C.7 LAND USE AND RECREATION

This section identifies the land uses, plans and policies present in the project area, which could be affected by the Proposed Project or alternatives. The section addresses the environmental baseline and regulatory setting (Section C.7.1); the environmental impact analysis and applicant proposed measures (Section C.7.2); the environmental impacts and mitigation measures for the Proposed Project and alternatives by geographic area (Sections C.7.3 – C.7.6); and the mitigation monitoring program (Section C.7.7).

C.7.1 ENVIRONMENTAL BASELINE AND REGULATORY SETTING

C.7.1.1 Environmental Setting

The Proposed Project and alternatives are located within the planning boundaries a variety of local jurisdictions, including two counties and four cities. The jurisdictional boundaries are shown on Figure C.7-1.

C.7.1.1.1 *Pleasanton Area*

Southern Transmission Line Route. The origin of the southern alignment at the Tesla-Newark transmission line corridor is located in unincorporated Alameda County on open space land that is dedicated to cattle grazing, as shown on Figure C.7-2. After crossing State Highway 84 (Vallecitos Road) at about Milepost M0.3 and a planned East Bay Regional Park District regional trail at about Milepost M0.5, the transmission line route continues north across grazing land for several miles. At about Milepost M2.65, the overhead transmission line would convert to an underground cable, and shortly thereafter, at Milepost M2.75, the alignment passes into the City of Pleasanton. From about Milepost M3 to Milepost M3.7 the alignment would be located within the roadway of an existing paved road that provides maintenance access to a water tank serving the Kottinger Ranch subdivision. This roadway discharges into the cul-de-sac terminus of Benedict Court in Kottinger Ranch. The alignment would be located in the streets of this single-family residential subdivision from about Milepost M4.0 to Milepost M4.4, following Benedict Court into Smallwood Court, then heading west on Hearst Drive, which it would follow to Bernal Avenue. At the intersection of Smallwood Court and Hearst Drive, the alignment would pass the Kottinger Ranch private swimming and tennis club. An open space gully is on the south side of Hearst between Grant Court and Remillard Court, with an unpaved hiking trail following the gully. Aside from this open space and the swim/tennis facility, the alignment within Kottinger Ranch is flanked by single-family homes.

From about Milepost M4.4 to Milepost M5.4 the alignment would be located within Bernal Avenue, which is also predominantly a residential street. Most of this 1-mile segment is divided by a landscaped median and provides two travel lanes in each direction. The alignment passes Kottinger Park at Bernal Avenue's intersection with Kottinger Drive. While Bernal is lined exclusively with single-family homes south of Kottinger Park, north of the park there are also a few condominium developments.

Between Palomino Drive and the western leg of Vineyard Avenue[1], both sides of the street are occupied entirely by condominiums. The alignment would pass near a second neighborhood park, Tawny Park, which is surrounded by condominiums to the north and west and by single-family homes to the east. North of Tawny Drive, Bernal Avenue is no longer divided and narrows to two lanes. About 500 feet north of the eastern leg of Vineyard, Bernal crosses the Arroyo del Valle on a narrow two-lane bridge, then widens again to a divided four-lane arterial. North of the arroyo, large vacant parcels line both sides of Bernal Avenue north to Stanley Boulevard. The exception is along Utah Street, a short street heading west from Bernal for about 600 feet. This street is lined on the south by light industrial uses, including an auto body repair shop at the corner of Bernal and Utah. A single large vacant parcel occupies the east side of Bernal, immediately to the west of the Vineyard substation site. This site is currently being graded for future development as a synagogue and Jewish preschool. The underground alignment would leave Bernal Avenue and cross this currently vacant site into the substation.

Alternative S1: Vineyard-Isabel-Stanley. The tap point for Alternative S1 is located in Sycamore Grove Regional Park, in an area of open space consisting of rolling hills dotted with oak trees. The alignment would travel northwest, paralleling an existing dirt road/graded trail and 60-kV wood-pole transmission line for about 2,500 feet. Shortly after the tap point, the alignment would pass into the City of Livermore. Passing out of the park and briefly through an unincorporated area, the alignment would turn to the north and run alongside an existing dirt road just outside the park's western boundary. As this road curves toward the northwest, it joins Foley Road; the alignment at this point would be adjacent to Foley Road, which is bordered on the west by vineyards that comprise 20-acre vineyard estate lots. As Foley Road turns west to connect with Highway 84, the alignment would be located between the roadway and the vineyards extending to the south. Two rural residences line the north side of Foley along this short east-west stretch of the roadway.

The overhead/underground transition structure would be located in a vacant area south of the Foley Road/Highway 84 intersection, immediately north of the vineyards. The underground portion of the alignment would originate at this point and head west. After crossing under Highway 84, the S1 underground alignment would follow the south/west property line of a single rural residence located on the south side of Vineyard just west of Highway 84, then continue west on the south side of Vineyard Avenue, within a dirt road that provides access to the vineyards that extend south of Vineyard Avenue, which also comprise 20-acre vineyard estates. The north side of this stretch of Vineyard Avenue is devoted to aggregate mining. It is anticipated that these gravel pits and those located to the northwest will ultimately form a "chain of lakes" that will provide open space and possibly limited recreation amenities.

At the northwest corner of Vineyard and Isabel Avenues, the alignment would cross out of Livermore's jurisdiction into unincorporated territory and transition back to an overhead structure. The overhead line would head north along the west side of Isabel Avenue, about 50 feet west of the planned future roadway expansion, within property being actively mined for gravel. These extensive aggregate mining

[1] Vineyard Avenue approaches Bernal Avenue from the west at a point about 700 feet south of the point at which Vineyard continues eastward from Bernal Avenue, as shown on Figure C.7-1. For purposes of clarity, these different segments are referred to as 'the western leg' and 'the eastern leg' of Vineyard Avenue, respectively.

Placeholder: Figure C.7-1 Jurisdictional Boundaries

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Figure C.7-1 Jurisdictional Boundaries

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Placeholder: Figure C.7-2 Existing Land Use

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Placeholder: Figure C.7-2 Existing Land Use

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operations extend north to Stanley Boulevard and west to Shadow Cliffs Regional Park; additional gravel pits are located north of Stanley. The alignment would continue north to Stanley Boulevard, before turning west on the north side of Stanley. The east side of Isabel Avenue is also bordered by a gravel pit between Vineyard Avenue and Alden Lane. North of Alden is vacant land that is currently under construction with new residential development. Existing single-family residences flank the east side of Isabel north of Concannon Boulevard. Caltrans plans to construct an extension of Highway 84 along Isabel Avenue, widening the roadway to four or six lanes. An overpass at Stanley Boulevard that would be part of this project is currently under construction.

As the S1 alignment continues west along Stanley Boulevard, it is flanked on both sides by gravel mining operations. The alignment would be placed on the north side of Stanley between an active railroad line owned by operated by Western Pacific Railroad and an inactive line owned by Southern Pacific Railroad. About 1.3 miles east of Bernal Avenue, the active gravel pits on the south side of Stanley Boulevard give way to the Shadow Cliffs Regional Recreation Area, operated by the East Bay Regional Park District. This regional park, which includes a popular large waterslide and a lake providing swimming and fishing opportunities, was formerly a gravel mining operation. The Vineyard substation is located immediately west of the park. The S1 alignment would cross Stanley Boulevard at this point and enter the substation site.

Alternative S2: Vineyard Avenue. The Alternative S2 alignment is identical to the S1 alignment from the tap point to the intersection of Vineyard Avenue and Isabel Avenue. At this point, the S2 alignment would cross into the City of Pleasanton and continue westward as an underground line located in Vineyard Avenue, which is a two-lane, two-way highway in this area. West of Isabel Avenue, Vineyard Avenue is flanked on the south by vineyards and a gateway into the Ruby Hills subdivision. To the north of Vineyard are the extensive gravel mining operations previously mentioned.

