation measures suggested for the Central Park section of the aerial structure are inadequate. This structure will result in a permanent visual intrusion into the park landscape and cannot be screened by the suggested landscape plantings. Landscape screening may be appropriate and adequate for equipment areas and fences, but would be completely inadequate when considered with the scale*

*of the aerial structure. The plantings shown in Figure 3.8-5C are mature and would take many years to just partially hide the pillars of the aerial structure. Any screening would also result in a further separation between the east and the west side of the park, affecting the interrelationship of recreational uses. Additionally, the pillars traversing Lake Elizabeth on the east side cannot be screened even partially from view. (CDD)*

**Response V-1:** The Draft EIR does not conclude that the visual mitigation measures will eliminate the impacts of the aerial structure. On pages 3.8-31 and 3.8-32 the residual visual impacts after mitigation are assessed. The analysis focuses on the three general areas of park activities/uses between Lake Elizabeth and Stevenson Boulevard. It concludes 1) that at the Lake and immediately north of it the aerial structure would "still have a significant visual impact"; 2) that in the active recreation area farther to the north the maturing of existing plantings and the establishment of additional screening landscaping would reduce the aerial structures visual effects to a level that is acceptable in an area developed for active recreation. Finally, in the third general area, near Stevenson Boulevard, the Draft EIR concludes that some visual impacts would remain but that they would be less than significant because of new buildings planned in this area and because the existing plantings (which are easily seen in Figures 3.8-6C and 3.8-6D) will mature and provide additional screening.

It is true that the mitigation plantings in Figure 3.8-5C are depicted as mature. Depending on the plants selected, it would take between 5 and 15 years for the trees to grow to a height sufficient to screen views of the structure. Many of the existing trees in the park were planted between 4 and 10 years ago, and are already beginning to screen of views of the existing railroad tracks and the fences and buildings around the softball complex. (See Figure 3.8-6C.)

It is difficult to understand how landscape plantings would further separate east and west areas of Central Park, as they are already separated by the SPTCo railroad embankment and a drainage channel. North of Mission Creek there is no physical access and very limited visual access between these two areas of the Park.

*Comment V-2 (Fremont): Reference page 3.8-31 of the Draft EIR. The discussion under Residual Impacts After Mitigation does not assess the impact of the landscape screening of the aerial structure and the affect on the interrelationship of the recreational land uses. This should be included in the discussion. Additionally, the discussion mentions that the future swim center, public safety building, and the landscaping proposed would reduce the visibility of the aerial structure and its relative importance to the landscape of Central Park. It is also stated that although some visual impacts would remain, they would not constitute a significant adverse environmental impact. The swim center and public safety facilities have not yet been designed or received site plan approval. The City Council has made a preliminary determination to locate a future Police Building in the Civic Center/Central Park area. Specific siting for the building is still to be determined. It is inappropriate and speculative for the consultant to assume these proposed buildings will screen or reduce the visibility of the aerial structure. (CDD)*

**Response V-2:** During data gathering for the EIR work, the consultant team requested information from several City departments regarding present and planned activities in Central Park. They were informed that the adopted Master Plan for Central Park (which was used in the 1987 Fremont-South Bay Alternatives Analysis study) is out of date should not be used. One of the reasons given was that it does not show four possible projects that could affect Central Park land uses. They are the Gymnasium/Swim Center, Police Department Building, Golf Course and Cultural Arts Center. The consultants recognize that none of these projects have been designed or approved, but that they are important to the City. It is clear that they must be considered in the Draft EIR, because they are "reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the proposed project."<sup>1</sup> Although the buildings are not designed or even specifically sited, the conclusions in the Draft EIR regarding how they would change the visual environment in the portion of Central Park along Stevenson Boulevard are appropriate because they are presented under "Cumulative Impacts" (page 3.8-26).

The mitigation measures for the Central Park visual analysis area note that BART would work closely with the City to develop a landscape plan for the recreation complex and the now vacant land on the north shore of Lake Elizabeth. It indicates that "groups of plantings would be strategically sited throughout the area north of the lake . . ." The mitigation measure is phrased in this way so as to maintain flexibility in designing a landscape plan that will "visually define and aesthetically enrich the various use areas . . ." In this way BART and the City would work together to provide screening for near and more distant views of the structure that would also work to define the recreational use areas of the Park. In concept, this would be similar to the landscaping in place today that defines the boundary between the soccer fields and the open area north of Lake Elizabeth. It consists of earthen mounds, grass, trees and shrubs, and meandering walkways.

*Comment V-3 (Fremont): Reference page 3.8-31 of the Draft EIR. The suggestion that the visual impact in an active sports area would be acceptable is too judgmental a statement for an objective EIR document. (LS)*

**Response V-3:** The analysis leading to this conclusion is both logical and consistent. Note that the statement would apply only after mitigation. The Draft EIR states, on page 3.8-19 that, "Although the aerial structure would be bulkier than the built elements that now exist in the sports complex area, it would not be out of scale with the floodlight standards or the snack bar structure in the softball complex. Plantings in this area would provide a modest level of screening. In spite of these contextual factors, visual impacts would be significant (before mitigation) in this area."

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<sup>1</sup> CEQA Guidelines, §15355 (b).

*Comment V-4 (Fremont): Reference page 3.8-31 of the Draft EIR. The Fremont General Plan considers Central Park a unique visual resource, and a valuable recreational asset to the community. Therefore, it appears the consultant has underempathized [sic] the impact of the aerial structure on the visual and aesthetic quality in the Central Park recreational area. Implementation of Design Option 1 or Design Option 2S, with the subway through Central Park, should be suggested as a mitigation measure for the adverse visual impact. (CDD)*

**Response V-4:** The Draft EIR finds that the aerial structure, even after mitigation, would have significant adverse residual visual impacts. The level of impact is described in the text and illustrated in color photosimulations. Furthermore, the Draft EIR contains a separate section assessing the land use and recreation impacts on Central Park.

As noted in the Draft EIR, Design Option 1 and Design Option 2S would create significant visual impacts in Central Park only during the construction period. These design options are assessed as alternatives, and not as mitigation measures, for the reasons discussed in Response CP-1.

*Comment V-5 (PH-Higgason): There was another portion where it talked about putting that sound barrier wall on both sides of BART would impact the BART viewer ride and the historic Irvington scenery. I'm sorry. I don't agree. I've got pictures from my backyard, and they're not scenic. The only scenic thing is the little winery. The rest of it is warehouses, fields, tractor trailer rigs. I mean, there's nothing pretty back there. Even though I live there, I do look out there. It's nice not to see a bunch of other houses except for the houses on the hill which I wish we hadn't built either. Needless to say, I'm not real thrilled.*

**Response V-5:** The commentor apparently is referring to the analysis on page 3.8-22 of the Draft EIR. The analysis finds no significant visual impacts from the at-grade tracks and sound walls. The text indicates that views of the Irvington District and the Gallegos Winery would be mostly obscured by the depressed portion of the alignment near the Irvington Station and soundwalls located adjacent to the roadbed in the at-grade segment between the Irvington Station and Durham Road.

*Comment V-6 (PH-Higgason): I guess one of the alternatives, I wish BART wouldn't be there, I'd like Alternative 8, although I know it's one of the least liked alternatives, because it gets it away from my backyard. They want to put a sound barrier wall in, why don't they put it behind our houses so we don't have to look at the people every 15 minutes. It's not fair to us to lose our privacy. I've been there 12 years. I've been in Fremont just about all my life. And I'd like to keep my privacy. It's not fair for me to lose that just because people are going to be behind my home.*

**Response V-6:** The sound walls alongside BART will mitigate visual intrusion from BART. Page 3.8-22 of the Draft EIR states that:



In the at-grade segment of the route between the Irvington Station and Durham Road, passengers would mostly see the sound walls located immediately adjacent to the roadbed, particularly on the west side.

### 3.10 COMMENTS AND RESPONSES ON CULTURAL RESOURCES

*Comment C-1 (Fremont): Reference page 3.9-11 of the Draft EIR. Under the section on Proposed Project Impacts, the discussion on the focused subsurface archaeological testing program related to the CA-Ala-343 site is a mitigation measure and should be discussed in that section (rather than under impacts). It should also be clarified this task would be performed in implementing any of the design options since all would have some level of impact on the subsurface deposits. (CDD)*

**Response C-1:** The need for an archeological testing program to determine the integrity and cultural complexity of CA-Ala-343 is recognized by BART as an essential study no matter which alternative is selected. The City is correct in noting that the testing program could be classified as mitigation. Therefore, the first full paragraph on page 3.9-11 of the Draft EIR is hereby moved to the next page and inserted in the Mitigation sub-section after the heading CA-Ala-343.

*Comment C-2 (SHPO): The Office of Historic Preservation assists federal agencies with meeting legislated and regulatory historic preservation responsibilities. Your cover letter, however, gives no indication that a federal agency is involved in the proposed extension project. What federal agency, if any, will be required to permit or fund the project?*

**Response C-2:** No federal agency is directly involved in the project. No federal funds are anticipated for the project. Appropriate regulatory federal agencies may be requested to issue permits for portions of the project. An example is the 404 permit which would need to be issued by the U.S. Army Corps of Engineers for filling a portion of the South tule pond.

*Comment C-3 (PH-O'Conner): I also wanted to touch on the fact that we have a good historical resource on the corner of Washington Boulevard and Osgood. There's an old historical winery. I would like to see that not impacted too greatly, that we do something with the bricks or something and save some of that historical resource at that point.*

**Response C-3:** Page 3.9-13 of the Draft EIR specifically calls for avoiding any impacts to the historic winery ruins by preserving the ruins in their present state including consideration of methods for stabilization. An appropriate barrier can be placed around the ruins so that the resource is protected and at the same time visually available to the public.

*Comment C-4 (PH-Hirsch): Lastly, the Old Gallegos Winery facility across the street is something that should be tied in with what we do so we do it in a proper way to make that a bit of an asset*

*for our area because it does have a lot of history and it is a significant structure. And it needs to be done in the correct way so as not to be destroyed in the process we're talking about.*

**Response C-4:** See Response C-3.

### **3.11 COMMENTS AND RESPONSES ON UTILITIES AND PUBLIC SERVICES**

*Comment U-1 (SPTCo): Page 3.10-2, Communication Utilities - About 0.7 mile of US Sprint fiber optic cable lies on westerly side of SPTCo track in vicinity of Warm Springs. Protection and/or relocation must be done as needed.*

**Response U-1:** Mitigation measures described on page 3.10-11 of the Draft EIR are proposed to insure the protection of the communication utilities.

*Comment U-2 (SPTCo): Page 3.10-3, Communities Utilities - MCI and SP Telecom both have fiber optic cables on westerly side of SPTCo track. Protection and/or relocation must be done as needed.*

**Response U-2:** See Response U-1.

*Comment U-3 (Hetch Hetchy): Your proposals would impact our 115KV transmission lines at the Durham Road Crossing. Alternatives Seven and Eight would encroach upon the safety margins inherent in the clearances between the overhead lines and vehicles passing underneath. If you should choose to elevate the grade and/or in other ways reduce the clearance, as in Alternates Seven and Eight, suitable mitigation will be required. However, we do not believe this is an insurmountable problem.*

**Response U-3:** Comment noted. Mitigation measures described on page 3.10-10 of the Draft EIR are proposed to insure adequate clearance between BART and transmission lines.

### **3.12 COMMENTS AND RESPONSES ON SAFETY AND SECURITY**

*Comment SS-1 (Fremont): Reference page 3.11-1 of the Draft EIR. No discussion of security or vandalism impacts on park supervision program is included in this section. No reference is made to the existing park security program. Are Park Rangers expected to keep visitors from flying kites in proximity of the track for fear of dropping metallic mylar films onto the third rail? Who responds when a park visitor lofts a ball or Frisbee at an oncoming train? (LS)*

**Response SS-1:** As noted in the Draft EIR, page 3.11-3, BART police are responsible for safeguarding BART property, personnel and the lives and property of BART passengers. BART police would respond to reports of incidents along the project right-of-way, whether

within Central Park or at other locations. As noted, in the event of reports of crimes in progress, the Fremont Police might be the first to respond, unless BART police units are patrolling nearby. In no event, is it expected that the responsibility for patrolling the right-of-way within Central Park would fall to the City's Park Rangers.

Out of concern for passenger safety, BART's System Safety staff has conducted tests of the ability of BART cars, and particularly their windows, to withstand impacts from objects that could be lofted at trains such as rocks, baseballs, softballs, golfballs, frisbees, etc. The windows are able to withstand reasonably expectable forces from such objects. Hence, BART does not propose to erect any special protective screens along the alignment through the Park.

*Comment SS-2 (Fremont): Reference page 3.11-4 of the Draft EIR. The Fremont Fire Department has nine fire stations, not eight as listed in the report. (FD)*

**Response SS-2:** The word "eight" in the first line of page 3.11-4 is hereby changed to "nine".

*Comment SS-3 (Fremont): Reference page 3.11-4 of the Draft EIR. Identify the location and response time to Fremont of the four emergency vehicles. (FD)*

**Response SS-3:** The nearest of BART's four emergency vehicles is located at the Hayward yard. It is estimated that the emergency vehicle could respond within 30 minutes of an incident. The procedures established in the BART Emergency Plan call for BART Central Control to mobilize the emergency vehicle operators, without prior request, and to notify the Fire Department Incident Commander when the emergency vehicle is ready to be set on the track. The Emergency Vehicle would not be dispatched until ordered by the Fire Department Incident Commander.

*Comment SS-4 (Fremont): Reference page 3.11-5 of the Draft EIR. This section makes reference to a safety engineer review of drawings and specifications for compliance with safety codes. It further states on pages 3.11-6, the Fremont Fire Department requests an opportunity to conduct a review of plans for conformance with local codes.*

*At the July 17, 1991, EIR meeting, a BART representative stated BART enjoyed autonomy on matters of design criteria and review.*

*The Fremont Fire Department contends that Title 19 of the California Code of Regulations gives fire department jurisdiction over BART stations. Specifically page 1, paragraph 1.03, states these regulations should govern use and maintenance of structures used for awaiting transportation. Title 19 constitutes the basic building design and construction standards of the State Fire Marshal. (FD)*

**Response SS-4:** See responses G-5 and G-6.

*Comment SS-5 (Keenly): Construct an aerial alignment opposite the Grimmer School.*

*An aerial alignment near the Grimmer School provides for the safety accorded the schoolchildren while at the same time enhancing the view from the BART train (see Figure 3.8-8B in the Draft EIR). The at-grade alignment, which would construct walls at the outer edges of the BART tracks, would detract from the riders' view significantly while at the same time not increasing the safety factor (see Figure 3.8-8C in the Draft EIR).*

**Response SS-5:** BART has had excellent success in protecting many miles of at-grade track from unwanted incursions of any type. Because of the high voltage third rail, and the high speed and frequency of trains, public safety concerns demand full protection of the right-of-way. This requires continuous, high security fences (or sound walls with security fencing on top) and bi-lingual high voltage warning signs on both sides of the right-of-way wherever the tracks are at-grade. The commentor's observation about the at-grade alignment and sound walls detracting from the riders' views is true; however, the soundwall also provides visual privacy for residents whose backyards are along the alignment. See also response V-6.