As Vineyard turns northwest, paralleling the Arroyo del Valle and skirting the steep hillsides to the south, it is lined for the next mile or so by rural residential properties and open space. At the point where Vineyard first turns to the northwest, Station No. 5 of the Livermore-Pleasanton Fire Department is on the south side of the road. As Vineyard veers from its northwest trajectory and heads due west, a nursery is located on the south side of the road (just east of Vista Diablo Way) and suburban residential development is set back from the road on both the north and south sides for a distance of about 1,600 feet. This section of Vineyard Avenue has two lanes in each direction, divided by a narrow median. Continuing westward, the Hacienda Estates Motor Home Park is on the north side of Vineyard, followed by Vineyard Villas, a trailer park providing senior housing, which extends to Bernal Avenue. A condominium development is opposite Vineyard Villas on the southeast corner of Vineyard and Bernal Avenues. The S2 alignment heads north at this corner, and rejoins the Proposed Project alignment for the remaining approximately 2,000 feet of the alignment.

Alternative S4: Eastern Open Space. This alternative is identical to the Proposed Project from Milepost MX0 to approximately Milepost M2.1, at which point the alternative would turn to the northeast and travel overhead through grazing land for about 1.1 miles, then convert to an underground

alignment and head north through grazing land and open space until connecting with Vineyard Avenue. From this point, the remainder of the S4 alignment would be identical to the S2 alignment described above. As shown on Figure C.7-1, the alignment would enter the City of Pleasanton about 0.5 miles after diverging from the project alignment, then pass back into unincorporated territory about 0.1 miles before the transition structure, then pass back into Pleasanton about 0.2 miles before turning to the northwest on Vineyard Avenue.

C.7.1.1.2 *Dublin Area*

The generalized land uses in the Dublin area are depicted on Figure C.7-3.

Northern Transmission Line Route. The portion of this alignment east of Milepost B13.2 is described below in Section C.7.1.1.3. Commencing at Milepost B13.2, the alignment continues heading west across hilly grazing land in unincorporated Alameda County. The alignment passes about 1,000 feet north of a farm residence at approximately Milepost B13.8. At about Milepost 14.8, the alignment crosses Collier Canyon Road. The alignment would pass about 600 feet south of two farm residences, about 400 feet north of another farm residence, and directly over an open-air barn used as an equestrian arena at this road crossing.

West of the road crossing, the alignment would continue across grazing land and open space for several more miles, crossing Doolan Road, a private road, at Milepost B16.1. Prior to Doolan Road, it would cross an area of slumped land (areas of previous surface landslides) and near a wetland. At Milepost B17, just prior to the substation site, the alignment would cross from Alameda County into unincorporated Contra Costa County territory. The proposed Dublin substation site is on vacant grazing land nestled by surrounding hillsides. A private residence is situated atop one of these hillsides, roughly 2,000 feet southwest of the substation site. Tassajara Road is nearly 1 mile west of the site.

Alternative D1: South Dublin. Alternative D1 would originate in Pleasanton at the existing Vineyard substation, then head directly north, crossing Stanley Boulevard, then passing just to the west of a construction company storage yard and gravel processing facility. The D1 alignment would continue north alongside an existing dirt road west of Valley Avenue until reaching Busch Road, at which point the transmission line would make a right-angle turn to the east, following Busch Road and passing the City of Pleasanton Operations Service Center. The alignment would continue easterly along Busch for about 2,500 feet, before turning north, crossing into unincorporated Alameda County, and following a private haul road used to haul gravel mined from pits immediately east of the roadway. The alignment would continue north along this roadway, flanked on both sides by deep gravel pits, then passing fallow agricultural fields on both sides of the road. North of the northernmost gravel pit on the east side of the alignment, El Charro Road converges on the private haul road from the southeast. A horse ranch flanks the north side of El Charro Road at this convergence. Just before the Fallon Road interchange with Interstate 580, the alignment would convert to an underground cable and head west along the south side of the freeway for about 2,600 feet, crossing currently vacant land flanked by single-family residential development on the west. Just east of this subdivision, the alignment would cross under I-580 and into the City of Dublin, and would continue underground north for about 1,000 feet to the

Placeholder: Figure C.7-3 State-Designated Important Farmland

Alternative D1 substation in South Dublin. The portion of the alignment north of the freeway, including the substation site, is currently vacant land that is being graded for development with office and business services development.

Alternative D2: Dublin-San Ramon. This alternative would originate in the City of San Ramon at the existing San Ramon substation, located west of Alcosta Boulevard and north of Pine Valley Road.[2] The station is surrounded on the north and west by single-family residential development. The Iron Horse Regional Trail, running in a north-south direction, parallels South San Ramon Creek, which is about 600 feet west of the substation. The San Ramon Cross Valley Trail extends west from the Iron Horse Trail, following a large transmission line corridor that leads into the substation. Bordering the station on the south is a rectangular section of the San Ramon Royal Vista Golf Course, an 18-hole course stretching to the south and interspersed throughout with residential development. The Walt Disney Elementary School and neighborhood park are located on the south side of Pine Valley Road, about 850 feet south of the substation. A large wholesale nursery borders the substation on the east; after exiting the substation, the underground alignment would traverse this nursery, then cross Alcosta Boulevard and continue east in open space grazing land. Immediately east of Alcosta Boulevard the underground alignment would pass approximately 80 feet north of several residences. At the top of the ridge east of Alcosta Boulevard, the D2 alignment would pass into unincorporated Contra Costa County. Immediately after this change in jurisdiction, at approximately Milepost B21.1, the alignment would transition from an underground to an overhead alignment as it continues toward the east.

Between Alcosta Boulevard and the Alternative D2 substation, a distance of about 3.7 miles, the alignment is bordered on the north by extensive open space grazing land. About 2,000 feet east of Alcosta Boulevard, a large water tank is located about 600 feet south of the D2 alignment. At this point the alignment makes a dogleg further to the north, and away from residential development extending to the south and east to Dougherty Road. An existing overhead transmission line runs to the north of this subdivision in an east-west direction. East of Dougherty Road, the D2 alignment would be just north of and parallel to the northern border of the Camp Parks training area, which includes maneuvers areas and shooting ranges, among other facilities on the 2,700-acre site. The area to the north is planned for development with single-family residences. It is expected that a 200- to 300-foot buffer would be maintained between Camp Parks and the future residential development, and the alternative alignment would be located within this buffer area. As the alignment crosses Tassajara Road, it would pass adjacent to an existing private warehouse located on the east side of the road. A single residence is located on a hilltop to the south, roughly 1,000 feet away. The remainder of the D2 alignment, which terminates at the Proposed Dublin substation, is hilly grazing land.

Alternative D2 may entail reconductoring the San Ramon-Pittsburg transmission line, a 20-mile long, single-circuit 230 kV line. Departing the San Ramon substation and heading north-northwest, the transmission corridor crosses several miles of hilly open space, then passes adjacent to or through suburban residential development in eastern Danville, traverses the unincorporated Contra Costa

[2] The directional references of north, south, east, and west are used for ease of reference in this discussion of the San Ramon substation. They are used to represent the actual directions of northwest, southeast, northeast, and southwest, respectively.

County community of Blackhawk, and then crosses the oak-studded eastern flank of Mount Diablo and the State Park lands surrounding it. North of Mount Diablo, the alignment crosses through residential development in unincorporated Clayton, crosses more undeveloped hillsides, then continues into the City of Pittsburg, passing just west of residential neighborhoods, through an industrial area, and into the Pittsburg power plant, located on the north side of the City of Pittsburg.

C.7.1.1.3 *North Livermore Area*

Northern Transmission Line Route. Land uses along the northern transmission line route are shown on Figure C.7-2. The North Area alignment west of Milepost B13.2 is described above under the Dublin Area. The proposed alignment would originate at PG&E Co.'s existing Contra Costa-Newark 230 kV transmission line at Milepost B10.4, which is located in open grazing land just west of Vasco Road in unincorporated Alameda County. Heading west, the alignment would pass about 500 feet north or south of isolated rural residences at approximately Mileposts B11, B11.3, and B11.4, and about 200 feet south of another residence at B12.3. The land crossed by the alignment between Dagnino Road and North Livermore Avenue is currently fallow agricultural land. At the north end of North Livermore Avenue (Milepost V0), transmission lines would head in two directions, one continuing westward, and another heading south for 1 mile along the west side of North Livermore Avenue. From Milepost V0 to Milepost V1 the North Livermore Loop alignment is located in open space grazing land, including the proposed North Livermore substation site. The land to the east of this segment of the alignment is a tilled agricultural field surrounding a residence and farm buildings located to the east of Milepost V0.5. A farm residence is also located opposite the substation site on the east side of the roadway, and a second is approximately 1,000 feet due south of the substation site. Thirteen additional rural residences are located along Bel Roma Road, about 2,000 feet east of the site.

As the northern alignment continues westward from Milepost V0, it continues in grazing land, passing three rural residences located on the north side of Manning Road between North Livermore Avenue and Morgan Territory Road, and a fourth residence on the south side of Manning at Morgan Territory Road. It crosses Cayetano Creek at Milepost B12.7. As Manning Road curves to the northwest at about Milepost B13.2, the alignment crosses an incised gully that drains to Cayetano Creek and continues heading west across hilly grazing land. The remainder of this alignment is described above in Section C.7.1.1.2.

Variants on Proposed Project (P1 and P2). The alignments for the two variants on the Proposed Project in the North Livermore area are identical to the Proposed Project alignment. Refer to the previous discussion for a description of existing land uses.

Alternative L1: Raymond Road. The Alternative L1 alignment would tap into the Contra Costa-Newark transmission line at the east end of Raymond Road where it meets Ames Street. New single-family residential development is located just to the southeast of the tap point, off Ames Street. Heading west from the tap point, the L1 alignment immediately crosses two adjacent farms. The one closest to the tap point consists of farm buildings only, with no residence, while the one to the west has a residence and farm buildings. West of the buildings, a fallow agricultural field extends west to Dagnino Road; the L1 alignment would cross the edge of this field next to Raymond Road. The south

side of Raymond Road between Dagnino Road and Ames Street is predominantly alkali sink habitat that is proposed for protection as the Alkali Sink/Bird's Beak Preserve. This habitat surrounds the Hal Chesnutt Memorial Field, a model airplane airstrip used by the Livermore Flying Electrons on south side of Raymond, east of Dagnino Road. As shown on Figure C.7-1, the L1 alignment between Ames Street and Dagnino Road lies just to the north of the Livermore city limits, in unincorporated Alameda County.

After crossing Dagnino Road, the alignment continues west in another fallow agricultural field before entering a farm property at the corner of Raymond and Lorraine Roads. The alignment would cross this property without displacing any buildings, then enter the L1 substation site adjacent to the farm. The substation currently consists of vacant grazing land. Three residences are located on the south side of Raymond Road between Dagnino and Lorraine. A Federal Communications Commission (FCC) monitoring station is located about 1,000 feet south of the L1 substation site. Substantial clearances around this facility are required in order to avoid interference with the high-frequency direction finder operated at the site. This issue is addressed below in Section C.7.1.2.1, in the Impacts and Mitigation Measures discussion, and also in Section C.10, Socioeconomics and Public Services.

Alternative L2: Hartman Road. Alternative L2 is identical to Alternative S1 (described above) from the tap point to the intersection of Isabel Avenue and Stanley Boulevard. At this point, the S1 alignment turns west, while the L2 alignment continues to the north, following the west side of the future extension of Isabel Avenue. Approximately 800 feet north of Stanley, the alignment crosses back into the City of Livermore's jurisdiction. Between Stanley Boulevard on the south and Jack London Boulevard on the north, this area appears to be vacant grazing land, while construction on the future roadway interchange is underway at Stanley Boulevard. The east side of the future Isabel extension is occupied by single-family residential neighborhoods. The roadway extension is expected to be open to traffic in May 2001.

At Jack London Boulevard, the L2 line would be converted to an underground transmission line, which would turn west for about 1,200 feet, then resume its northern heading, passing between the Livermore Water Reclamation Plant on the east and the main runway of Livermore Municipal Airport on the west. At Airport Boulevard, the alignment would turn briefly to the east, then cross Airport Boulevard at a northeast angle, before heading north on Kitty Hawk. This segment of the alternative alignment is bordered on the south by small plane hangars associated with the airport and on the north by single-story offices and light industrial development. Where Kitty Hawk begins veering west, the transmission line would cross under I-580 and continue north under a new roadway currently under construction. This road is bordered on the west by a large indoor sports facility and on the east by a large office/light industrial building currently under construction. After passing a vacant field, the alignment would veer to the northeast, passing adjacent to Las Positas College. It would continue its northeast trajectory through fallow agricultural fields. The L2 substation study area and immediate surroundings consist entirely of these vacant agricultural fields. Just prior to the L2 substation site study zone, the alignment crosses out of the City of Livermore into unincorporated Alameda County.

C.7.1.1.4 *Tesla Connection*

North Area (PG&E's Phase 2). The Phase 2 alignment would originate at the Tesla substation, which is surrounded by grazing land in unincorporated Alameda County. The alignment would be located in an existing 75-foot-wide vacant PG&E easement, nearly all of which is on land used to graze cattle, except as otherwise noted. Cattle grazing also occurs on the wind farms discussed below. The Phase 2 line would depart from the northwest corner of the substation heading in a north-of-west (i.e., WNW) direction, continuing to cross grazing land. Traversing hilly open space land, the existing easement crosses numerous hills and ridges lined with windmills, in some cases passing adjacent to a line of windmills and in others crossing through a line of windmills. At about Milepost C1.0, the easement passes roughly 500 feet to the north of the US Windpower substation and control room. At Milepost C1.5, the easement crosses the Union Pacific Railroad corridor and about 800 feet south of the Southern Pacific Railroad corridor. West of this crossing, the easement continues through wind farms, all of which are crossed by a network of maintenance roads that would provide construction access for PG&E Co.

The alignment would cross Interstate 580 overhead at Milepost C3.6, with a support tower placed on the southern end of a truck parking apron located adjacent to the eastbound freeway lanes. West of the freeway, at about Milepost C4.1, the alignment would pass immediately north of two stock ponds. At Milepost C5.6 the easement crosses another railroad corridor and Altamont Pass Road, which provides access to the Altamont Landfill, located about a mile to the northeast. At roughly Milepost C6.1, the Phase 2 line would cross over a north/south-trending transmission line operated by the Western Area Power Administration (WAPA). A final line of windmills is crossed at about Milepost C6.4.

The Phase 2 alignment veers slightly to the northwest at Milepost C7.1, then turns dues west at Milepost C7.9 and crosses Laughlin Road at Milepost B8.0, about 1,000 feet south of a former residence now owned by the East Bay Regional Park District (EBRPD) and about 800 feet north of a second residence on the east side of the roadway. The EBRPD intends for Laughlin Road to provide access to the Brushy Peak Regional Preserve, which is currently closed to the public. Due to concerns about the visual impacts of PG&E's proposed crossing of this gateway to an important regional natural resource, an alternative to this crossing location is examined below (the Brushy Peak Alternative Segment).

Continuing in a westerly direction, the easement begins passing immediately to the south, Browning-Ferris Industries' Vasco Road Landfill at about Milepost C8.3, then turns sharply to the northwest at Milepost C8.55, crossing closed landfill cells and to the west of the active fill areas of the landfill. At Milepost C9.2, the alignment again heads due west. Again crossing grazing land, the easement passes to the south of an existing residence at Milepost B10.3 just before crossing Vasco Road. About 500 feet west of Vasco Road, the Phase 2 line would connect with the Phase 1 line at Milepost B10.4 (at the junction with the Contra Costa-Newark transmission line).