*Comment SS-6 (Allen): Page 3.11-1: Footnote 1 does not distinguish between vehicle-miles and passenger-miles. It should do so.*

**Response SS-6:** The death rate is expressed in terms of 100 million *passenger* miles. Page 3.11-1, footnote 1, which reads:

<sup>1</sup> In 1988 the death rate in the United States for passenger cars was 1.19 per hundred million miles. For buses the rate was 0.03, for scheduled airlines it was 0.01 deaths and for passenger rail trains it was 0.02. National Safety Council, 1990, *Accident Facts*, p. 90.

is changed to read:

<sup>1</sup> In 1988 the death rate in the United States for passenger cars was 1.19 per hundred million miles. For buses the rate was 0.03, for scheduled airlines it was 0.01 deaths per hundred million passenger miles and for passenger rail trains it was 0.02 per hundred million passenger miles. National Safety Council, 1990, *Accident Facts*, p. 90.

*Comment SS-7 (UPRR): Third, safety and security will be a problem as the railroad experiences instances of trespassers on the tracks in this location.*

**Response SS-7:** Safety and Security along the segment of the UPRR and SPTCo rail corridors would probably be improved by the presence of BART by making access more difficult (since the BART right-of-way will be enclosed by fences).

*Comment SS-8 (PH-UPRR): We have real problems with security, I think. Unfortunately, we have a problem with a lot of people being on our tracks, and we think a tunnel would probably encourage that activity. So the security would have to be really strong.*

**Response SS-8:** See Response SS-7.

*Comment SS-9 (PH-Kliment): My main concern is about safety in regarding the railroads versus BART. I live on Valdez Way, 1585 Valdez Way, I forgot to mention that, and that runs parallel of the Union Pacific Railroad. And after hearing all the comments tonight, I'd be for the plan to not even have BART go through the park. Because reading the Environmental Report and living on Valdez Way, there's a lot of things I don't think people are aware of.*

*The Union Pacific, when I moved here in 1977, was just a spur track to Ford and the Southern Pacific was to General Motors. Now, they are full blown with freight trains. And we all know the records of the past few months of Southern Pacific and Union Pacific and Amtrak. So if we're going to make passenger trains out of the railroads, think about the record of Amtrak in the last year; think about Southern Pacific and the hazard and the safety involved.*

*On March 27th of this year, the Union Pacific, at 7:15 in the morning, went down our track by my house and the one wheel slipped off the rail. And it sounded like an earthquake. It was shattering. And the engineer of the train didn't--as far as I know, is what I heard from the railway workers--didn't stop and check the train and went on to Milpitas. Well, you should see the damage to the ties. They have come out and replaced them. They were absolutely splintered because as their wheel went along, it tore it up.*

*So the trains, it's true, have been mentioned as going ten miles an hour. Now, this is the fact because it was a little piece in the paper that Union Pacific said that the wheel went off the train, I think at Gomes Park, just a little bit farther down from me and that it was minor. Well, I guess you consider something like that minor if it doesn't derail.*

*And the hazard, those cars are carrying, it said in the paper, something about it was carrying, it was a minor thing, it was carrying car parts. Well, they carry a lot more than car parts. There are chemical trains with the I-800 number to call if they derail. There's lumber. There's coal. There's car carriers, which is natural because they're going to the plant. But there are a lot of different things like piggyback, so if you have a derailment this can be serious. It can go either way.*

**Response SS-9:** The comments regarding the existing railroad service and the potential hazards of freight rail service are noted. In the past few months there have been several large and highly publicized rail accidents in California. Typically, there are more than 100 non-grade crossing rail accidents in the state each year (and over 300 grade-crossing accidents). Of these, only a few of the non-grade crossing accidents involve injuries or fatalities. In 1988, for

example, there were 121 non-grade crossing accidents with 2 fatalities and 32 injuries.<sup>2</sup> Since there are 6,267 miles of railroad track in the state,<sup>3</sup> the risk of an accident occurring at any given location remains quite low. Based on 1987 data, the accident rate is about 1.4 accidents per mile of track per 100 years. The risk of an injury accident is, clearly, much lower.

The location of the BART alignment adjacent to freight rail alignments would create a small risk that a BART train could be harmed during the occurrence of a train accident on an adjacent track. The risk is very low, however, as it would have to involve the concurrence of a number of low probability events. The accident would probably have to be a large derailment, with debris extending across the both railroad and BART alignments, and it would have to coincide with or occur immediately before the passage of a BART train.

*Comment SS-10 (PH-Higgason): The other issue, too, at the Grimmer School is the safety of the children. And kids love trains. Like they've said, there have been accidents with the trains. That's just going to be one more thing to take the kids' mind and put them near the train tracks if there's a BART station there and there's no way of protecting them. And I just need to find out how we're going to resolve all of this.*

**Response SS-10:** See Response SS-5.

Since the existing SP and UP alignments are not fenced, passage across either or both rights-of-way is both possible and relatively common, by both children and adults. The construction of BART and the installation of the BART security fencing along the alignment would eliminate the possibility of passage across the corridor except at designated streets and sidewalks. Grimmer School children might still have access to the SP right-of-way but the construction of BART would completely eliminate any "short-cuts" or paths across the corridor. This would reduce the risks of the exposure to school children to harm from the adjacent rail corridor.

*Comment SS-11 (PH-Aihara): The other thing, too is, in looking at the executive summary -- I read a lot of reports in my work, and I know that a lot of people only look at the summaries. And I think there was only one box as far as safety and security. And I have seen many people riding on the trains. And even with the wall, there will still be people, hopefully, none of the kids from the elementary school because elementary school grounds run fairly close to the trains tracks also, but that doesn't seem adequate. Just to think the security plan is going to work would be one thing, but I can only assume that costs for security, additional people and additional materials for fences and BART, will go up. And I don't think that is adequately covered.*

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<sup>2</sup> California Public Utilities Commission, Safety Division, Annual Report of Railroad Accidents Occurring In California, Calendar Year 1988, April 1, 1990, pp. 1-4; II-2.

<sup>3</sup> Pacific Data Resources, California Almanac, 4th Ed., 1990, p. 377.

**Response SS-11:** The costs for the project include full and complete protection of the BART right-of-way from unauthorized public access. As noted in Responses SS-5 and SS-10, the Proposed Project would block access across the railroad corridor adjacent to Grimmer School where it is not fenced or protected.

*Comment SS-12 (PH-Keenly): I'd like to make a couple of comments about the Grimmer School. I rode my bicycle by there yesterday and if you look out there right now, there are not even walls blocking the school. There's a fence along the outside of the Grimmer School which is three feet high, which means currently any child can jump over the fence and walk in front of any freight train. So instead of putting the walls in front of the BART -- or I'm sorry, on either side of the BART, why not put the walls next to the school? That way, the kids can't jump over the wall or anything like that as they could currently.*

**Response SS-12:** BART must protect its alignment from unwarranted public access, but would not be able to invest its (public) funds in the protection of Southern Pacific and/or Union Pacific right-of-way as well.

### 3.13 COMMENTS AND RESPONSES ON TRANSPORTATION

*Comment T-1 (AC): In the transit discussion in Section 3.12.3 - Impacts of Proposed Project - on page 3.12-47, it is estimated that 40 persons would use AC Transit to connect with BART At Warm Springs on an average daily basis in the year 2010. The number appears to be quite low, considering the number of businesses in the Warm Springs area. The previous paragraph points out that the AC Transit Comprehensive Service Plan (CSP) shows one bus route passing near the proposed Warm Springs Station (Line 31). It is also mentioned in this paragraph that if a BART station were constructed in Warm Springs, AC Transit would modify bus service to connect to that station. Apparently, the analysis leading to the 40 daily AC Transit passengers did not take this bus service modification into account. A revised estimate of daily AC Transit bus passengers should be made, with the assumption that AC Transit will modify its bus service to serve the Warm Springs Station.*

*If a Warm Springs station is constructed, AC Transit is proposing to make the following CSP bus route changes:*

- *Line 34 would be extended to the station.*
- *Lines 31 and 22 would deviate from the current proposed route to serve the station.*
- *Line 32X, which is currently proposed to operate as an express to the Fremont Station, would be revised to operate as a feeder route serving both the Warm Springs and the South Warm Springs Station (if built).*

- *Lines 24 and 28 might be revised to also serve the station.*

**Response T-1:** The estimate of transit patronage at the Warm Springs station is based upon the MTC regional transportation model. The model run assumed only the Route 31 bus passing near the Warm Springs station, since additional service had not been committed by AC Transit. The first paragraph of page 3.12-47 says that "it is possible that AC Transit would modify service to connect to that station".

If AC Transit makes the modifications discussed in their comment, it would be reasonable to expect approximately 400 daily AC Transit passengers to and from the Warm Springs station. BART, working with AC Transit, intends to design the station to accommodate future bus transit services, such as proposed by AC Transit.

*Comment T-2 (AC): It is important to note that employment in the area served by the Warm Springs extension is quite large and continues to grow. Virtually no work site is within walking distance of any existing or proposed BART station. Therefore, reverse commuters relying on BART must use a transit link to reach their place of employment.*

**Response T-2:** Comment noted. No response required.

*Comment T-3 (AC): In all of the transit discussions in Section 3.12.9 - Impacts of Alternatives 6, 7, and 8 - on page 3.12-84; Section 3.12.10 - Impacts of Alternative 9 - on page 3.12-90; Section 3.12.11 - Impacts of Alternative 10 - on page 3.12-93; and, to a lesser extent, Section 3.12.12 - Impacts of Alternatives 11 - on page 3.12-98, it is stated that the impacts on transit service are similar to the Proposed Project. Since AC Transit has designed its CSP around the creation of a major Timed Transit Center, to be located at the Irvington BART Station, and would modify the CSP routes to serve the Warm Springs and South Warm Springs Stations, the choice of Alternative would have a major impact on bus transit in this area. This is especially significant since a suggested transit mitigation measure suggested is for AC Transit to modify its routes to improve service subsequent to project approval.*

**Response T-3:** Each of the BART extension alternatives, Proposed Project and Alternatives 4 through 11, offer opportunities to modify AC Transit's proposed Comprehensive Service Plan to enhance bus transit connections to BART. As mentioned in Comment T-1, AC Transit proposes to revise their CSP routes to better serve a Warm Springs station. Route modifications similar to those suggested by AC Transit will enhance bus ridership at the Warm Springs station for the Proposed Project and Alternatives 4 and 5 (as noted in the response to Comment T-1). Route modifications to serve the Warm Springs station are more important with Alternatives 6 through 9 since there would be no Irvington BART station. The proposed timed transit center at Irvington is anticipated to go into service several years before BART service could be extended to Irvington and presumably would remain as a transit center even if BART did not have a station at Irvington. Alternative 10 with no BART stations at either Irvington or Warm Springs would likely result in AC Transit route modifications at the South



Warm Springs BART station to improve service connections in the southern most portions of Fremont. Alternative 11, with Irvington and South Warm Springs BART stations but no Warm Springs BART station would likely result in similar route modifications to Alternative 11 in southern Fremont.

BART will work with AC Transit to devise an appropriate local bus system in Fremont that coordinates well with the chosen BART station arrangement.

*Comment T-4 (AC): Concerning the conceptual station plans that are mentioned in Section 3.12 - Transportation - bus transit centers should be located as close to the entrances to stations as possible with an exclusive lane for bus access and egress. Kiss-ride lanes should be located between the transit centers and the surface parking lots. This arrangement will reduce traffic congestion and conflicts, as buses will not have to compete with taxis, kiss-ride vehicles, and vehicles entering the parking lot. This would greatly improve the overall circulation at the stations. Such exclusive bus access lanes have proved to be effective at existing BART stations such as Concord and El Cerrito del Norte. In addition, the convenience of minimum walking distance between bus/BART transfers will encourage transit usage.*

**Response T-4:** Figures 2-4, 2-5 and 2-6 in the Draft EIR illustrating station concepts include special bus facilities similar to these comments. BART, working with AC Transit, will use design techniques such as those suggested in the comments to enhance design of the stations and assist in promoting transit access to the stations.

*Comment T-5 (AC): The discussion of traffic cumulative impacts notes that with the Proposed Project there will be a degradation of Levels of Service for several intersections. In particular, it is noted that the Driscoll Road - Osgood Road/Washington Boulevard intersection and the Mohave Drive/Mission Boulevard intersection will go to LOS F. Nowhere in the Draft EIR is there any discussion how the increased traffic congestion will affect AC transit bus service reliability or travel time, and thus AC Transit costs or ridership. The Draft EIR claims that there would be no significant impacts on transit. LOS F at these intersections will definitely impact AC Transit.*

**Response T-5:** Increased traffic associated with cumulative growth consistent with the Fremont General will affect AC Transit's service reliability and travel times. However, the traffic improvements identified by the City of Fremont and the proposed mitigations identified in the Draft EIR will result in traffic levels of service of D or better at most intersections. As identified in the Draft EIR on Page 3.12-71 there are several intersections which are expected to have residual impacts after mitigation. These intersections include Driscoll Road-Osgood Road/Washington Boulevard LOS E; Mohave Drive/Mission Boulevard LOS E; Warm Springs Boulevard/Mission Boulevard LOS E; Warm Springs Boulevard/Kato Road-Scott Creek LOS E and several freeway ramps. Four of the twenty one AC Transit routes in the Fremont area pass through one or more of these intersections. Most of these intersections would operate at an unacceptable LOS, even without the proposed BART extension. In general the effect of BART

on congestion levels is relatively small and the mitigation measures identified in the Draft EIR improve other intersections which tend to improve bus service reliability.