Brushy Peak Alternative Segment. This alternative is essentially the same as PG&E's proposed Phase 2 route, with a detour to the south of Brushy Peak. At Milepost B7.1, the proposed Phase 2 alignment would turn to the northwest, while the Bushy Peak alternative segment would diverge,

heading west across open grazing land. At the point where it would cross Laughlin Road, the alternative alignment would pass about 350 feet to the south of the existing residence on the property recently acquired by the East Bay Regional Park District for the expansion of the Brushy Peak Regional Preserve. About 2,000 feet west of the Laughlin Road crossing, the alternative alignment would turn 90 degrees to the north, and continue through grazing land to reconnect with the proposed Phase 2 alignment at about Milepost B8.55. The entire length of this alternative segment is currently used for cattle grazing.

South Area (Stanislaus Corridor). This existing transmission corridor originates at the Tesla substation and heads south through grazing land. At about Milepost V1.2, the alignment turns southwest at Tesla Junction. The open space/grazing land is also occupied by wind turbines from approximately Milepost V1.5 to Milepost V4, near Patterson Pass. At least four sets of existing towers are located on hay fields approximately between Mileposts V6.6 and V7. At about Milepost V7, the alignment crosses through a ranch property where the existing towers are immediately adjacent to a small, occupied horse paddock and in close proximity to a farm residence, barn, and animal stables. After passing through this property, the alignment crosses over Cross Road at about Milepost V7.2. It then crosses a fallow agricultural field adjacent to a vineyard, before crossing to the south side of Tesla Road at about Milepost V7.5.

Once south of Tesla Road, the Stanislaus Corridor crosses through cultivated vineyards, then crosses the large Bar–None Ranch, with one pair of towers located in close proximity to the residence on the property. Crossing Greenville Road, the corridor continues westward several miles across a broad, flat valley cultivated with vineyards. At roughly Milepost V9, the vineyards surround what appears to be a motor home sales lot; an existing set of lattice towers are located on this lot. West of the RV sales lot the Stanislaus corridor continues across vineyards, then crosses Mines Road at Milepost V10.1 and passes through PG&E's Mocho Junction at Milepost V10.2, adjacent to Arroyo Mocho. The alignment veers slightly to the southwest at this point and crosses hilly open space/grazing land for the next several miles. For the remainder of the portion of the Stanislaus Corridor being considered for this alternative, the corridor runs parallel to and about 1,000 feet north of the Tesla-Newark 230 kV transmission line corridor. At Milepost V12.1 the corridor crosses Wetmore Road, then crosses Arroyo Road at about Milepost V12.4.

The transmission corridor crosses into Sycamore Grove Regional Park at Milepost V12.8. If Alternatives S1 or S2 were selected for implementation, the Phase 2 line would terminate in the park at about Milepost V13.2, where either of these alternatives would connect in the Stanislaus line. If the Proposed Project or Alternative S4 were selected for implementation, the Stanislaus line would continue toward the southwest, crossing out of the recently expanded park at about Milepost V13.6. Between this point and approximately Milepost V16.5, where the Stanislaus line would connect with the southern alignment of the Proposed Project, the Stanislaus Corridor traverses open space grazing land. However, it passes adjacent to the Zone 7 Water District's Del Valle Water Treatment Plant at approximately Milepost V13.8.

C.7.1.2 Applicable Regulations, Plans, and Standards

The Proposed Project would pass through the planning jurisdictions of two counties—Alameda and Contra Costa—and the City of Pleasanton. The alternatives examined in this EIR would be partially located in three additional cities—Livermore, Dublin, and San Ramon—as well as the unincorporated areas of both counties. In addition, the project, or one or more of the alternatives, would pass through lands owned and managed by the East Bay Regional Park District and the Livermore Area Recreation and Park District. Due to the proximity of several alternatives to the Livermore Municipal Airport, they would be subject to the policies of the Alameda County Airport Land Use Commission. The planning and policy documents of each of the entities identified above have been carefully examined to identify regulations and policies that pertain to the project or alternatives to the project. All of the pertinent policies identified during this review are listed in Appendix 1, along with an analysis of the project's (or alternatives') consistency with each policy. In accordance with its General Order No. 131-D, the CPUC will consider compliance with local regulations as part of the CEQA process, and encourages PG&E Co.'s compliance with local regulations to the extent feasible. Therefore, both the legally binding Federal and State regulations and the non-binding local regulations are discussed in this section. The CPUC will consider the consistency of the Proposed Project with local plans and policies during review of this EIR and prior to making a decision on whether or not to approve the Proposed Project and/or the Alternatives.

The proposed alignment segments and their alternatives cross a wide variety of city and county zoning districts, which are generally reflective of and consistent with the applicable land use designations. The zoning ordinances of the jurisdictions relevant to the project typically are either silent on high-voltage electric transmission lines, or they are implicitly included in broadly defined "public and quasi-public" uses. When addressed in the zoning ordinances, electric transmission facilities are principal permitted uses or conditional uses. The height of the proposed transmission line would exceed the height limit of most zoning districts. Other than height restrictions, no conflicts with the zoning ordinances of the affected jurisdictions were identified for the Proposed Project or alternatives to the project. As noted previously, local zoning regulations are not binding on the CPUC. Since a considerable amount of space would be required to describe the zoning along each alignment and alternative alignment and because the zoning typically mirrors the land use designations, the discussions for each local jurisdiction are limited to the land use designations, and the detailed zoning is not presented.

See Appendix 1 for a summary of the land use policy consistency analysis prepared for this EIR.

C.7.1.2.1 *Federal Regulations*

U.S. Army Corps of Engineers. The U.S. Army Corps of Engineers (USACE) has jurisdiction over all waters of the U.S., which include oceans, lakes, streams, wetlands, tributaries to navigable waters of the U.S., and other water bodies. The USACE is legally charged with the administration of a variety of federal permits, including the Section 404 permit required for the Proposed Project. See Section C.6, Hydrology and Water Quality, for an additional discussion of the Section 404 permit and the USACE's role in the permitting process.

U.S. Environmental Protection Agency. The U.S. Environmental Protection Agency (U.S. EPA) is charged with administering the Clean Water Act and the permitting system that includes the Section 404 permit required for the Proposed Project. The U.S. EPA developed, and revises as warranted, the environmental guidelines used by the USACE in its issuance and enforcement of Section 404 permits. The U.S. EPA retains oversight of the permitting process and can revoke a permit issued by the USACE.

U.S. Fish and Wildlife Service. Under the Fish and Wildlife Coordination Act of 1958, the USACE is required to consult with the U.S. Fish and Wildlife Service (USFWS) prior to issuing a Section 404 permit. The Act requires that all federal agencies consult with the USFWS, the National Marine Fisheries Service (NMFS), and state wildlife agencies (e.g., the California Department of Fish and Game) for activities that affect, control, or modify waters of any stream or other surface body of water.

Federal Aviation Administration**.** The Federal Aviation Administration (FAA) is charged with regulating air commerce in the United States to promote the safety and development of civil aviation. The Federal Aviation Regulations (FAR) require FAA review of any project involving construction or modification of a building or object that meets any of the following conditions:

a) the object would exceed 200 feet in height;

b) the object would intrude into one of the imaginary boundaries established by the FAA around the runways of all civil airports; or

c) the object would be located within an instrument approach area, as defined by the FAA.[3]

The transmission lines and support towers of Alternatives S1 and L2 would protrude into one of the referenced imaginary FAA boundaries around Livermore Municipal Airport. Along Stanley Boulevard, the S1 alignment would be between approximately 6,000 feet and 9,000 feet from the airport's nearest runway. The applicable imaginary surface in this case, established in Section 77.13 of the FAR, extends 20,000 feet from the nearest runway, at a slope of 100:1 (100 feet horizontally for each foot vertically). At 6,000 feet from the runway, construction of any object that would exceed 60 feet would need to be reviewed by the FAA to determine if it would constitute a hazard to air navigation. At Jack London Boulevard, where it would transition to an underground cable, Alternative L2 would be approximately 1,700 feet from the runway, where anything over 17 feet in height would require referral to the FAA. Therefore, if Alternatives S1 or L2 were selected for implementation, the project applicant would need to initiate an FAA Aeronautical Study by submitting FAA Form 7460-1 to the Western Pacific Region of the FAA. Although the overhead portions of other alternative alignments would also be within 20,000 feet of the runways of Livermore Airport, they would be sufficiently distant from the airport that towers of 120 feet in height would not penetrate into the referral airspace.