*Comment T-6 (AC): The subsidized cost of free parking spaces at BART stations should be considered. If parking fees were charged, there could be additional incentives to traveling to and from the stations in ways other than driving. These incentives could include increased frequency of bus service connecting to the stations, reduced cost or free transfers between bus and BART, expanded transit information and marketing, and additional free bicycle lockers. Improved, more frequent bus service would attract additional bus riders and reduce the size of the proposed parking lots. This will also have a beneficial effect on air quality. If people drive to BART stations as part of their commute, they will have their cars available for other high pollution generating short trips while on their way to or from the BART stations. If they utilize feeder bus service, the negative effects on air quality in the vicinity of the stations will be reduced. In addition, auto congestion in the vicinity of BART stations would also be greatly reduced.*

**Response T-6:** The existing BART stations, with the exception of Lake Merritt Station, provide free parking to BART riders. The proposed BART extensions are planned to provide adequate and free parking spaces for BART riders. The question of parking fee at BART stations is a continuing subject of discussion at BART. However, a fee for parking would entail a change of BART Board Policy. BART will continue to work with AC Transit and other bus operators to facilitate their provision of improved bus service at all proposed station locations. (For example, see response T-4 in regard to station enhancements for transit.) Convenience shopping or other errands while en route to or from a BART station by combining potential trips tends to reduce vehicle miles, cold starts and air pollution.

*Comment T-7 (Fremont): Traffic Mitigation: The Transportation Section of the Draft EIR presents volumes of information regarding the traffic impacts of the new BART stations. However, it fails to identify specific mitigations for which BART is responsible. Based on data presented in the EIR, the City Council believes BART should be responsible, as a minimum, for full improvements at the intersections of Driscoll/Osgood/Washington and Warm Springs/Osgood/S. Grimmer and the Blacow Road grade separation and street improvements between Roberts and Osgood. BART should consider using the existing structure in the abandoned Route 238 right-of-way south of Blacow Road to build an I-680 on and off-ramp directly into a parking structure at the Irvington Station. BART should also provide pedestrian improvements to facilitate walking to the station sites, install any traffic signals required at station driveways, and install transitional street improvements beyond BART station frontages. The cost of adequately mitigating all the impacts of the Warm Springs extension are the responsibility of BART and the region as a whole and not the City of Fremont.*

**Response T-7:** BART's enabling legislation states that BART's goal is to provide regional transit service; therefore, it is not within the scope of BART's authority to construct roadway and intersection improvements. However, BART will mitigate traffic and circulation impacts caused by the extension by contributing to off-site street improvements planned and constructed

by the City of Fremont commensurate with station related traffic. In addition, BART will make normal frontage improvements at each of their new station sites.

The Irvington Station is planned as a major multi-modal transit center. AC Transit's Comprehensive Service Plan identifies the Irvington BART Station as a key transit center for timed transfers between routes that serve southern Fremont. In terms of the connecting ramps to I-680 there are a number of issues that resulted in the concept not being included as part of the Warm Springs Extension. The project as described in the Draft EIR does not preclude the addition of direct connector ramps at some time in the future to enhance long term transportation service.

Some of the issues related to the direct connection of I-680 to an Irvington Station parking area are as follows: The South Warm Springs Station is easily reached from the Scott Creek Road interchange and is approximately six miles closer to the Santa Clara County line than the Irvington Station. Therefore, the South Warm Springs station is preferred for accessing BART from Santa Clara County via I-680 to minimize automobile miles traveled on I-680. Santa Clara County transit buses will use the South Warm Springs Station for their transfer location in order to minimize route length and travel time, important operating considerations for costs and fleet size. The idea of connecting ramps to the station parking area is of concern to Caltrans because the ramps would involve left lane egress and access to the freeway involving potentially slower moving traffic in the fast lane entering or exiting the freeway. The City of Fremont had previously expressed some concern that the ramps might also be used for local traffic, rather than strictly BART station access. This would load additional traffic on the adjacent city streets, where there already is fairly large traffic volumes.

Additionally, connecting the I-680 ramps to the Irvington station parking area would require significantly more cost for right-of-way and probably a parking structure. This cost would likely not result in additional patronage since the South Warm Springs station serves the same pool of anticipated riders. Cost is very important, and since the direct I-680 ramp connectors are not essential, they have not been included in the proposed project. The ramps can, however, still be considered at some future time when warranted.

*Comment T-8 (Fremont): Reference page 3.12-4 of the Draft EIR. The method used to calculate signalized intersection level of service is slightly different from our usual TJKM method. The method used by DKS differs in its treatment of right- turn movements and does not appear capable of evaluating alternative phasing arrangements, such as right-turn overlap phasing. As such, this method would appear to generate more conservative level of service results.*

**Response T-8:** Comment noted. One example of this conservative approach is noted in Comment T-19, where the intersection of Fremont Boulevard with Cushing Boulevard is mitigated by overlap phasing.

*Comment T-9 (Fremont): Reference page 3.12-4 of the Draft EIR. The description of the all-way stop-controlled method of calculating level of service appears to be different from the method actually used, as shown in Transportation Technical Appendix. (PW)*

**Response T-9:** The method described in the text was used for the evaluation of existing conditions. In most cases, intersections were worse than LOS C. Therefore, the analysis of future conditions did not revisit these calculations. The figures in the appendix are shown simply to provide information on traffic volumes, and for input to the signalized level of service calculation, when appropriate.

*Comment T-10 (Fremont): Reference page 3.12-4 of the Draft EIR. The discussion about the Blacow Road extension should be expanded. The Blacow Road extension is included in the City of Fremont's General Plan to accommodate the presence of the BART station in this area. (PW)*

**Response T-10:** The analysis in the Draft EIR shows that Blacow undercrossing will benefit the City of Fremont whether or not the Irvington Station is built. In the year 2010, during the P.M. peak hour, the proposed underpass is estimated to carry about 780 vehicle per hour, of which 190 vehicles (about 25 percent) would be generated by the proposed Irvington Station and 590 vehicles (about 75 percent) would be generated by other developments in the Irvington District.

*Comment T-11 (Fremont): Reference page 3.12-13 of the Draft EIR. Osgood Road will be a four-lane facility, with provisions for left turns, not strictly an undivided facility. Provisions for left turns should be available at the Irvington BART Station. (PW)*

**Response T-11:** Comment noted. The text in the Draft EIR has now been changed to incorporate this statement, as follows:

Page 3.12-13, 3rd paragraph, 4th sentence, currently reads:

City of Fremont plans provide for Osgood Road/Warm Springs Boulevard to become a four-lane undivided facility from Washington Boulevard to just north of Mission Boulevard.

and is changed to read:

City of Fremont plans provide for Osgood Road/Warm Springs Boulevard to become a four-lane facility with provision for left turn movements from Washington Boulevard to just north of Mission Boulevard.

*Comment T-12 (Fremont): Reference page 3.12-33 of the Draft EIR. The EIR does not address the impacts to local circulation in the vicinity of the Irvington BART Station with respect to the elimination of Railroad Avenue. We would anticipate a requirement to connect High and Main Streets. (PW)*

**Response T-12:** BART will be buying the properties with access affected by the elimination of Railroad Avenue. The relocation of the SPTCo tracks in connection with the elimination of Railroad Avenue will eliminate the current connection between High Street and Main Street. A connection of these streets adjacent to the SPTCo tracks would maintain the connection between the two streets.

A new bullet is added on page 3.12-33 as the first bullet on the page as follows:

- The elimination of Railroad Avenue north of Washington Boulevard and the Irvington Station will remove the existing connection between High Street and Main Street.

A new section is added on page 3.12-61 just before the section titled **Mitigation of Intersection Capacity Problems** as follows:

**Mitigation of Local Circulation Problems.** The project eliminates Railroad Avenue to the north of Washington Boulevard and the Irvington Station severing the connection between High Street and Main Street. It is proposed to mitigate this impact by constructing a street connection between High Street and Main Street adjacent to the SPTCo tracks.

*Comment T-13 (Fremont): Reference page 3.12-33 of the Draft EIR. The report discusses significant traffic impacts for the proposed project. Included in this discussion are descriptions of the percent of BART traffic relative to the total traffic in 1998. These percentages should not be interpreted as BART's responsibility for mitigation. BART's mitigation responsibility should be based on a combination of factors. These factors include: (a) the need to have certain street and access improvements in place when train service begins, (b) the satisfaction of normal frontage improvement requirements, and (c) the percent of incremental traffic at impacted intersections where the timing of improvements can be delayed.*

*This latter concept needs further explanation. Calculating mitigation responsibility by this method is in line with the intent of AB 1600. Where existing roadway deficiencies do not exist, it becomes incumbent upon future development to remedy anticipated problems. Therefore, the calculation of the mitigation responsibility must be based on the net growth in traffic - not the total traffic - at those problem locations. If a deficiency does currently exist, then the percentage of total traffic can be considered. (PW)*

**Response T-13:** As discussed in response T-7, BART will make normal frontage improvements for each of the new station sites; additionally BART will participate in paying for off-site street improvements commensurate with their contribution to the traffic. For those intersections that do not have current deficiencies BART would pay their proportionate share of the mitigation based on the net growth in traffic consistent with the intent of the nexus legislation, Government Code 66000 et sequence. For those intersections that already have deficiencies

BART would pay their proportionate share of the mitigation based on the percentage of total traffic again consistent with the intent of Government Code 66000 et sequence.

*Comment T-14 (Fremont): Reference page 3.12-16 of the Draft EIR. The Mitigation Measures section should also list those BART driveway intersections that will require traffic signals. These signals may also require traffic signal interconnect. (PW)*

**Response T-14:** The Proposed Project would require traffic signals at the following locations:

- *Irvington Station:*
  - Main driveway to parking lots on Osgood Road.
- *Warm Springs Station:*
  - Both driveways to parking lots on Warm Springs Boulevard.
- *South Warm Springs Station:*
  - Southern driveway to parking lot on Warm Springs Boulevard.
  - Driveway on Kato Road.

Station descriptions in Chapter 2 are modified to include this information as follows:

Page 2-7, third paragraph under **IRVINGTON STATION**, third sentence, add the following sentence:

The main driveway to the parking lots on Osgood Road approximately two-thirds of the way toward the south end of the station will be signalized.

Page 2-9, second paragraph under **WARM SPRINGS STATION**, add at the end of the paragraph:

Both auto driveways to the parking lots on Warm Springs Boulevard will be signalized.

Page 2-11, first paragraph, add at the end of the paragraph:

The southern driveway to the parking lot on Warm Springs Boulevard and the driveway to the parking lot on Kato Road will be signalized.

*Comment T-15 (Fremont): Reference page 3.12-62, Table 3.12-12 of the Draft EIR. The right-turn lane designations should be double checked on this table, particularly regarding the "\*" and "\*\*\*" footnotes. According to this table, some intersection approaches do not have right turn lanes. For example, see northbound and southbound Warm Springs/Kato/Scott Creek. (PW)*

**Response T-15:** The double asterisk (\*\*) footnote on Table 3.12-12 indicates that one through lane also serves right turning traffic. This notation should only have been made when there was *also* a dedicated right turn lane. Locations where no right turn lane is shown have right turn movements accommodated from the right-most through lane. Therefore, the only place this notation should appear is at the intersection of Warm Springs Boulevard/Kato Road - Scott Creek Road, where the westbound approach, under improved conditions has a dedicated right turn lane, as well as a shared through-right lane.

At the intersection of Milmont Drive and Kato Road, the double asterisk is used incorrectly. Here, the *left* turn movement is shared with a through lane, resulting in a dedicated left, a shared through/left, and a shared through/right lane. A separate symbol (\*\*\*) has been added to the table to clarify this information.

*Comment T-16 (Fremont): Reference page 3.12-63, Table 3.12-13 of the Draft EIR. Why are some intersections designated as "NA" under the column labeled "Impact of Mitigation" when mitigation has been applied. For example, see Driscoll/Osgood/Washington. (PW)*

**Response T-16:** The NA refers to intersections where implementation of Fremont future plans have been assumed (see page 3.12-23 of the Draft EIR), and for which no additional mitigation is necessary. The mitigation measures listed as NA were generally taken from the Traffic Impact Fee Study. In June 1991, the City Council passed ordinances authorizing imposition of fees for traffic (Section 8-9302 of the Fremont Municipal code) and in September 1991, the City Council passed a resolution establishing a traffic impact fee to be imposed on each new development in the City. Since the City is collecting impact fees from developers to fund intersection improvements, the City is obligated to make these improvements or refund the fees collected.

*Comment T-17 (Fremont): Reference page 3.12-67 of the Draft EIR. I-680 Northbound Ramps-Luzon/Washington - The City is not planning any particular improvements for this intersection, as stated in the text. (PW)*

**Response T-17:** The City's comment has been noted. The Draft EIR mistakenly assumed the improvements indicated. The improvements noted should be considered those needed above and beyond those planned by the City of Fremont. Table 3.12-13 has been revised to reflect this change, and page 3.12-67 has been modified as follows:

Page 3.12-67, third bullet: remove reference to improvements at this intersection being planned by the City of Fremont. Reword as follows:

- At I-680 Northbound Ramps-Luzon/Washington Boulevard, add a second left turn lane on the southbound and eastbound approaches. These improvements would be needed with or without the proposed project. There would be no residual impact.

**Comment T-18 (Fremont):** Reference page 3.12-67 of the Draft EIR. I-680 Northbound Ramps/Durham Road - The statement about the eastbound-to- southbound right-turn movement being made free-flowing does not make sense (page 3.12-67). It is already free-flowing. This movement is the on-ramp to the freeway. Our planned improvements to this intersection are as follows: northbound - same as existing; southbound -1 LT, 1 LT+TH, 1 RT; eastbound - 2 LT, 2 TH, and one free RT; and westbound -1 LT, 2 TH, 1 RT. (PW)

**Response T-18:** The City's comments have been noted and incorporated into the analysis. The planned improvements indicated are adequate to mitigate future deficiencies. The following changes have been made:

Table 3.12-13 has been changed to reflect the City's plans.

Page 3.12-67, last bullet; reword as follows:

- At I-680 Northbound Ramps/Durham Road, the City's planned improvements are adequate. These improvements involve restriping the center lane as a through-left lane on the southbound approach, adding a second left turn lane on the eastbound approach, and adding a right turn lane on the westbound approach.

**Comment T-19 (Fremont):** Reference page 3.12-68 of the Draft EIR. Fremont Boulevard/Cushing Road-I-880 Southbound Ramps - In the future, with construction of the partial cloverleaf interchange, the southbound on- and off-ramps will be split into two intersections. At the southbound off-ramp, three northbound through lanes and two southbound through lanes should be adequate. The Fremont/Cushing intersection can achieve an acceptable level of service by operating the eastbound right-turn movement as an overlap phase with the northbound left turn. This will require the prohibition of U-turns for the northbound approach. (PW)

**Response T-19:** The suggestion in this comment has been tested. This improvement will adequately mitigate the intersection of Fremont Boulevard/Cushing Boulevard/I-880 southbound ramps.

**Comment T-20 (Fremont):** Reference page 3.12-71 of the Draft EIR. City staff disagrees with the assessment concerning Fremont Boulevard/Cushing-I-880 Southbound Ramp. This intersection can achieve an acceptable level of service by operating the eastbound right-turn movement as an overlap phase with the northbound left turn. See the comment above. (PW)

**Response T-20:** See Response T-19.

**Comment T-21 (Fremont):** Reference page 3.12-72 of the Draft EIR. The statement that there is little difference in transportation impacts between alternatives is difficult to believe. With the single station extension alternatives, it would seem traffic and parking impacts become more concentrated. There should be additional explanation to counter this conclusion. (PW)



**Response T-21:** The comment refers to Section 3.12-4 "Impacts of Design Options" and is a discussion of the effects on traffic of the design options which are contained within the Proposed Project and alternatives. The statement in the Draft EIR on page 3.12-72 within this section says, "There would be little difference in transportation impacts among the design options." The section does not refer to project alternatives with different station configurations. The Transportation section of the Draft EIR does discuss on pages 3.12-32 through 3.12-105 the differentiation of impacts between the Proposed Project and all of the alternatives.

**Comment T-22 (Fremont):** Reference page 3.12-79 of the Draft EIR. Alternative 8 would have a significant impact on the left turn storage lanes where the aerial structure runs along a street median. According to page 3.8-18, the aerial structure columns are spaced 70 to 80 feet apart. To span large intersections and avoid impacts on left turn lanes, the spacing would have to be on the order of 800 feet. (PW)

**Response T-22:** The Draft EIR has been modified to incorporate the additional impact of Alternative 8. The following changes are made:

Page 3.12-79, 1st paragraph, which currently reads:

The difference in alignment between Alternatives 6, 7 and 8 is expected to have no effect on the level of transportation impacts. They are therefore discussed together.

is reworded as follows:

The difference in alignment between Alternatives 6, 7 and 8 is expected to have little effect on the level of transportation impacts. They are therefore discussed together. However, Alternative 8, which would be an aerial alignment down the street median of Osgood Road and Warm Springs Boulevard, would constrain the ability to provide turn lanes due to the 70 - 80 foot spans between columns.

Page 3.12-87, 1st paragraph; add this paragraph:

Alternative 8 would require additional mitigation measures to accommodate the elevated span down the median of Osgood Road and Warm Springs Boulevard. This mitigation would involve lengthening and spacing the spans such that adequate room is given to accommodate turn movements at intersections.

**Comment T-23 (Keenly):** Reduce the size of the parking lots.

*The proposed station parking lots are far larger than they should be (refer to Table 3.12-11 in the Draft EIR). As an example from the Table, the estimated parking demand in the year 2010 for*

*the South Warm Springs Station is 1390 vehicles while the number of stalls to be provided exceeds this number by 1010, for a total of 2400 parking stalls. Why do we need so many parking spaces? The Facciola Meat Packing plant, which is located at the southeast corner of this future station's parking lot should not need to be removed just to provide excess parking. This building, if retained, would also serve as a good visual block of an unsightly parking lot as viewed from Warm Springs Blvd. and Kato Rd.*

*A much better solution to the parking question would rely on a well integrated transit system providing feeder bus lines that access nearby neighborhoods thereby eliminating the need for people to use their cars to get to the parking lots! The land that would be used for parking could instead be better utilized for the integration of businesses located near a BART station. Riders could disembark the BART train and walk a block or less to their workplace. Besides, these new businesses would be paying property tax for the land on which their building sits. Unfortunately, land used for expansive BART parking lots becomes a permanent "no money generator" for the City of Fremont.*

**Response T-23:** The conceptual designs were intended to accommodate the heaviest level of parking need among all the alternatives. Therefore, under some alternatives and the proposed project, some lots may appear to be oversized.

BART intends to size the parking lots to accommodate parking demand under the selected alternative. If the entire parking lot is not needed initially, the land which BART owns will be reserved for future expansion of the parking lot when demand warrants.

*Comment T-24 (Keenly): Construct an overpass at the tracks for vehicle traffic on Paseo Padre Parkway. The construction of an aerial alignment for BART at this intersection would only allow for the BART trains to cross Paseo Padre Parkway. Vehicles will continue to stop for SP or UP freight trains. By constructing an overpass at this street, vehicle traffic would be unaffected by any train movements whether it be BART or freight.*

**Response T-24:** The concept of Paseo Padre being elevated over an at-grade BART line is presented in the Draft EIR as a Design Option as described in section 2.3.2 OTHER DESIGN OPTIONS on page 2-14. The last sentence of Section 3.12.4 IMPACTS OF DESIGN OPTIONS on page 3.12-72 states that with this design option there would be benefits to auto circulation.

*Comment T-25 (Allen): Plan a major intermodal Station at Irvington with direct I-680 access.*

- *Avoid traffic impacts of using city streets.*
- *Provide quick, direct access for buses, carpools, and motorists using existing structure once planned for SR 238 freeway.*

- *Consider parking tolls to help fund the facility.*

**Response T-25:** The Irvington Station is already planned as a timed transfer center by AC Transit. The addition of BART, with park-and-ride lots would add to its intermodal transfer function.

For additional discussion regarding direct I-680 access, see Response T-7. Parking fees are discussed in Response T-6.

**Comment T-26 (Allen):** *I-680 access at Irvington: Link I-680 directly with a major intermodal facility at Irvington.*

- *Avoid use of surface streets for traffic to/from Milpitas and San Jose.*
- *Use the existing separation built for the since-abandoned SR 238.*
- *Speed I-680 buses directly to and from the bus loading area.*
- *Consider a substantial parking fee in structure for non-carpool autos using the direct I-680 access.*

**Response T-26:** See responses T-6 and T-7.

**Comment T-27 (IBA):** *Most importantly, we believe the Irvington Station will become an excellent multi-modal transportation hub. AC Transit has plans to operate a transit center at the station site. The State of California and the Federal Highway System has completed an interstate off ramp for the abandoned I-238/680 interchange project. This existing interstate connection is within 1/4 mile of the Irvington Station's planned parking area.*

*The numerous environmental benefits to the City of Fremont, i.e., street traffic, noise, air pollution, etc., warrant full investigation of this transportation opportunity.*

*This concept was discussed at prior BART community meetings; however, it is not mentioned in the DEIR.*

**Response T-27:** See responses T-7 and T-25.

**Comment T-28 (Kliment):** *BART's Warm Springs Extension will only serve a select population--especially those who live outside Fremont. It seem Santa Clara County is not interested in BART. Their preference is for a light rail system. Four stations in Fremont with parking will only encourage non-tax supporting commuters to drive over our already over-loaded streets. All that these BART stations will accomplish is a transfer of the traffic from the surrounding freeways onto*

*our city streets. Fremont will then have additional SMOG, noise pollution and traffic problems. Why should Fremont be burdened, suffer more degradation, expenses and property devaluation?*

**Response T-28:** Comment noted. The purpose of the EIR is to identify and mitigate the impacts discussed in this paragraph.

*Comment T-29 (Queen): IMPACT ON RAIL FREIGHT SERVICE: This EIR must present both the circumstances and the possible impact on rail freight service in terms of traffic, cost, operating schedules, etc. Local government's lack of policy and "political will" in support of industry generally and Ocean (Marine) Commerce and related Public Trust Use of Land activities (ship repair, fisheries, et al) and rail commerce specifically has resulted in a series of activities being undertaken to rezone public and private property as non-industrial areas (see ref #18, #19). San Francisco Bay is considered one, if not the best, deep-water port in the world. There are countries that have started wars to gain access to a deep-water port. In sum, Seaports cannot survive or expand without modern facilities, adequate backland area, and efficient rail freight services.*

**Response T-29:** The impact on rail freight service was addressed in the Draft EIR beginning on page 3.12-48.

*Comment T-30 (FCC): Because of the existing Interstate 680-238 Interchange property adjacent to BART property in Irvington, the Irvington station has the ability to become an ideal multi-modal transportation hub. For some reason, this interchange was not addressed in the Draft EIR.*

**Response T-30:** See responses T-7 and T-25.

*Comment T-31 (SPTCo): Page 3.12-20, Rail Lines - The rail crossings are controlled by crossing signals with automatic gates, not "barriers." (See California PUC General Order NO. 75.)*

**Response T-31:** Comment noted. Page 3.12-20 second line under Rail Lines and word "barriers" is replaced with "automatic gates".

*Comment T-32 (Johnson): The Irvington Station Site is a good one, it serves a large residential area and has good access from I-680, which can be greatly improved by building an interchange with Blacow Road. This interchange would use the ramps initially intended for the SR 238 Foothill Freeway and intersect new ramps from I-680 north and a Blacow Road extension from Osgood Road. This, along with a Blacow Road railroad underpass, would greatly improve traffic patterns and BART access. Optionally, a road parallel to Osgood Road could be built from the new freeway interchange to BART parking.*

**Response T-32:** See responses T-7 and T-25.

*Comment T-33 (PH-Fremont): Clearly identifying BART's responsibility for traffic mitigation measures.*

**Response T-33:** See responses T-7 and T-13.

*Comment T-34 (PH-Rumbolz): Also, CalTrain's short-range plan calls for the coming over the Dumbarton rail bridge to Fremont within a very short time and we expect BART and CalTrain to have a station there for a transfer, again, so passengers can come over from the west bay and get off if they want and then transfer to BART.*

**Response T-34:** Connectivity to any future rail service across the Dumbarton bridge requires use of connecting SPTCo tracks through the Centerville District of Fremont with a new track extension to the Fremont BART station or alternatively using existing UPRR or SPTCo tracks near Niles junction to connect with BART at the Union City BART station.

*Comment T-35 (PH-Hirsch): Number one, it allows us to complete the existing transportation problems that we have in the area, as the gentleman before me indicated. Because right now, if you try to go through that area with the trains going through morning and evening, it really is a traffic problem. This gives us a golden opportunity with recessed railroad tracks and with BART going through the area, to really take care of that problem and to really do things the right way to minimize the impact and to improve overall traffic circulation. Also, if the lines are handled in the right way, it will improve the quality of life for a lot of people who live in that area and have businesses in that area as well.*

**Response T-35:** Comment noted.

*Comment T-36 (PH-Pease/IBA): The Irvington Station has strong support from the community, and also, we were at the community workshop. One of the things that was brought up at that particular time was the option of making the Irvington Station a multi-modal transportation hub, combining AC Transit along with BART and the automobile.*

**Response T-36:** See response T-7 and T-25.

*Comment T-37 (PH-Pease/IBA): And one of the possibilities of doing that is that the current 680 freeway goes right through and makes a curve or sharp bend just above Osgood Road. There's an overpass or interchange that's already completed that goes nowhere, and that was to take care of the proposed freeway running along the hillside. With a little bit of thought, that particular interchange can go directly right down into the Irvington Station parking lot and eliminate traffic coming down from either Santa Clara County and/or the Pleasanton/Sunol area which will take off the Fremont streets. Why that's not addressed in the EIR, I'm not sure. I didn't find it.*

**Response T-37:** See Response T-7.

*Comment T-38 (PH-Norman): I, too, would like to address the issue of the draft Environmental Impact Report not addressing the issue of the 238 abandoned right-of-way and using that right-*

*of-way as direct access to the Irvington Station. I certainly hope that that matter will be addressed by the time the final Environmental Impact Report comes out.*

**Response T-38:** See Response T-7.

*Comment T-39 (PH-Allen): One other point I would like to make: Interstate 680, the access at Irvington, it's been mentioned before and I've mentioned it repeatedly. There is a freeway interchange which is now unused. And it would aim directly down. It ends about a half mile short of the BART Irvington Station. You could go directly into a intermodule structure, parking, buses, everything. You could charge parking tolls on that which would basically apply only to people coming up from Santa Clara County, and I think that they would much rather pay, say, pay a dollar to go directly into a parking structure rather than go on through all the roundabouts on city streets and clog up your streets.*

**Response T-39:** See Response T-7 concerning I-680 and T-6 concerning parking fees.

*Comment T-40 (PH-Keenly): I also have something against the parking lots. I think we should work towards increasing the bus service to the parking lots or to the area of the stations and decrease the size of the parking lots. I'm not sure if we need 2300 parking spots at most of these stations, even on the Southern Warm Springs Station. There's a meat packing plant. I don't know if they've been notified, but they're building is going to be removed under the design of the parking lot. I'm sure they probably wouldn't be too happy about that.*

**Response T-40:** See Response T-23.

### 3.14 COMMENTS AND RESPONSES ON NOISE AND VIBRATION

*Comment N-1 (Fremont): Noise and Vibration Mitigation: One of the most frequently voiced concerns expressed by residents living near the proposed BART extension alignment relates to noise and vibration impacts, especially the noise bounce-off effect if sound barrier walls are only installed between the tracks. BART should commit to meet with impacted residents and property owners and implement noise and vibration measures which resolve their concerns. The draft EIR concludes noise barriers are required along much of the alignment. The City of Fremont urges BART to select an alignment which minimizes noise impacts and declare its intent to install noise barriers to protect existing residences and other sensitive noise receptors along the extension alignment. BART should also declare its intent to use rail and ballast installation techniques for BART and railroad tracks which minimize vibration and ground-borne noise.*

**Response N-1:** The Draft EIR in Section 3.13 discusses where noise and vibration impacts are projected to occur for the Proposed Project and each of the alternatives; also discussed are methods or techniques that would be used to mitigate those impacts in all affected areas for the Proposed Project, the project alternatives and design options, and any other project-related

changes. Depending on the selected extension project, BART would mitigate the effects of increased noise by constructing appropriate mitigations to lessen those impacts.