FAR Part 77 also establishes standards for determining obstructions to air navigation (Sections 77.21–77.29). A complicated series of imaginary surfaces are defined for civil airports. If an object would exceed the height of one of these surfaces, it would be considered an obstruction. The surface relevant to Alternatives S1 and L2 is an oval horizontal surface extending 10,000 feet from the center of each

[3] 14 CFR, Part 77

runway and extending vertically to 150 feet above the established elevation of the airport. Both Alternatives S1 and L2 would be well below the limits established by the horizontal surface. They are outside the imaginary approach and primary surfaces, and well within the height limit established for a conical surface. The FAA Aeronautical Study would confirm that the selected alternative would not exceed any of the applicable standards. Alternatively, it could find that one or more of the standards would be exceeded, coupled with a determination of whether or not it would constitute a hazard to air navigation. If the FAA were to determine that the project would constitute a flight hazard, the agency would request the CPUC to deny the project. However, the FAA has no final jurisdictional authority over the project. For purposes of this analysis, it is assumed that none of the Part 77 standards would be exceeded, and no impact has been identified in the Impacts sections below. However, it is likely that the FAA would notify the applicant that Alternatives S1 or L2 would be subject to the lighting standards prescribed in FAA Advisory Circular AC 70/7460-1, entitled "Obstruction Marking and Lighting."

Alternatives S1 and L2 would also be located within the General Referral Area established around the airport by the Alameda County Airport Land Use Commission (ALUC), and therefore subject to review by that agency. Please refer to the discussion on the *Alameda County Airport Land Use Policy Plan* in Section C.7.1.2.3, below, for additional information.

Federal Communications Commission. The Federal Communications Commission (FCC) operates a monitoring station in North Livermore, north of Hartford Road and west of Lorraine Road. It is critical to the operations of the facility that adequate sight distance be maintained around the receiving antennas. Certain types of land uses are more prone to interfere with reception than others. Metal fences, rail lines, large metal structures (e.g., water towers) and vertical metal structures (e.g., light or utility poles), buried metal pipes or electrical cables, and large bodies of water, including irrigation and drainage ditches, ponds, small creeks, and intermittent streams, all have the potential to adversely affect operations of the FCC facility. To maintain adequate sight distance, the height of metal structures may not exceed 2 degrees vertical angle as viewed from ground level in the center of the long-range direction finder, while the height of all other structures may not exceed 3 degrees vertical angle. The applicable restrictions on development around the FCC facility are discussed in more detail in Section C.10.1.3 (Socioeconomics and Public Services).

The *North Livermore Specific Plan*, which has yet to be officially adopted by Alameda County and the City of Livermore, proposes a land trade that would relocate the FCC facility to the south in an area designated for habitat protection, which would create an additional buffer between the facility and urban development planned in the North Livermore area. The Alternative L2 substation would be located outside but immediately north of the proposed FCC buffer. Please refer to Appendix 1 for a discussion of a land use policy in the *North Livermore Specific Plan* applicable to development of this alternative substation.

C.7.1.2.2 *State Regulations*

California Public Utilities Commission. The California Public Utilities Commission (CPUC) is charged with the regulation of certain investor-owned public utilities within the State of California,

including electric transmission facilities. The CPUC regulates the terms and rates for service, equipment, practices, and facilities, as well as the issuance of stocks and bonds. As previously noted, the CPUC is the Lead Agency for CEQA review of the Proposed Project and has authority for project approval. Prior to approval, the CPUC will ensure that the project would comply with applicable State and Federal regulations, and will encourage PG&E Co.'s compliance with local regulations to the extent feasible, in accordance with its General Order No. 131-D.

California Department of Fish and Game. The California Department of Fish and Game (CDFG) regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles in accordance with the California Fish and Game Code, a compilation of laws pertaining to fish and wildlife regulation. In addition to other mandates, CDFG is responsible for protecting the fish and wildlife resources of the State, including their related ecological communities, for the benefit of the general public. Enforcement of the California Endangered Species Act of 1984 is included in the agency's responsibilities. The Proposed Project has the potential to affect special-status species in the project area, such as California red-legged frog, California tiger salamander, Western pond turtle, and others. Activities with the potential to affect State-listed species would be subject to regulation by CDFG, and may require incidental take authorization.

The project would also require a Streambed Alteration Agreement from CDFG for the proposed dry boring under Arroyo del Valle at Bernal Avenue in Pleasanton. Sections 1601-1603 require any person, governmental agency, or public utility proposing an activity that will divert or obstruct the natural flow or change the bed, channel, or bank of any river, stream, or lake, or proposing to use any material from a streambed, to first notify CDFG about the proposed activity. Following review of the proposal, consultation, and possibly a field visit, the agency may require the applicant to enter into a Streambed Alteration Agreement that may include modifications to the proposed construction designed to protect fish and wildlife resources and habitat quality. If a Streambed Alteration Agreement (also referred to as a Section 1601 or 1603 permit, depending on whether the applicant is a public or private entity, respectively) is required, water quality certification would also be required from the Regional Water Quality Control Board. Regulatory issues pertaining to vegetation and wildlife are discussed in greater detail in Section C.3, Biological Resources.

California Department of Conservation. The California Department of Conservation's Division of Land Resource Protection (DLRP) plays a major role in protecting California's farmland and open space. Among other programs, DLRP administers the Farmland Mapping and Monitoring Program and the California Land Conservation Act of 1965, more commonly known as the Williamson Act. Due to the amount of agricultural land in the project area and because the *CEQA Guidelines* specifically address conversion of farmland and conflicts with Williamson Act contracts as potentially significant impacts, these two programs and their relevance to the project are discussed in the following paragraphs.

Farmland Mapping and Monitoring Program

Under the Farmland Mapping and Monitoring Program (FMMP), the DLRP evaluates agricultural land throughout the State, based on soil surveys and irrigation status. Every two years, the DLRP produces

maps of the 48 most important agricultural counties, delineating four categories of farmland. The four categories are:

1) **Prime Farmland.** Land with the best combination of physical and chemical characteristics, able to sustain long-term production of agricultural crops. This land must have been used for production of irrigated crops at some time during the four years prior to the mapping date.
2) **Farmland of Statewide Importance.** Land with a good combination of physical and chemical characteristics for agricultural production, having only minor shortcomings, such as less ability to store soil moisture, compared to prime farmland. This land must have been used for production of irrigated crops at some time during the four years prior to the mapping date.
3) **Unique Farmland.** Land used for production of the State's major crops on soils not qualifying for categorization as prime or of Statewide importance. This land is usually irrigated, but may include non-irrigated fruits and vegetables, as found in some climatic zones in California.
4) **Farmland of Local Importance.** Land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee.

Four non-farmland categories are also mapped, including grazing land, urban and built-up land, other land, and water. As noted below in Section C.7.2.2, the CEQA Guidelines define the conversion of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland as determined by the FMMP, to non-agricultural use to be a significant impact. In the project area (see Figure C.7-3), the area of west of Sycamore Grove Regional Park, which would potentially be crossed by Alternatives S1, S2, and L2, is designated Farmland of Statewide Importance. Beginning approximately 1,400 feet west of Highway 84 and continuing westward for about 8,000 feet, the land south of Vineyard Avenue is identified as Prime Farmland. In addition, as shown on Figure C.7-3, most of the area to the west of the future extension of Isabel Avenue between Stanley Boulevard and Jack London Boulevard (currently under construction) is designated Prime Farmland or Farmland of Statewide Importance. The Alternative L2 alignment would cross the eastern edge of this designated important farmland. The Alternative D1 alignment would also cross land designated by the State in 1998 as Prime Farmland. However, much of this land is currently being mined for gravel and has not been in recent cultivation. Only near the northern end of the alignment (approximately 800 feet of alignment) is there land feasible for cultivation.