The sound barrier wall as currently proposed for mitigation of BART train noise would be in between the southbound BART tracks and the SPTCo tracks. An insignificant amount of sound from freight trains on the SPTCo tracks would be reflected back by the BART sound wall to the residential community on the west side of the tracks, because only a portion of the noise energy is reflected, the freight train cars will provide some shielding of the reflected noise, and the sound level is reduced or attenuated the farther the sound waves travel. In this case the extra distance the noise emitted on the eastern side of the train must travel is approximately 25 feet--for a total of 95 feet--compared to the approximately 70 feet the sound travels from the west side of the train. The combined effects of reflected noise, attenuation due to distance and shielding means that there would be no significant change over the current levels of freight train noise.

The Draft EIR also states, on page 3.13-22,..."final noise predictions and specific details of noise mitigation measures (e.g., exact height, location, and extent of sound barrier walls) would be determined in the final engineering design phase of the project." BART would meet with the Fremont community to present its detailed plan of noise and vibration mitigations during the final engineering design phase of the project.

*Comment N-2 (Fremont): Reference page 3.13-23 of the Draft EIR. The assumption the noise of the BART trains would have little, if any, impact on wildlife is incorrect. The significant impacts related to noise in the Lake Elizabeth area with implementation of the aerial structure design would inhibit wildlife movement patterns and breeding in the area. The text mentions that passbys typically last no longer than 15 seconds, and would only result in a minor and temporary impact on wildlife. However, passbys would occur every 2.25 minutes during peak periods, and every 3.75 minutes at other times. This represents a reoccurring noise and vibration pattern which would definitely create a permanent impact on wildlife movement and habitat patterns. In other words, birds and wildlife would avoid the affected corridor all together.*

*Additionally, the text also states no reported instances of detriment to wildlife due to operational noise along the existing BART corridor have been observed, which indicates there would be no significant noise impact on wildlife. This assumption is based on a comparison of completely different environmental settings. There exists no other area in the BART corridor resembling the environmental makeup of the Central Park area, which contains the diversity of wildlife present there. In fact, the only similar setting might be the Lake Merritt area, and BART is an underground subway through the area, thereby eliminating the adverse noise impacts to both wildlife and people. The consultant should reassess the impact of project related noise on wildlife. (CDD/LS)*

**Response N-2:** In the Ecology section of the Draft EIR, on page 3.5-19, it is stated that:

Operating impacts from increased noise from frequent train passage could deter species such as Cooper's hawks, black-shouldered kites, and northern harriers from roosting in the trees. Noise could also deter migratory birds from resting and foraging in the riparian forest. These are considered significant impacts given the rarity of this habitat.

The impact on these animals is based on the sensitivity of these particular species and the rarity of this type of habitat. The ecologists and the acoustical engineers working on the study agree that there is insufficient evidence to support a general conclusion that, outside of the riparian forest, the operation of the BART trains through Central Park or at other locations along the corridor would create a significant noise impact on wildlife.

In general, wildlife in the wild, and raptors in particular, have been observed to habituate to the noises created by humans.<sup>4567</sup> Noises that cause the greatest disturbance are those that are loud and sudden such as sonic booms or blasts, but even these noises are tolerated to some degree.<sup>89</sup> Consequently, wildlife close to urban areas should be even more accepting of noise from humans, because of more frequent exposure to such noises. Raptors have been observed to even take advantage of loud noise caused by humans (e.g., freight train) to flush prey.<sup>10</sup> Another benefit to a bird of prey would be the masking, provided by train noise, of the noise of the raptor's wings just prior to capture of their prey, thereby making foraging easier for the raptor. One study found that the presence of humans associated with the noise were more

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<sup>4</sup> "Compatibility of Bald Eagles with PG&E Facilities and Operation," Pacific Gas & Electric Company Report 009.4-88.9, 1988.

<sup>5</sup> "A Study of the Effect of Drilling on Eagle Behavior at Overwintering Roost Sites on Pine Mountain, Natrona County, Wyoming," University of Wyoming-Raptors Research and Statistical Consulting Center, 1985.

<sup>6</sup> "Survey and Inventory of Raptors Along the Upper Missouri River, Montana," Department of Biology, Montana State University, 1990.

<sup>7</sup> "Reproduction of Ferruginous Hawks Exposed to Controlled Disturbance," *The Condor* 87, 1985, M.W. Cooper and T.L. Thurow.

<sup>8</sup> "Behavior and Productivity of Nesting Prairie Falcons in Relation to Construction Activities at Swan Fans Dam," Idaho Power Company, 1989.

<sup>9</sup> "Eastern Wild Turkey Behavioral Response Induced by Sonic Boom," in *Effects of Noise on Wildlife*, eds. Fletcher and Busnel, 1978.

<sup>10</sup> Personal Communication with John Aikin of the San Francisco Zoo.



disruptive than machinery with no human visible.<sup>11</sup> BART trains would have no associated human activity.

One area along the existing BART system with riparian and open water habitats that are very close to the BART lines is found north of the Fremont Station where the BART line crosses Alameda Creek and the ACWD groundwater recharge ponds. In addition, the tule pond, which is recognized as a valuable habitat area, lies beside the BART parking lot.

There are numerous important wetland and riparian habitats in the Bay Area that have high noise exposures yet maintain a high wildlife value. Several examples follow. The Emeryville Crescent mudflats, which were formed as a result of the construction of the Bay Bridge toll plaza, are home to many species and greatly affected by I-80 traffic noise. Endangered terns nest on beaches with exceedingly high noise exposure because they are adjacent to active Oakland Airport runways. Portions of the San Francisco Bay National Wildlife Refuge lie within the noise impact zones of the San Mateo and Dumbarton Bridges. Wetland habitat that provides cover for the endangered San Francisco Garter Snake, as well as numerous birds, is found between the rail corridor and Route 101 adjacent to the San Francisco Airport approach ramps. Many miles of I-280 pass adjacent to protected habitat of the San Francisco watershed lands.

The well-regarded report by the Bay Institute on dikes historic baylands provided case studies of 12 development proposals around the Bay that now provide important wildlife habitat or that present significant opportunities for habitat enhancement.<sup>12</sup> Of these 12 projects, 6 are adjacent to transportation corridors or other significant sources of noise. These include the Leonard Property, beside Highway 37 in Sonoma County; Cullinan Ranch, beside Highway 37 near Vallejo<sup>13</sup>; White Slough, near Vallejo, which is bisected by Highway 37; Shell Marsh, beside I-680 in Martinez; the Clayton Homes site in San Leandro, where noise levels exceed EPA and City standards for residential use; the Shorelands site in Hayward, adjacent to Highway 92, and Port of Oakland land adjacent to the Airport.

Although it is possible to conclude that the BART train noise would have no significant impact on wildlife in other habitats in the Corridor, it is not possible to conclude that the impact of BART noise on nesting birds in the riparian forest adjacent to Central Park would be below a level of significance. The availability of existing published scientific data relating to the impact

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<sup>11</sup> "Response of Breeding Peregrine Falcons to Human Stimuli," T.H. Johnson, Southwest Raptor Management Symposium and Workshop, 1988.

<sup>12</sup> San Francisco Bay Institute, *Citizens Report on the Diked Historic Baylands of San Francisco Bay*, Sausalito, 1987.

<sup>13</sup> This site was purchased in 1991 for a major habitat restoration project using Federal and State Funds.

of BART train noise on Cooper's Hawks, other indigenous raptors, and song birds nesting in the riparian forest area close to Central Park is insufficient at this time to arrive at a definitive conclusion.

Communication with the United States Department of Fish and Wildlife Service<sup>14</sup> and the California Department of Fish and Game revealed no noise criterion appropriate for protecting nesting raptors or song birds. However, a threshold level of noise from BART trains that might deter the Cooper's Hawk or other sensitive birds from nesting in the riparian forest area could be determined by studying resident populations and other populations in areas close to noise sources in the Bay Area. Based on available literature, this threshold appears to be in the range of 70 dBA to 80 dBA.<sup>15</sup>

With the standard sound barrier wall mitigation for the aerial structure, a level of 70 dBA would be achieved at 300 feet during peak hour operation for the Preferred Alternative and 200 feet during off-peak hour operation. A level of 80 dBA would be achieved within less than 50 feet at all times with the normal aerial structure sound barrier wall. For the higher possible threshold noise level of 80 dBA, very little of the riparian forest would be affected, whereas for the lower level much of the riparian forest through which the Proposed Project alignment would pass would be affected.

As noted in Section 3.5, Ecosystems, the Proposed Project would create potentially significant cumulative impacts on various bird species, including Cooper's Hawks, due to habitat fragmentation that would make the project area less suitable for breeding and foraging. Although somewhat inconclusive, a cautious interpretation of the available research regarding noise effects on raptors supports the conclusion that the introduction of noise from BART trains could contribute to this impact, by reducing the available habitat suitable for raptor breeding, and for Cooper's Hawks in particular. Habitat fragmentation was identified as a residual impact in the Ecosystems section of the Draft EIR.

*Comment N-3 (Fremont): Reference page 3.13-34 of the Draft EIR. Under Residual Noise and Vibration Impacts After Mitigation, the Draft EIR states residual noise impacts cannot be mitigated in the far northeastern part of Lake Elizabeth and Central Park with the proposed project. Since this residual impact would exist with the proposed project and all of the alternatives which incorporate the aerial structure, the only option available to mitigate this impact is to underground the rail line through this area. This should be suggested as a mitigation measure.*

**Response N-3:** See Response CP-1.

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<sup>14</sup> Personal Communication with L. Solata and Pete Sorenson with USFWS.

<sup>15</sup> "Southwest Sewage Treatment Facilities, Final Environmental Impact Report," City and County of San Francisco, 1988.

*Comment N-4 (Fremont): Reference page 3.13-34 of the Draft EIR. Additionally, the Draft EIR also states that approximately 7.5 percent of the park would be affected. This is misleading and minimizes the actual noise related impact of the aerial structure. The noise impact would occur in a corridor which physically bisects the park, decreasing the value of the recreational experience for people picnicking, walking, jogging, boating, and engaging in other sporting activities in the park. (CDD)*

**Response N-4:** The Draft EIR indicates that 33 acres (7.5 percent) of Central Park would experience a significant residual noise impact, after mitigation. This means that the noise of the BART trains would decrease the value of the recreational experience for people walking, jogging, boating, etc. within the zone of impact.

*Comment N-5 (Allen): Page 3.13-20: The "Transit System Noise Characteristics" box could well include a comment about curve noise, e.g., gauge squeal, tread slip.*

**Response N-5:** Inclusion of a discussion of special curve, noise sources is a useful suggestion and will be implemented in the future. In the case of the BART Warm Springs Extension, the curves are of sufficiently large radius and gauge tolerances that should be adequate to avoid any significant noise impact beyond what has already been projected in the Draft EIR.

*Comment N-6 (Kliment): BART's proposed 2A Aerial or 3 Aerial are completely unacceptable. These alignments could exceed the Federal Noise Standards. Having BART passing our home constantly from early morning till midnight (perhaps extended hours in the future) will impose on our privacy with people looking in our house and yard. Our kitchen, den and master bedroom have large sliding doors and windows facing these aerial routes. To protect our privacy we would have to live with drawn drapes 24 hours a day, which is not tolerable or acceptable. The noise, vibration, visual pollution, and other endangering safety factors also make proposals 2A and 3 unacceptable.*

**Response N-6:** The commentor's opposition to Design Options 2A and 3 is noted. The noise analysis in the Draft EIR indicates that while Design Options 2A and 3 would result in higher noise levels for the homes on the east side of the UPRR than would the Proposed Project, the proposed noise mitigation (sound barrier walls and a closed deck on the aerial structure) would reduce the noise impacts to a less than significant level. The Draft EIR identifies significant residual visual impacts for Design Option 3 at the location noted in the comment.

*Comment N-7 (UPRR): Lastly, excessive vibration may occur if two trains are operating in the tunnel at the same time.*

**Response N-7:** The two freight railroad trains would only be operating in the same subway structure under Alternative 4. In that event noise and vibration criteria would be exceeded.

*Comment N-8 (Lum): After reviewing the Draft Environmental Impact Report I wish to make the following comments. We live in the noise sensitive residential area next to the UPRR track therefore we are especially with the alignments proposed for Central Park. In the report the noise introduced by Option #3 with mitigation is not considered significant. The criteria used is  $L_{dn}$  that is the average over a 24-hour period. I do not think this is realistic because the peak noise over time will result in a smaller value than the peak. Also,  $L_{dn}$  weighs the noise at night more greatly than the noise during the day. Since BART does not run at night the noise during the day is deemphasized. What is the expected peak noise with the sound barriers? Granted the trains on the UPRR track will make more noise as they go by then a BART train but the UP trains come by six or seven times a day. BART trains will come by much more often (10-20 min.) but at a lower noise level. This I feel will be much more of an annoyance.*

**Response N-8:** The noise impact evaluation for the BART Warm Springs Extension considers both the impact of noise due to individual train passbys and the cumulative effect of numerous train passbys. The cumulative noise impact takes into account the totality of noise at a specific location in the community and is measured in terms of the energy average of noise over time (e.g.,  $L_{eq}$ ,  $L_{dn}$ ), which is also referred to as noise exposure. These two different ways of measuring noise (i.e., individual passby and exposure) can not be compared directly. Therefore, whether the passby noise is greater than the energy average noise is not of great importance. What is significant is that the individual train passby noise levels satisfy the APTA noise criteria (see Tables 3.13-2, 3.13-3 and 3.13-4) and that the time averaged noise levels satisfy the UMTA noise criteria (see Page 3.13-4). The noise levels projected with the implementation of sound barrier walls are indicated (see "Predicted Operational Noise Levels With Mitigation") in the tables in Appendix E of the Draft EIR. For Design Option 3, refer to Pages 6 and 7 of Appendix E.

*Comment N-9 (Olson): As mentioned in the beginning of this letter, we have a personal interest in how the BART extension traverses Central Park. Two of the options (B and C) place the aerial tracks along the UP railroad tracks which borders the backyard of many residences along Valdez way in Fremont. It is extremely insensitive on the part of the Draft EIR to state that:*

*Because the proposed BART extension generally follows the existing Southern Pacific and Union Pacific Railroad corridor, many of the noise-sensitive receptors are already exposed to significant noise levels.*

*It should be noted that there is a significant difference in the impact of a UP train that uses the track only once every three to six hours and a BART train that would go by every seven and a half minutes and produce a sound level such that*

*Homes along Valdez Drive which back up against the UP railroad tracks would be exposed to maximum noise levels exceeding the absolute noise impact criterion for all three aerial options. Option C would be located close enough to these homes to also exceed UMTA's criterion for relative noise impact.*

*My experience is that the Union Pacific train noise is tolerable because it occurs relatively infrequently. An aerial route next to Valdez Way along the UP tracks would cause the frequency of these events that exceed the absolute noise limits to increase by 30 to 60 times given an average interval of 3 to 7.5 minutes between BART trains (two routes, each with a 15-minute departure schedule with both northbound and southbound trains). As such, we urge that BART strive to use the route through Central Park that minimizes the impact on the noise and vibration levels affecting the residences adjoining the UP railroad tracks along Valdez Way.*

**Response N-9:** The referenced quotes are from the previous Draft EIR. The Draft EIR indicates a significant noise impact for Design Option 3 on page 3.13-36, but indicates (on page 3.13-38) that with sound barrier walls on both sides of the aerial structures and a closed deck, homes on the east side of the UPRR (near Valdez Way) would experience a 1 dBA increase in the  $L_{dn}$  for residences in this area; this would not be a significant impact.

*Comment N-10 (PH-Kliment): Now, I would be concerned about BART. It if has to be any way, the subway would be the way to go. If it goes, I read the report and it said, now it said on Valdez and Vaca, the noise now exceeds the APTA criterion, right now as it is.*

**Response N-10:** Presumably this comment is made with reference to Page 3.13-17 of the Draft EIR and the discussion of the existing noise environment. The existing noise environment adjacent to the SPTCo and the UPRR tracks exceeds the City of Fremont guidelines (as indicated by the Noise Element of the City's General Plan) for residential land use, but there was no discussion in the Draft EIR of APTA criteria in relation to the existing noise environment as this would not be appropriate. The APTA criteria only have meaning for rail transit system noise. Furthermore, the comment appears to be referring to the ambient noise and vibration monitoring that was an integral part of the BART Warm Springs Extension Draft EIR.

*Comment N-11 (PH-Kliment): Also, they say there's going to be 139 sensors placed somewhere in this area, this new line. And they say the sensors are quite loud and they would have to be--I didn't quite understand it because I read this rather rapidly--encased in some kind of wall. I'm not sure about that.*

**Response N-11:** This comment appears to be referring to the number of receptors (e.g., residences, school, churches) affected by a significant noise impact. Except for Central Park, with sound barrier walls it will be possible to mitigate all noise impacts to a level that is less than significant.

*Comment N-12 (PH-Seymour): It's noted, the possibility of moving the Union Pacific tracks closer to my house and adding two more tracks would add more noise pollution. And I notice that they only talk about putting a seven-foot sound wall on BART track only.*

*I have a two-story house next to the railroad track. My master bedroom window is 58 feet from the Southern Pacific Railroad tracks. And I am very worried about the added noise pollution that this is going to generate. And you made no mention in your Environmental Impact Report about the two-story houses on the railroad right-of-way, and you talked about single-family dwellings which leads me to believe that you did not notice the two-story houses along there.*

**Response N-12:** In the area of Ronald Court, which is just north of Blacow Road, Alternative 4 would relocate the UPRR tracks 20 feet to the west, which would allow BART to be located further east resulting in lower noise levels from BART trains for this particular alternative. The noise levels from individual freight trains would not be any greater than now, because the SPTCo tracks would not be moved and would still be closer than either the UPRR and BART.

Use of the terminology "single-family" residence refers to the number of families dwelling in one building and not the number of building stories. Residences on Ronald Court would be approximately 110 feet from the BART tracks and a seven foot high sound barrier wall adjacent to the BART tracks (approximately 10 to 12 feet away from the nearest track) would provide adequate shielding of noise even for the second story. However, the actual design height of the sound barrier wall will be determined in the engineering phase of the project, in which the height may be varied to adjust for a different location.

*Comment N-13 (PH-Higgason): I've got a few questions, one, I did ask a question at the May 20 meeting about sound bounce off against the BART trains and the trains when they go by at the same time. I didn't find 'u in the Environmental Impact Report anywhere. It wasn't covered.*

*And now they're talking about putting a sound barrier wall on each side of the BART train seven feet high, but inside, not outside, on either side of the railroad tracks. To my mind, that impacts that even more with more sound bounce off when the BART goes by and the trains go by. And it doesn't alleviate any problems. It just makes a greater problem. So I'd really like to know where the impacts are.*

**Response N-13:** The sound barrier wall will reduce noise levels of BART to levels below a level of significance. The sound barrier wall would not significantly increase the noise from freight trains on the closest track and would lessen the noise from freight trains on the far side of BART due to the sound barrier. (See also response N-1)

*Comment N-14 (PH-Higgason): And as far as the school goes, how is that going to affect the sound on them because if they want an Irvington District Station, from what my understanding is when that train comes out and goes into Irvington District Station, it will sound off its horns behind our house. They've talked about some switches that make lots of noise back there. All I'm hearing is more noise. I'm not seeing anything getting rid of any of it. And I don't see how that's going to help me one bit.*

**Response N-14:** The Draft EIR in Section 3.13 discusses where noise and vibration impacts would be likely with the implementation of an extension and what methods or techniques would be used to mitigate those impacts in all affected areas for the Proposed Project, the project alternatives and design options and other project-related changes. The EIR indicates that mitigation measures can reduce the noise and vibration to acceptable levels except for a few residences adjacent to the track crossovers near Blacow Road, unless special switches and resiliently supported ties are used. (page 3.13-34)

*Comment N-15 (PH-Aihara): And reading about the recent incidents, the railroad derailments, doesn't make me feel any better. But the addition of BART in that area is also a real concern. When Mary Jo brought up the point about the concurrence of the trains running and BART running at the same time and what kinds of noise impact that would have, that was addressed at one of the previous meetings for the draft Environmental Impact Report. And from what I understand, I certainly couldn't find that mentioned.*

**Response N-15:** The methodology used for assessing the impacts is described at the top of page 3.13-12 of the Draft EIR. The cumulative noise impact of BART trains, freight trains on both the UPRR and SPTCo tracks and other noise sources was evaluated using the UMTA criteria (described on page 3.13-4 of the Draft EIR), which considers the relative change in the energy average noise level measures such  $L_{eq}$  and  $L_{dn}$ . The determination of the relative changes was made by adding the project-related noise to the monitored existing noise levels (see Table 3.3-10) and correcting for such factors as nighttime noise. Simply stated, use of the UMTA criteria requires consideration of the cumulative noise of both the existing freight trains and BART trains (as well as auto traffic and other sources of noise).

*Comment N-16 (PH-Aihara): Plus now what sounds like the option of putting large sound walls in between the tracks, the BART tracks and the railroad tracks, that seems like that would exacerbate that situation. It would cause more sound bounce off to our homes and to the Grimmer Elementary School. I have a nine-year-old that goes there now, and we also have a two-year-old. And hopefully in the future -- Grimmer has been a very good elementary school, and we'd like to keep it that way and help improve it.*

*We have lived with the sound of the railroads as they're going by now, and it is excessive, but it's not that frequent. With BART in there, it seems like the sound will be a lot more frequent. From what I understand, it doesn't seem like there was that much thought as to the placement of the walls. If the walls could be in between all the noise and receptors, that would be one thing, but it seems like they're only putting them by the BART tracks.*

**Response N-16:** Sound bounce is discussed in responses N-1 and N-3.

BART train noise will be less than the freight train noise and the effects of more frequent BART noise has been addressed in the evaluation using the UMTA criteria. Placement of the sound barrier wall is BART's decision. If the sound barrier wall were placed further away from

the BART tracks, it would have to be higher to achieve the same amount of noise reduction. The proposed location of the BART sound barrier wall is based on BART's clearance requirements and a minimum wall height necessary to satisfy the APTA criteria and result in no significant noise impact. The proposed sound barrier wall would be adjacent to Grimmer School as well as residences in the neighborhood of Blacow Road.

### 3.15 COMMENTS AND RESPONSES ON AIR QUALITY

*Comment AQ-1 (Fremont): Reference page 3.14-6 of the Draft EIR. Dust from construction will be a serious problem to pedestrians after 1:00 p.m. Twice a day watering in this open area used by many park visitors would be inadequate. (LS)*

**Response AQ-1:** BART specifications for construction will require the contractor to control construction-generated dust at all times regardless of the number of waterings that may be required. At a minimum it would be twice daily.

*Comment AQ-2 (UPRR): First, without adequate ventilation there will be smoke buildup in the subway, especially when two trains are operating at the same time.*

**Response AQ-2:** Ventilation of the tunnel would be incorporated in the design of the project if Alternative 4 is chosen as the project for implementation.

### 3.16 COMMENTS AND RESPONSES ON SIGNIFICANT UNAVOIDABLE ADVERSE EFFECTS

*Comment SE-1 (Fremont): Reference page 5-2 of the Draft EIR. If it were not for the Blacow Road extension, the Fremont Boulevard/Bay Street/Washington Boulevard intersection would be even more heavily impacted. It is, therefore, necessary to mitigate the impacts at this intersection.*

**Response SE-1:** The Blacow Road extension is important to the Driscoll Road/Osgood Road and Washington Boulevard intersection as well as the Fremont Boulevard/Bay Street/Washington Boulevard intersection. The Draft EIR identified the Blacow Road underpass as necessary to mitigate cumulative traffic conditions with or without the Irvington BART Station. As stated in the Draft EIR, page 5-2 there is no further feasible mitigation and an unavoidable impact remains.

*Comment SE-2 (Fremont): Reference page 5-2 of the Draft EIR. Other intersections experiencing significant unavoidable adverse impacts include: (1) Mission/Mohave, (2) Mission/Warm Springs, (3) I-680 SB Ramps/Durham Road and (4) Warm Springs/Scott Creek/Kato. According to Tables 3.12-12 and 3.12-13, these intersections all experience V/C ratios greater than 0.85, either in 1998 or 2010. (PW)*



**Response SE-2:** The following paragraph is added between the sixth and seventh paragraphs on page 5-2 of the Draft EIR:

The intersections of I-680 SB Ramps/Washington Blvd, I-680 SB Ramps/Durham Rd, Mohave Dr/Mission Blvd, and Warm Springs Blvd/Kato Rd-Scott Creek would operate at V/C ratios greater than 0.85 after mitigation and are significant unavoidable adverse impacts.

*Comment SE-3 (PH-Aihara): Another thing, too, is really it's only really highlighted in Alternative 8 which is, I believe, the aerial that there would be significant residual impacts on residences and the school. I mean, on all the design options and alternatives, Grimmer Elementary is next to the train track. And it is, as far as I know, the one school that would be impacted by just about all of them except for the one that goes down by Osgood.*

**Response SE-3:** All of the alignment alternatives can be mitigated so as not to have significant residual impacts on Grimmer school and the adjacent neighborhood as enumerated in the Noise and Vibration section of the Draft EIR on page 3.13-24 (impact) and 3.13-33 (mitigation) and the Visual and Aesthetic Quality section on page 3.8-22.

### 3.17 COMMENTS AND RESPONSES ON CUMULATIVE IMPACTS

*Comment CU-1 (Caltrans): Section G (sic 6), concerning Cumulative Impacts should include the Interstate 680 to Interstate 880 cross connector project and how it relates to the Bart Warm Springs Extension Project.*

**Response CU-1:** The I-680 to I-880 cross connector project is included in the assumptions for the cumulative analysis, which is consistent with the City of Fremont traffic model assumptions. This is described in the first bullet on page 3.12-23 of the Draft EIR.

*Comment CU-2 (Fremont): Reference page 6-2 of the Draft EIR. Under Visual Quality, the assumption is made that development and maturation of plantings will create a more complex environment in Central Park capable of absorbing the visual intrusion of the aerial structure. The assumption that the addition of buildings to the park complex would absorb the visual impact of the structure is purely speculative. As discussed under the Visual and Aesthetic section above, any further development in the park area is conceptual only at this time, and yet to be designed and approved. (CDD)*

**Response CU-2:** See responses V-2 and V-3.

*Comment CU-3 (Fremont): Reference page 6-2 of the Draft EIR. The cumulative impacts discussion should include reference to future development of Central Park. More intensive*

*development throughout Central Park may become more acceptable to future planners if the park is impacted by an aerial structure. In particular, the open space between UPRR and SPRR is currently planned for golf. Should the proposed BART project use aerial alternates in this area, golf may be impractical. Substantial acreage could then become available for other recreation development projects which would include buildings of one sort or another. (LS)*

**Response CU-3:** The CEQA Guidelines require consideration of the cumulative impacts of reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the proposed project.<sup>16</sup> With respect to Central Park, the EIR preparers met with City staff and ascertained that there were four future projects that were reasonably foreseeable or probable. Three of those four projects have the potential to interrelate with the Warm Springs Extension Alternatives. The ramifications of those three projects are addressed in the EIR, as required.

### **3.18 COMMENTS AND RESPONSES ON OTHER ALTERNATIVES CONSIDERED**

*Comment OA-1 (CTC): The draft EIR should consider the full range of available technologies, including a light rail alternative. Cost-effectiveness for the Warm Springs Extension is particularly important in light of the second comment below. Consideration may be more justifiable for a light rail alternative, in addition to consideration of the heavy rail alternative, given that the proposed Warm Springs Extension will connect directly with a light rail transit system in Santa Clara County, thus resulting in potential savings by sharing a common track, equipment and other infrastructure with that light rail system.*

**Response OA-1:** The Draft EIR discusses in Section 9.2, the previous planning process that included a full range of mode and alignment alternatives. This study, the Fremont-South Bay Corridor Phase I Planning Study, considered a total of 35 transportation alternatives including express bus, busway, light rail transit and a "Caltrain" type of commuter service. These alternatives were subsequently screened and reduced to alternatives involving either BART or LRT modes and were further evaluated on a number of factors including connectivity, right-of-way impacts, patron access, ridership potential, capital costs, operating costs and revenues, travel time, environmental factors and overall implementation issues. The Policy Committee composed of elected representatives from MTC, BART, SCCTD and Caltrans reached a consensus based on feasibility as well as the grounds listed above that BART should be the modal alternative to be pursued for the Warm Springs Corridor.