Williamson Act

The Williamson Act (drafted as the California Land Conservation Act of 1965) was enacted to protect valuable agricultural land throughout the State from urban encroachment. By entering into contracts to retain their land in agricultural or related open space use, farmers receive property tax assessments well below market value. Under an additional provision added by the Open Space Subvention Act of 1971, the State has been partially compensating local jurisdictions for the reduced property tax revenues that result from Williamson Act contracts. The contracts have a minimum term of ten years, and renew automatically on the annual anniversary of the contract unless the property owner initiates a process of non-renewal. Once non-renewal has been initiated, it takes an additional nine years for the contract to

lapse. While a property is under contract, there are a variety of restrictions on use and transfer of the land. The minimum parcel size for a Williamson Act contract is 100 acres.

The proposed Dublin substation site is under a Williamson Act contract and the Alternative L2 substation site study zone includes three parcels, each of which is currently under a Williamson Act contract. In addition, the Proposed Project alignment and some of the alternative alignments would cross numerous properties currently under Williamson Act contract. Identifying and mapping these properties for inclusion in this EIR would have been quite laborious, and was not done for the reason that the Proposed Project would not interfere with or contravene any Williamson Act contracts. Section 51238 of the Act[4] explicitly states that "the erection, construction, alteration, or maintenance of gas, electric, water, communication, or agricultural laborer housing facilities are hereby determined to be compatible uses within any agricultural preserve," with agricultural preserve referring to land under a Williamson Act contract. While cities and counties have authority under the Act to develop of list of compatible uses on agricultural preserves, subject to compatibility criteria set forth in the statute, construction of electric facilities is decreed a compatible use in the statute, any determinations to the contrary by a city or county notwithstanding.

Section 51292 of the statute requires any public agency or person proposing to erect a public improvement on an agricultural preserve to notify the Department of Conservation of its intention and to make the following findings:

a) The location is not based primarily on a consideration of the lower cost of acquiring land in an agricultural preserve.

b) If the land is agricultural land covered under a contract pursuant to this chapter for any public improvement, that there is no other land within or outside the preserve on which it is reasonably feasible to locate the public improvement.

However, Section 51291.5 states that this notification requirement does not apply to the acquisition of land for the erection, construction, or alteration of gas, electric, piped subterranean water or wastewater, or communications facilities. Such projects are also exempt from the requirement to make findings pursuant to Section 51292, as stipulated in Section 51293(c). Therefore, the Proposed Project would not conflict with any agricultural preserve contracts or be subject to any provisions of the Williamson Act.

C.7.1.2.3 *Regional/Local Regulations and Agencies*

Regional Water Quality Control Board. The San Francisco Bay Regional Water Quality Control Board (RWQCB) is one of nine regional water quality control boards in the State under the direction of the State Water Resources Control Board. The RWQCB is responsible for maintaining and improving water quality in San Francisco Bay and its tributaries. The Proposed Project would require Section 401 Water Quality Certification from the RWQCB or a waiver of Waste Discharge Requirements. The RWQCB also administers the National Pollutant Discharge Elimination System (NPDES) permitting program in the Bay Area. An NPDES General Construction Stormwater Permit would be required for

[4] Codified in California Government Code Title 5, Division 1, Part 1, Chapter 7, Sections 51200 *et seq*.

construction of the project. Also, as previously noted, water quality certification would be required from the RWQCB if a Streambed Alteration Agreement were determined to be needed for the project. These requirements are discussed in more detail in Section C.6 (Hydrology and Water Quality).

East Bay Regional Park District Master Plan. The East Bay Regional Park District (EBRPD) provides and manages regional parks and trails in Alameda and Contra Costa counties that are intended to conserve open space and cultural resources and provide outdoor recreational opportunities. The District's *Master Plan 1997* identifies the existing and planned parks and trails within its service area and establishes policies and guidelines for maintaining District standards of service in resource conservation, management, interpretation, public access, and recreation. Specific policies applicable to the Proposed Project are addressed in Appendix 1.

A number of EBRPD facilities are located in the project area. The Vineyard substation in Pleasanton is immediately west of Shadow Cliffs Regional Park, a 296-acre park with an 80-acre lake and a four-flume water slide. In addition, the proposed Phase 2 route passes south of Brushy Peak Regional Preserve, a 507-acre scenic open space area owned by the Livermore Area Recreation and Park District (LARPD, see below), but managed and operated by the EBRPD. Currently, the Preserve may only be visited via LARPD-guided tours. The EBRPD has recently acquired two properties immediately to the south of the Preserve, and a third property will be acquired in January 2001. These properties totaling 1,120 acres will be added to the Brushy Peak Regional Preserve and will provide the primary public access into the Preserve. The proposed Phase 2 alignment crosses these properties approximately between Mileposts B8 and B9.4. Due to concerns by the EBRPD that the proposed transmission line would cross the entrance way to the park and visually degrade the visual gateway to the Preserve and Brushy Peak, an alternative alignment (Brushy Peak Alternative) south of the planned park entrance is examined in this EIR.

In addition to these existing regional recreation facilities, several alternatives to the project would pass adjacent to potential EBRPD parklands in the vicinity of Vineyard Avenue, Stanley Boulevard, and Isabel Avenue. Extensive aggregate resources are located adjacent to these roadways, many which are currently being mined, and some of which will be mined over the next 30 to 50 years. It is anticipated by Alameda County and the EBRPD that the gravel pits will ultimately be used to create an interconnected "Chain of Lakes" that would perform various water management functions while providing limited recreational opportunities compatible with those uses.

Numerous regional trails identified on the EBRPD *Master Plan 1997* map are located in the project area and would be crossed or paralleled by the project or alternative alignments. These facilities and their current status are listed in Table C.7-1.

Table C.7-1 EBRPD Trails Adjacent to Project or Alternatives

Trail Designation	Name of Trail	Proximate Alignment(s)	Status/Comments
27	Pleasanton Ridge to Shadow Cliffs	Project, S4	Several years from planning stage. Alignment not firmly fixed.
8B	Niles Canyon to Shadow Cliffs	Project, S4	Currently in planning stage in vicinity of project. Funding not acquired. Construction several years away.
29	Shadow Cliffs to Iron Horse	Project, S4	Portions complete; other segments under construction in 2000–2001.
28	Shadow Cliffs to Del Valle	S2, S4	Easement acquired along Arroyo del Valle between Highway 84 and Isabel Avenue. Construction schedule will depend on availability of funding, but at least 1 to 3 years away. Between Isabel Avenue and Shadow Cliffs Regional Park, construction will be tied to completion of mining operations by RMC Lonestar, but at least 5 years from implementation.
4A	San Joaquin County to Shadow Cliffs	Project, S1, S2, S4, LG	Will follow former Southern Pacific Railroad alignment along Stanley Boulevard between Bernal and Isabel Avenues. Active County trail on south side of Stanley may be used instead. Still coordinating planning with City of Pleasanton and Livermore. Funding not acquired. Construction several years away.
4B	Shadow Cliffs to Alameda County	Project, S1, S2, S4, LG	Right-of-way license in place between EBRPD and Alameda County. Ongoing planning with City of Pleasanton. Some segments may be constructed in 2–3 years.
8C	Shadow Cliffs to Morgan Territory	Project, S1, L2	Follows Isabel Avenue. Some segments to be constructed in next 2–3 years. Others dependent on future land use changes.
7B	Bethany Reservoir to Santa Clara County	Project Phase 2	Mostly in preliminary planning phase. Portions may be located through Carnegie State Recreational Vehicle Area.
45	Brushy Peak to Del Valle	Project Phase 2	Will follow alignment of South Bay Aqueduct. In preliminary planning stage.
30	Iron Horse to Sycamore Valley	D2	No alignment yet determined for this Master Plan trail.
31	Tassajara Creek	D2	Some segments completed (Dublin Boulevard to Gleason); others to be constructed in 2000–2001.
--	Iron Horse Trail	D2	Should be completed from the Contra Costa County/Alameda County boundary to Pleasanton BART station in 2001–2002.
--	Ohlone Wilderness Trail	S1, S2, L2	Unpaved hiking/equestrian trail complete between Del Valle and Mission Peak.