The Warm Springs Extension as described in the EIR extends from the current end of the line Fremont BART Station south within Fremont to, at a maximum, the Santa Clara County Line. A corridor identification project for a possible future, out of the BART District, BART

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<sup>16</sup> CEQA Guidelines, §15355 (b).

extension within Santa Clara County is currently underway to investigate potential alignment options leading to the selection of a possible alignment for future right-of-way protection. Within Santa Clara County these possible alignments start at the county line and go to downtown San Jose crossing the Tasman LRT in Milpitas at a proposed multi-modal transit station. As the Tasman LRT runs roughly east-west while BART is proposed for North-South transit service, it is unlikely that there would be any potential for savings from the use of common track, equipment and other infrastructure.

*Comment OA-2 (Allen): Central Park/Lake Elizabeth: Keep BART at grade (or in shallow cut) thru the park and on fill across the finger of Lake Elizabeth. Use cost savings in part to reconfigure park.*

- *BART line could divide active from passive uses.*
- *Visual and sound impacts much less than with aerial structure.*
- *BART ride much more enjoyable than with tracks in tunnel.*
- *Existing finger of lake could become a silting pond/wetland.*

**Response OA-2:** This alternative, although attractive from the perspective of cost savings to BART, is not consistent with the City of Fremont's Master Plan for Central Park. An at-grade or shallow cut alignment, even with pedestrian overpasses, would restrict free pedestrian circulation and split continuity of the park. Either aerial or tunnel BART alignments allow free pedestrian circulation across the alignment. At-grade crossing of Lake Elizabeth would result in significant impacts on adjacent emergent seasonal wetlands and riparian forest areas.

*Comment OA-3 (Allen): Grade separate railroad grade crossings before or when BART comes.*

- *Paseo Padre Parkway - Build overpass or underpass*
- *Washington Blvd - Build overpass (avoid major track changes).*
- *Blacow Road - Add new overpass or underpass*
- *Warren Blvd - Separate per Caltrans plans*
- *Kato Road - Stop BART to north until it is separated.*

**Response OA-3:** Design Options are identified in the Draft EIR to grade separate Paseo Padre Parkway and Warren Boulevard. Blacow Road and Kato Road are proposed to be grade separated underpasses. Grade separation of Washington Boulevard is not considered desirable because of the close proximity of Driscoll Road/Osgood Road intersection with Washington Boulevard and the impacts on the properties along Washington Boulevard west of the railroads and BART alignment.

*Comment OA-4 (Allen): Keep BART west of the UP - between the railroads - at their grade.*

- *Work with the railroads on compatible operations.*
- *Design Warm Springs and South Warm Springs stations like Richmond.*

**Response OA-4:** The BART alignment for the proposed project shows BART between the two railroads (west of the UP) and at grade from just south of Washington Boulevard to just north of Grimmer Boulevard. Near Grimmer Boulevard the proposed BART alignment crosses over the UP tracks to the east, this cross over provides access to the Warm Springs Station and is necessary to avoid cross over tracks between the UPRR and the SPTCo and the SPTCo yard at the NUMMI plant. The yard and crossover tracks effectively block BART from being between the two railroads in this area. Once on the east side of the UPRR the remainder of the extension stays on the east side of the UPRR.

**Comment OA-5 (Allen):** *Fremont Station thru Central Park: Keep BART at grade (or in shallow cut) along proposed project horizontal alignment.*

- *Modify elevation of Stevenson Boulevard to conform.*
- *Modify park layout:*
  - *Use BART to divide active from passive uses.*
  - *Landscape BART and add berms if needed.*
- *Put BART on fill across north cove of Lake Elizabeth*
  - *Convert north cove to a silting pond/marsh/wetland.*
  - *Resculpt Lake Elizabeth as needed to retain water acreage.*
- *Avoid both tunnels and aerial structures so far as possible.*
  - *Save the huge costs of each.*
  - *Present riders with a pleasing vista - not just tunnel walls.*
  - *Avoid the adverse visual impacts of aerial structures.*

**Response OA-5:** See Response OA-2.

**Comment OA-6 (Allen):** *Railroads, general: Explore joint operation on one railroad's line - probably UP.*

- *This would be like joint Niles--Tracy operation on UP thru Niles Canyon, Sunol, Livermore, and over the Altamont.*

*Grade separate streets crossing (or to cross) the BART line:*

- *Nominate them for CPUC grade separation priority list.*
- *Request CPUC to factor in savings that would accrue in BART construction.*
- *Keep railroads at existing grade. Put streets over or under.*

- *Major streets to nominate:*
  - *Paseo Padre Parkway*
  - *Washington Blvd.*
  - *Blacow Road*
  - *Warren Avenue*
  - *Kato Road*
  - *Dixon Landing Road*

*Keep BART on a common grade with the railroads where possible.  
Run BART between the railroads; don't leapfrog them unnecessarily.*

**Response OA-6:** BART has explored the potential for joint operation of the UPRR and SPTCo on one track. BART will continue to encourage such a plan as it proceeds with engineering, however such a plan is not currently accepted by the railroads. See Response OA-3 concerning grade separation of street crossings.

*Comment OA-7 (Allen): Again, keep the railroads at their existing grades in Irvington, and put Washington Blvd. over the tracks.*

**Response OA-7:** See Response OA-3.

*Comment OA-8 (Schriever): Assuming that the decision is to have the BART tracks cross Central Park on an aerial structure, I would favor shifting the alignment toward the center of Lake Elizabeth and increasing the height and span of the aerial structure sufficiently to allow boats to sail underneath. Removing the structure from the eastern shoreline of the lake would greatly improve the view and the access to the shoreline for those walking along that shoreline. It would reduce the loss of playground area north of the lake to a very minimum. And finally, the increased height and the graceful arch of such an aerial structure would provide an attractive focus for the view of the lake from the western shoreline. I have never heard anyone complain that the Golden Gate Bridge spoils the view of the Bay from the shoreline in either San Francisco or Oakland. Why not build an aesthetically pleasing structure that will enhance the view across Lake Elizabeth?*

**Response OA-8:** Relocating the BART alignment into the center of the lake would increase the number of obstacles (piers) in the lake, the wind effect on sailing, noise on the lake and the visual impact of BART from many vantage points on and around the lake. These factors together with the construction impacts for the piers in the lake support the alignment options shown in the Draft EIR.

*Comment OA-9 (Schriever): I understand the desire of the Irvington businessmen to have this project include an Irvington station, but it seems to me that the site chosen for this station is just not practical. In the first place the traffic along Washington Boulevard is already congested and adding an Irvington station there would simply increase this congestion. Secondly, the proposed*

*design of the station requires placing the BART tracks together with both railroad tracks in a wide cut in order to cross under Washington Boulevard. Relocating the railroad tracks would add significantly to the cost of the project without providing any benefit to the community. Also, officials of the railroads have already expressed strong opposition to this plan. And finally, as I have already mentioned, the Irvington station would be located within a few hundred feet of the existing trace of the Hayward Fault. Assuming that there is a real desire to include an Irvington station in the project, I would favor moving the station toward the south to a point that would allow the railroad tracks to remain at grade. In general, I favor building the BART tracks at or above grade whenever possible since that improves the view for the passengers.*

**Response OA-9:** The issues of traffic congestion in the vicinity of the Irvington Station are addressed in Section 3.12 of the Draft EIR. The depression of the railroad tracks along side the BART tracks under Washington Boulevard reduces train and auto conflicts on Washington near the station and improves existing traffic delays encountered when freight trains cross Washington Boulevard. Moving the Irvington Station further to the south in order to keep the railroads at grade would negate the traffic improvements gained by the grade separation. BART will work during final design to site the location of the Irvington Station so as to avoid the existing trace of the Hayward Fault.

*Comment OA-10 (Queen): The following is a brief summary of an alternative proposal employing use of existing Southern Pacific or Union Pacific trackage in a manner similar to the CalTrain service currently operating in the San Francisco Peninsula.*

*ALIGNMENT: The alignment of the proposed BART extension from the Current Fremont Station to the Multi-Modal station (as shown) will be consistent with BART Alternatives 4-11, and may employ the most appropriate "Central Park Design Option." My preference would be the use of a subway structure beneath Central Park and/or Lake Elizabeth to ensure preservation of the natural ambience and unrestricted use of the park and lake while at the same time providing the most efficient throughput and safety of trains.*

*ISSUES: I ask that the following issues also be addressed in a Supplemental EIR:*

- *The ability to lay two transit-only tracks along the SP and UP freight right-of-way, if needed, now or in the future.*
- *The ability to interface Alternative 12 with the SBDC's "Transit Link System" including Phase II which includes extension of CalTrain service from the Peninsula across a transit-only (rebuilt) Dumbarton bridge to the East Bay.*
- *The ability to interface these proposals with the Hannigan (ACR-132) proposal.*
- *Development of text and tables showing ridership, capital and operating costs, possible housing and business displacements, environmental considerations and mitigations, etc.*

**Response OA-10:** As discussed in Chapter 9, Other Alternatives Considered, Caltrain type service was examined and rejected in the Warm Springs Corridor due to low ridership. Terminating BART at a multi-modal station next to Central Park that connects with the SPTCo and UPRR railroad corridors would not provide the service level and transit improvements that the BART extension would provide to the southern portion of Fremont.

The BART alignment within the rail right-of-way demonstrates that over most of the corridor, two transit-only tracks could be constructed within the right-of-way. However, there is insufficient right-of-way for two transit tracks adjacent to the SPTCo yard between Grimmer Boulevard and Mission Boulevard.

Connectivity to any future rail service across the Dumbarton Bridge, such as the Transit Link System, requires use of connecting SPTCo tracks through the Centerville District of Fremont and the SPTCo tracks east of Central Park to the proposed Alternative 12 multi-modal station near Central Park or alternatively using the UPRR or SPTCo tracks near Niles junction to connect with BART at the Union City BART station. Both of these routes involve several miles of circuitous travel to connect with proposed Alternative 12 terminal.

Amtrak service which is being improved as a result of the Hannigan Study (ACR-132) operates on the Alviso Line west of I-880, several miles west of the BART alignment and the proposed Alternative 12 terminal.

A reasonable range of alternatives are discussed in the Draft EIR, including those described as alternatives in Chapter 2, Project Description, and those discussed in Chapter 9 as other alternatives considered and rejected. Information as to ridership, costs, displacements, environmental considerations and mitigations is contained in Chapters 2 and 3 of the Draft EIR for the proposed project and alternatives as required by CEQA.

*Comment OA-11 (Snow 1): I am a one-fourth owner of the above named property, an industrial building with 12 tenants and one vacancy. In regard to this property, I am against all proposed routes except alternative #8 which travels along Osgood Rd. and Springs Blvd., thus avoiding our property. Since there is very little chance of the BART Board approving alternative #8, then I ask that the engineers a route that does not take any of our property. Your present drawings show that the route takes a slice of our property. This will adversely the land use and economic activity of our property. More specifically, would take away the parking lot used by the tenants on that side of the building. It would also adversely affect the tenants' access into their units via the overhead door openings. The net result would be our inability to rent the units. I am a retired person. The majority of my income is derived from the rental of this building. BART's compensation for a piece of our land would never be enough to cover the income that the owners expect to receive over the next 20 or more years.*

*Therefore, I recommend that BART move the location of the Warm Springs further south on their property and realign the rail access to the station so that it does not need to take any of our property. It will save money and allow us to continue the rental of our property.*

**Response OA-11:** The comments on the design of the alternatives are noted. BART will work during final design to minimize the acquisition of all property within the design constraints and operational parameters of the project.

*Comment OA-12 (Aihara 2): We would like the following comments/signatures written into the public record: The attached five pages are signatures of homeowners in the Irvington District and parents of students at Grimmer Elementary School. We do NOT want Alternatives 4, 5, 6, 7, 9, 10 or the Proposed Project. We support Alternatives 1, 2, 3 and 8 that keep the BART tracks away from our homes and neighborhood school. Why are there no other alternatives besides BART or highway?*

**Response OA-12:** The signatures and alternative preferences are noted. See Response OA-1 for a discussion on other alternatives studied.

*Comment OA-13 (Johnson): I read with interest much of the BART Warm Springs Extension Draft EIR. I also researched the route by walking in the affected part of Fremont Central Park on a Saturday around noon, and drove along the route to form an opinion on the best alignment and options. First I would like to say that I support a BART extension and realize the importance of keeping capital costs low. For that reason, I do not support any subway alignment through Fremont Central Park unless the needed incremental funds are provided locally. I do, however, believe that Design Option 3 would be a reasonable expenditure to reduce the impact on the park and lake. Beginning at the Fremont BART Station and working south, I would like to make the following observations and recommendations. BART should be aerial from the Station to south of the tule pond, on embankment to Stevenson Blvd. with soundwall on the southwest side as needed, on aerial using roughly the Design Option 3 alignment across Stevenson Blvd., Fremont Central Park, SPTC, a realigned UPRR, and Mission Creek. The UPRR should cross over to the SPTC southeast of the driving range, and be relocated adjacent to the SPTC from near Mission Creek to Carol Ave. This will allow BART to use the vacated UPRR ROW with a lower vertical profile and less impact on residents in the Valdez/Vaca/Valero neighborhoods. It should also make an overcrossing at the Paseo Padre Parkway less expensive and less visible as well as provide easier access to the pumping station. BART would transition from embankment to at-grade to open cut between Mission Creek and Washington Blvd. with soundwall on the east side as needed. BART should cross below Washington Blvd., but whether the railroad should be depressed or cross at-grade ought to be reconsidered. If a SPTC/UPRR subway Section be deemed necessary, its length should be minimized. Extending this subway for station parking doesn't make economic sense.*

**Response OA-13:** The alignment suggested would impact the proposed golf course between the two railroads north of Mission Creek. Additionally, although the vertical alignment could begin



to return to grade after crossing the two railroads, BART would still be aerial along most of Valdez Way. The railroads would need to be depressed under Washington Boulevard to provide traffic improvements over current railroad crossing interference near the Irvington Station. In aggregate this alternative is similar to the combination of Design Option 3 and the Paseo Padre Parkway Design Option as evaluated in the Draft EIR.

*Comment OA-14 (Snow 2): We own a small industrial building with 13 tenants. Your plan shows the BART tracks taking a slice of our property as the tracks approach alignment for the Warm Springs/Grimmer station. If you position station a little further south you can cross over later & thus eliminate having to take any of our property. In other words, please draw your plans so that you don't take any of our property. If the parking lot next to present R.R. tracks is used for BART tracks then we wouldn't be able to rent units on that side of building. My income depends on this building being fully rented.*

**Response OA-14:** See Response OA-11.

*Comment OA-15 (Wolffe): Do not expand the BART boondoggle into Warm Springs. In fact it would be better for the whole Bay Area if the overly expensive and mistaken technology of BART were not expanded anywhere. The \$540 million for Warm Springs is enough to electrify the existing railroad lines around the bay and up to Sacramento including 20 trainsets. This would help increase BART ridership more than all of the presently planned extensions combined. Since CalTrain, especially when electrified, is faster, cheaper and can be implemented sooner it is totally irresponsible to waste rail dollar during these times of recession and budget deficits. The congested highways and fading government budgets are directly attributable to the long delays and inflated costs of BART projects. This extension is aligned between 2 existing railroad lines. Either of which could be upgraded to provide superior service for less cost than BART by using modern conventional railroad technology. Please quit wasting our tax money and do the Bay Area a favor.*

**Response OA-15:** As discussed in Chapter 9, Other Alternatives Considered, Caltrain type service was examined and rejected in the Warm Springs Corridor due to low ridership projected for this type of service. See also response OA-1.

*Comment OA-16 (PH-Queen): And here's my alternative: My alternative is that I think extending BART to a parallel track along the SP or UP tracks probably makes sense and to make it so there's a station of roughly ten--a thousand feet so that people can get off BART and walk right across the platform to a regular train and then take the train down from where it comes from the north down to San Jose, connect it to the CalTrain system. It can be done much faster. It can be done with a lot less expense. And this way, it will also connect with a CalTrain system going up and into San Francisco.*

**Response OA-16:** See Response OA-10.

*Comment OA-17 (PH-Wolffe): If you really want a BART extension to your lake, I would suggest you put it north of the lake, connect with the regular rail lines and use the other \$400,000,000 that you'd have extra to buy real trains, run them up to Sacramento, run them off the San Joaquin, and that would really take the people off your highways and off your city streets.*

**Response OA-17:** Terminating BART at a transfer station next to Central Park that connects with the railroad corridors and implementing commuter service on the railroad to Sacramento and San Joaquin would not provide the service level and transit improvements that the BART extension would provide to the southern portion of Fremont. Commuter rail service is being introduced on the SPTCo Alviso line between San Jose and Sacramento but with only a few trains per day. Similarly studies are planned to investigate commuter rail service across the Altamont Pass from San Joaquin to Alameda County.

*Comment OA-18 (PH-Allen): The costs would be substantially reduced if the cities would go ahead and do grade separations first. And I would urge several factors in connection with the routes that are adopted that it stay completely on the west side of the Union Pacific. That the line not leapfrog over the railroad and that it would have to leapfrog back in order to get into Santa Clara. It's much better to keep BART at-grade alongside the railroads, between the railroads.*

*It might be possible to have one railroad operate. Have the SP move over, operate on the Union Pacific somewhat as they do over the Altamont. For many decades there were two railroads going over the Altamont. Now, the Southern Pacific operates over the Union Pacific and that is on a Union Pacific main line. It shouldn't be any great problem. I talked to the Union Pacific man going out and he said there would be no problem as far as the UP had, if the BART line were kept on the west side of the Union Pacific where there is room in between the railroads and minor track shifts might be made. A station on the order of the Richmond Station could be put at, say, at Warm Springs, South Warm Springs.*

**Response OA-18:** See Response OA-6.

*Comment OA-19 (PH-Allen): So far as Central Park is concerned, I would urge that BART--that consideration be made, now this is not to say that it would be done, but that a grade, a route at-grade, through the park, dividing the active and the passive parts of the park, and in the absence of an at-grade, a shallow cut, which would still be open-air and still give passengers some idea of the beauty of Fremont, perhaps converting that north cove into an additional silting pond like the existing silting pond putting BART at-grade across there would save megabucks. It would not be obtrusive. It would be less obtrusive than the Southern Pacific tracks are now, where they toot their horn at Paseo Padre.*

**Response OA-19:** See Response OA-2.

*Comment OA-20 (PH-Keenly): I, like Vaughn, would like to see, first of all, a Caltrain extension up here. It's a lot cheaper. We can do it right now. The tracks are already there. It's kind of*

*funny how we're running the BART down the center of the tracks, and we're not even using those tracks. It's kind of not seeing the forest for the trees.*

**Response OA-20:** See responses OA-1 and OA-15.

### **3.19 COMMENTS AND RESPONSES ON GENERAL COMMENTS ON THE DRAFT EIR**

*Comment Gen-1 (CTC): MTC's New Rail Starts program contains a 5.4 mile two-station project, not the 7.8 mile three-station project identified in the draft EIR. How does BART propose to fund the additional 2.4 miles and the extra station?*

**Response Gen-1:** See Response PD-1.

*Comment Gen-2 (Fremont): Station Architecture: It is extremely important for BART to establish and maintain a close working relationship with the City to insure station designs integrate well with the future development of the surrounding neighborhoods. The City is particularly interested in integrating plans for the Irvington Station and joint development on that site with redevelopment of properties along Washington Boulevard.*

*The City Council requests BART make provisions for City review of architectural and building plans for all new Fremont stations. The Fremont Fire Department has determined that Title 19 of the California Code of Regulations gives the Department jurisdiction over fire safety provisions at BART stations.*

**Response Gen-2:** BART fully expects to establish a close working relationship with the City of Fremont during the development of the station architectural design and site development concepts for all stations to be included in this Extension. In addition, on other BART extensions, BART staff and consultants have worked with affected community members on station design elements. We would expect to continue that kind of community input into the design process for the Warm Springs Extension.

Once the BART Board approves a specific alignment and profile for the Warm Springs Extension, we would set up regularly scheduled coordinating meetings with ourselves, representatives from the City of Fremont and our selected Station Design Architects to discuss the overall approach to the design of the station and site layout to assure compatibility with the city's existing development plans, as well as attitudes regarding the aesthetics for the station and the site.

An initial 15 percent Preliminary Design Package will be prepared for the BART Board approved Alternative which includes plan and profile, as well as typical cross sections of the overall alignment and functional layouts for the stations and off-street drop-off/pick-up and parking facilities. This package and subsequent design stage packages including completed

contract documents for actual construction will be made available to the City for their review and comment.

Fremont Fire Department review opportunities are discussed in responses G-5 and G-6.

*Comment Gen-3 (Fremont): Reference page 3.8-6 of the Draft EIR. The Civic Center is in North-West area adjacent to Central. (LS)*

**Response Gen-3:** Comment noted. The second sentence on page 3.8-6 of the Draft EIR is corrected by changing the word "northeast" to "northwest."

*Comment Gen-4 (IBA): Lake Elizabeth Central Park Area. We do not agree with an aerial route through central park. The noise and visual impacts an aerial alignment would bring to the park and surrounding residential areas cannot be mitigated satisfactorily and as stated in the Draft EIR, would cause significant unavoidable adverse visual and noise impacts.*

**Response Gen-4:** The Irvington Business Association's preference for a non-aerial (Design Option 1 or 2-S) alignment through Central Park is noted. The comment correctly points out that the aerial alignment would have unavoidable adverse visual and noise impacts in Central Park. (See 3.8-31 and 3.13-34)

*Comment Gen-5 (Queen): Page 1-7, para 2: The proposed BART Warm Springs Extension Project is being developed in response to this need (exceeding capacity of I-880 by as much as six additional lanes) and in response to the following specific mandates:*

*First Bullet: Internally creating a policy within BART and then citing it in a BART EIR is self-serving and therefore invalid.*

*Second Bullet: My letter to MTC's Hank Dittmar (ref #12) substantiates that the MTC's New Rail Starts Program (MTC Resolution No. 1876) is fatally flawed in both process and content and therefore is invalid.*

*Third Bullet: I'm sure the voters voted for transit, but they also want the "best bang for the buck." My Alternative 12 should be presented to the voters and let them decide--after the facts are available from the completion of a Supplemental EIR.*

*Fourth Bullet: My Public Comment on the MTC's Regional Transportation Plan (RTP) (ref #15) substantiates the fact that RTP is fatally flawed. Furthermore, on August 21, 1991, the federal courts ruled that the RTP is not in compliance with the Bay Area's Environmental Regulations. The MTC has 120 days to resolve this ruling. A new RTP and RTP EIR will likely be required. And thus this bullet is invalid.*

*Fifth Bullet: Senator Boatwright's Law (SB 1715) may not be used as an excuse to build bad transportation projects or waste taxpayer money. Additionally, Senator Boatwright was not informed of a "Southern Pacific R/R and BART Multi Modal" alternative and thus this bullet is invalid.*

**Response Gen-5:** BART Extension Staging Policy (BART Resolution #4300), MTC Resolution #1876 (New Rail Starts and Extension Program), the Measure B sales tax, MTC Resolution #2131 (TCM's for the Contingency Plan of the 1982 Air Quality Plan) and the Boatwright Law (SB 1715/Chapter 1259 of 1988) are all legal enactments by either the BART Board of Directors, the Metropolitan Transportation Commission, the people of Alameda County, or the State Legislature. Until such enactments are changed, modified, or in some way formally abridged, they are valid specific mandates which guide the Extensions Program of the BART District.

Mr. Queen's proposal, which he calls "Alternative 12," calls for terminating the BART extension at a multi-modal station next to Central Park connecting with the SPTCo and UPRR railroad corridors and then using CalTrain-type service south. This proposal would not provide the service level and transit improvements that the BART extension would provide to the southern portion of Fremont.

*Comment Gen-6 (Queen): Pages 1-8 through 1-10, Goal 1, Goal 2, Goal 3, Goal 4, Goal 5, Goal 6, Goal 7: Subject to findings of Supplemental EIR regarding Alternative 12.*

**Response Gen-6:** The commentator appears to be suggesting that the project goals and objectives on pages 1-8 through 1-10 should be utilized in developing the findings for the Supplemental EIR he has recommended be undertaken concerning his proposed alternative to those discussed in the Draft EIR, which he terms "Alternative 12." This proposal is also discussed in responses Gen-5 and OA-9.

*Comment Gen-7 (Queen): Page 2-47, para 2: The Capital costs and operating and maintenance costs, further detailed below, are conceptual and subject to revision after preliminary engineering.*

*Fatal Flaw: How can BART act to adopt (certify) this EIR if the cost per passenger ratios cannot be accurately calculated? The necessary "engineering" must be completed, this EIR and Alternative 12 updated, before the "preferred alternative" can be formalized.*

**Response Gen-7:** As indicated in the Draft EIR, page 2-47, the capital costs and operating costs are based on conceptual engineering and subject to revision after preliminary engineering is completed. The additional refinement to cost information that comes with preliminary engineering and design would be determined after the BART Board adopts a project and the project goes into preliminary engineering. It is not cost effective to complete 100 percent of the engineering before adopting a project. The environmental process as provided by the

California Environmental Quality Act does not require detailed cost estimates or calculation of cost per passenger indices.

*Comment Gen-8 (PH-Rumbolz): In regards to the Fremont park, we would like it to be as minimally environmentally impacted as possible. We would like it to go way around the park if possible. We don't know the history of BART, but we wondered why the original Fremont line wasn't just extended further around north or east anyway where the existing tracks are. We don't know why they chose it to go right down there to downtown Fremont and then dead-end right at the park. It seems to me it's poor planning.*

**Response Gen-8:** The existing 23-mile Alameda County portion of the BART system generally parallels the Union Pacific Railroad from Lake Merritt Station in Oakland to the Fremont Station in southern Alameda County. In 1979 when BART first began studying an extension of rapid rail service to Warm Springs, a southwesterly and a northeasterly alignment were considered as potential routes to avoid Central Park before BART would again return to the railroad corridor.

The potential southwesterly aerial alignment was proposed to cross the western edge of Central Park and proceed along Paseo Padre Parkway before returning to the railroad corridor. This preliminary alignment was eliminated from further consideration because the route would interfere with future planned park facilities, and because extensive residential displacement would be unavoidable between Paseo Padre Parkway and the railroad corridor. Reconsideration of this route during 1990 was not possible because the Fremont Main Library complex was constructed on the western edge of Central Park in the path of any likely aerial alignment, and the residential area between Paseo Padre Parkway and the railroad corridor had increased in housing density.

In 1984-85, a potential northeasterly aerial alignment around Central Park was reconsidered, but was eliminated as a viable option because the necessary route did not meet BART operational criteria. The alignment also would have interfered with the existing golf driving range in Central Park East.

*Comment Gen-9 (PH-Pohle): Well, is there going to be another public hearing for the final E.I.R. to know what the final decision is of the BART? In other words, whatever they decide, happens, right?*

**Response Gen-9:** There will be two additional opportunities where the public can request to speak on the project. The first will be a formal public hearing before the Engineering and Operations Subcommittee of the BART Board of Directors, this meeting is presently scheduled for December 17. The second opportunity is when the BART Board is considering certification of the Final Environmental Impact Report and adoption of the project, this meeting is scheduled for December 19.

*Comment Gen-10 (PH-Singh): The second point is that as a station agent, I've noticed that our parking lots are getting more and more dangerous. There is no station which does not have two or three cars break in almost every day. And this number is only increasing. It is not decreasing. I believe when the BART was planned, the people who planned the BART, the leaders who put it in, had promised the voters, as a general idea, that we will offer you free parking space because I also realized when I came to America six years ago, free parking space is not available in this country. So therefore, it is a very appealing idea. And now that they make their commitment, they don't want to go back on it.*

*But I do feel that if not in the stations which have already been built, at least in the future station they are going to build here, one, two or three or whatever the voters want, we should have about 50 percent parking space and secured paid parking space where we can leave our cars, maybe pay \$1, maybe pay \$2 for the day, whatever, which will pay for the person who is engaged to take care of the lot so that we have an option now. If you don't want to pay money and be unsafe, okay, park in the free space. But if you want to be safe or park overnight, get in there and pay the money.*

*I think we should very seriously, BART people should, please note that we should definitely insert this right in into our huge plans that we should have some, 50 percent, 24 percent, 20 percent, of the area allocated for paid, secure, wired-in, parking lot.*

**Response Gen-10:** The existing BART stations, with the exception of Lake Merritt Station, provide free parking to BART riders. The proposed BART extensions are planned to provide adequate and free parking spaces for BART riders. The question of parking fees and security at BART stations is a continuing subject of discussion at BART. However, a fee for parking would entail a change of BART Board Policy.