Livermore Area Recreation and Park District Master Plan. The Livermore Area Recreation and Park District (LARPD) shares responsibilities for eastern Alameda County regional parks and trails with the EBRPD. The District's *Master Plan 1995* establishes goals, policies, and standards to guide the future of the LARPD. No Master Plan components have been found to be directly applicable to the project or alternatives to the project.

In the project area, the LARPD owns and operates Sycamore Grove Regional Park, a 1,113-acre park with hiking, bicycle, and equestrian trails, picnic areas, and nature areas. The park was expanded to the south in Spring 2000 with the addition of 370 acres. The tap point for Alternatives S1, S2, and L2 is located within this expanded area. Approximately the first 2,000 feet of these alternatives' common route would be located within the expanded park, adjacent to a dirt road in this part of the park. An existing 60-kV PG&E transmission line mounted on wood poles is located along the north side of this road.

Livermore-Amador Valley Quarry Reclamation Plan. The *Livermore-Amador Valley Quarry Reclamation Plan* establishes policies applicable to the use and post-closure reclamation of areas identified in the *Alameda County General Plan* as Quarry Area. The policies are consistent with the requirements of the Surface Mining and Reclamation Act of 1975, as well as the general plans for Livermore, Pleasanton, and Alameda County. The area covered by the Reclamation Plan is roughly bounded by Livermore Airport and the Livermore city limits on the north, Isabel Avenue on the east, Vineyard Avenue and Stanley Boulevard on the south, and Martin Avenue on the west.

The Reclamation Plan projects completion of extraction operations within the quarry area by 2030, and identifies appropriate types of replacement uses on regenerated land for different portions of the area, based on the geologic stability and load-carrying capacity of the land. The majority of the area (2,160 acres) will remain excavated and will be allowed to fill with water from the local arroyos, ultimately forming a "chain of lakes." The EBRPD's Master Plan map identifies the Chain of Lakes as a future regional park. The area will also provide an important source of groundwater recharge, surface storage, flood control, and other water management functions.

South Livermore Valley Agricultural Land Trust. The South Livermore Valley Agricultural Land Trust (SLVALT) was established in 1994 as a Joint Powers Agency (JPA) by Alameda County and the cities of Livermore and Pleasanton. The primary goal of the SLVALT is to provide long-term stability for agriculture in the South Livermore area by permanently protecting at least 5,000 acres of vineyard or other cultivated lands within the 14,000-acre *South Livermore Valley Specific Plan* area. (The *South Livermore Valley Specific Plan* is discussed below.) The Trust works to achieve this goal by purchasing conservation easements on agricultural land and open space that restrict future development of the land, protecting it in perpetuity. The easements, which transfer with the land, provide landowners with significant estate tax, income tax, and property tax benefits. To date, the SLVALT has purchased conservation easements on over 2,000 acres, 85 percent of them on agricultural lands, and the remaining on open space lands, including Sycamore Grove Regional Park. The easements are intended to protect one or more of the following values: scenic resources, open space, agriculture, and natural habitat. Alternatives S1, S2, and L2 cross land on which the SLVALT owns conservation easements.

Alameda County Airport Land Use Policy Plan. The *Alameda County Airport Land Use Policy Plan* (ACALUP) was adopted by the Airport Land Use Commission (ALUC) of Alameda County to coordinate State, regional, and local land use planning as it affects or pertains to airport operations. The ALUC was established in 1971 pursuant to State ALUC law to "protect the public health, safety,

and welfare by promoting orderly expansion of airports and adoption of land use measures by local public agencies to minimize exposure to excessive noise and safety hazards near airports."[5] The ALUC is responsible for developing plans for achieving land use compatibility between airports and their environs.

The ALUC has adopted planning boundaries around each of the five general aviation airports in Alameda County, including an ALUC General Referral Area, which encompasses all of the other specific boundaries. All public agency actions that would take place on properties within the General Referral Area are subject to review by the ALUC, which must make a Determination of Plan Consistency. The ALUC evaluation ensures compatibility of the project with airport operations and the Airport Master Plan. The more specific boundaries include:

1) ALUC Hazard Prevention Zone. This boundary delineates an area around the airport wherein navigation may be impaired by smoke, electrical interference, glare, disorienting lighting, or concentrations of birds. This zone is identical to the ALUC General Referral Area.
2) ALUC Height Referral Area. This boundary delineates airspace around the airport in which tall structures could create possible hazards to air navigation. Established in accordance with Federal Aviation Regulations, a series of complex 3-dimensional imaginary surfaces are delineated around the runways of each airport. Any construction project that would penetrate one of these surfaces must be referred by the project sponsor to the Federal Aviation Administration for an Aeronautical Study. (See FAA description in Section C.7.1.2.1.)
3) ALUC Safety Zone. Land uses within this boundary should be limited in density and type due to accident potential.
4) ALUC Noise Impact Zone. This boundary delineates the area around the airport that is subject to significant noise levels from aircraft operation.

Preparation of the ACALUP was coordinated with the *Livermore Airport Master Plan*, which provides guidelines for future development of the airport. The ACALUP governs land use decisions within the General Referral Area of Livermore Airport, and the Alameda County Airport Land Use Commission has authority to disapprove any project that would be deemed an incompatible land use with the airport, though such a decision could be overridden by the local jurisdiction. Penetration of any FAR Part 77 imaginary surfaces would automatically characterize a structure or object as an incompatible land use. Any project that entails erection of a new structure within the General Referral Area of the airport must be referred to the ALUC for review. Alternatives S1 and L2 fall within the General Referral Area and would be subject to this requirement. Although the project South Area alignment and Alternative D1 also lie within the General Referral Area, they would have no potential to affect airport operations, and would therefore not be subject to ALUC review.[6]

[5] Airport Land Use Commission of Alameda County, *Alameda County Airport Land Use Policy Plan*, adopted July 16, 1968.

[6] Phil Sawrey-Kubicek, Senior Planner, Alameda County Planning Department, personal communication, August 14, 2000.

Alameda County General Plan

South Area. As defined in the *East County Area Plan*, the portion of the County's General Plan applicable to the project area, Resource Management lands are intended mainly for long-term preservation as open space, but may include low-intensity agriculture, grazing, and very low-density residential use. The Resource Management designation also provides for recreational uses, habitat protection, watershed management, and public and quasi-public uses. Approximately the first 2.7 miles of the project South Area alignment is located in unincorporated Alameda County. From Milepost M0 to approximately Milepost M1.3, the alignment is designated Resource Management by the County.

From approximately Milepost M1.3 to Milepost M1.5, the project alignment lies within lands designated Large Parcel Agriculture. This designation provides for a variety of low- and high-intensity agricultural uses and agricultural support service uses, as well as visitor-serving commercial facilities (e.g., wineries), recreational uses, quarries, solid waste landfills, utility corridors, and other similar and compatible uses. From Milepost M1.5 to Milepost M1.8 the alignment traverses another Resource Management area, then passes back into land designated Large Parcel Agriculture. At Milepost M3.0 the alignment passes into Rural Density Residential, which is intended for single-family detached homes (up to one unit per acre), limited agricultural uses, public and quasi-public uses, and similar and compatible uses. The proposed alignment crosses into the City of Pleasanton at Milepost M2.75. Although the land use map for the *East County Area Plan* designates land uses for incorporated and well as unincorporated areas, the City of Pleasanton has jurisdiction over land use within its boundaries. Accordingly, the land use designations for the project alignment between Mileposts M2.75 and the Vineyard substation are discussed below under the City of Pleasanton.

South Area Alternative S1: The alignment for Alternative S1 originates on unincorporated land designated Large Parcel Agriculture by Alameda County. The area immediately north of the alignment is designated Major Parks, assigned to Sycamore Grove Regional Park, which was expanded to the south in 2000 to include the Large Parcel Agriculture area traversed by the S1 alignment. The Major Parks designation allows for a maximum Floor Area Ratio (FAR) of 0.02, and provides for parks, open space, and recreational uses. Once the S1 alignment crosses Highway 84, the north side of Vineyard Avenue is designated Water Management, while the south side continues as Large Parcel Agriculture. Water Management lands include sand and gravel quarries, reclaimed quarry lakes, watershed lands, arroyos, and similar and compatible uses. One single-family home is permitted per parcel, subject to all other County standards, with a minimum parcel size of 100 acres and a maximum building intensity of 0.01 FAR. The south side of Vineyard Avenue on this portion of the Alternative S1 alignment is actually within the jurisdiction of the City of Livermore; the City's land use designations for this alignment are addressed below under the City of Livermore General Plan discussion.

As the Alternative S1 alignment heads north along Isabel Avenue, both sides of the alignment are assigned the Water Management category. On the west side, this designation continues north to Stanley Boulevard, while on the east side it gives way to Low Density Residential between Alden Lane and Concannon Boulevard, and to Medium Density Residential north of Concannon. In addition to single-family (attached and detached) residential uses at a density of 1.0 to 4.0 units per acre, the Low Density

Residential category permits limited agricultural uses, community and neighborhood commercial uses, neighborhood support uses, and similar and compatible uses. The allowable Medium Density Residential density is 4.1 to 8.0 units per acre; this category also allows multi-family and group quarters development, and the supplemental uses listed above for Low Density Residential. The southeast corner of Isabel Avenue and Stanley Boulevard is designated Medium/High Density Residential, which is the same as Medium Density Residential, except with a higher allowable density of 8.1 to 12.0 units per acre.

Heading west on Stanley Boulevard, the alignment continues as Water Management on the south side, and is designated Industrial on the north side. The Industrial designation provides for industrial parks, warehouses, light and heavy manufacturing, assembly, storage, low-intensity office uses, public and quasi-public uses, and similar and compatible uses. It has a FAR of 0.4, except within 1/4-mile of a BART station or downtown commercial areas, where a FAR of 1.0 is allowed. The north side of the alignment next gives way to the Water Management designation, then both sides become Urban Reserve, which is assigned to potentially developable land beyond what is needed to accommodate growth projected to occur during the current planning period. It is intended to create development flexibility and stabilize land costs. Urban Reserve lands have a minimum parcel size of 100 acres and permit single-family homes (one per parcel), low-intensity agriculture, public and quasi-public uses, quarries, utility corridors, and similar and compatible uses. The south side of the S1 alignment is next designated Water Management. Continuing west, the alignment passes into the jurisdiction of the City of Pleasanton. The remainder of the S1 alignment is discussed under the City of Pleasanton's General Plan.

Alternative S2: Identical to Alternative S1 from the tap point to the intersection of Vineyard and Isabel Avenues. As the two alignments diverge at this point and the S2 alignment continues west on Vineyard Avenue, it passes into the City of Pleasanton. The remainder of the alignment is therefore discussed below under the City's General Plan.

Alternative S4: Identical to the Proposed Project alignment from the tap point to the transition structure at Milepost M3.1. Heading east, the alignment crosses out of the City of Pleasanton and into County-designated Large Parcel Agriculture land. The S4 alignment remains in this land use category until it passes back into the City of Pleasanton. The remainder of this alternative alignment is discussed under that city's General Plan discussion.

North Area. The project alignment lies primarily within land designated Resource Management by Alameda County. Between Milepost B10.7 and Milepost B13.3, the alignment is designated Large Parcel Agriculture, with the exception of a narrow strip of Water Management land crossed between Mileposts B12.7 and B12.8. From Milepost B13.3 to Milepost B17, the north alignment lies in Resource Management-designated lands. The North Livermore substation site and the transmission line alignment between Milepost V0 and V1 are designated Large Parcel Agriculture.

North Area Alternative L1: The entire alignment, including the alternative substation site, is designated Low Density Residential on the *East County Area Plan* land use map. The Low Density Residential category was described previously for S1.

***North Area Alternative L2*:** identical to that of Alternative S1 from the tap point to Stanley Boulevard. North of Stanley Boulevard, the L2 alignment passes briefly across land designated Industrial (previously defined) by the County on the *East County Area Plan* land use map, then passes back into the City of Livermore for the remainder of the L2 alignment, with the exception of the L2 substation site study area, which is unincorporated. The substation study area is designated Medium Density Residential, described above. (See the City of Livermore subsection for its land use designations.)

North Area Alternative D1: Although originating in the City of Pleasanton, this is considered a North Area alternative because it provides an alternative power supply to the area north of I-580. Refer to the discussion on Pleasanton for that jurisdiction's land use designations applicable to this alternative. The D1 alignment passes into unincorporated Alameda County when it crosses to the north of Busch Road, approximately 0.4 miles north of the Vineyard substation. This area is designated Medium Density Residential, which was described previously. Heading east, the alignment briefly crosses a High Density Residential designation, then passes back into Medium Density Residential. The High Density Residential category permits single-family detached and attached homes, multiple-family residential units, group quarters, public and quasi-public uses, community and neighborhood commercial uses, neighborhood support uses, and similar and compatible uses, with allowable densities ranging from 12.1 to 25.0 units per acre. Before turning north, the alignment crosses into an area designated Urban Reserve, which provides for low-intensity agriculture, public and quasi-public uses, quarries, utility corridors, and similar and compatible uses. One single-family home is permitted per 100-acre parcel, provided that other County standards are met for services, etc. The minimum parcel size in this designation is 100 acres with a maximum building intensity of 0.10 FAR.

Turning to the north, the alignment continues in Urban Reserve land, then crosses an expanse designated Water Management. It passes again through an Urban Reserve parcel, crosses a strip of land with the Water Management designation, then passes into the Mixed Use category, which provides for offices, light industrial, retail and wholesale commercial, high-density residential, public and quasi-public uses, and similar and compatible uses. The allowable FAR is 0.5, with higher density allowed in downtown areas and near BART stations. North of I-580, the D1 alignment crosses into the City of Dublin. Refer to the discussion of Dublin for the land use categories applicable to the remainder of the D1 alignment.

***Proposed Phase 2 Alignment*:** The Tesla substation and all of the Phase 2 alignment from Milepost C0 to Milepost B10.4 are entirely within the Large Parcel Agriculture land use category, as designated on Alameda County's *East County Area Plan* land use map. In addition, the area between Mileposts C0 and approximately C6.4 is identified on the Open Space Diagram of the *East County Area Plan* as a Wind Resource Area. While the County does not define this as a land use category with development standards and restrictions, it has promulgated policies pertaining to wind farms in the East County area, which are addressed in Appendix 1.

***Brushy Peak Alternative Segment*:** mostly designated Large Parcel Agriculture, similar to the proposed Phase 2 alignment. However, west of Laughlin Road, the alternative segment crosses an area

designated Resource Management (described above), then crosses back into Large Parcel Agriculture on its jog to the north.

***Stanislaus Corridor (Phase 2) Alternative*:** Originates at the eastern end of Alameda County on land designated Large Parcel Agriculture, described previously for the proposed South Area alignment. With the exception of crossings of Arroyo Seco and Arroyo Mocho, both designated Water Management (described above), the corridor is entirely designated Large Parcel Agriculture until the crossing of Sycamore Grove Regional Park, which is assigned the Major Parks land use category until approximately Milepost V15.3, when it crosses into the Resource Management category. The remainder of the portion of the corridor comprising this alternative is designated Resource Management.

Contra Costa County General Plan

North Area. Only a small portion of the project alignment—from Milepost B17 to the proposed Dublin substation—is located within Contra Costa County. This land is designated AL (Agricultural Lands) on the County's land use map. This land use category is assigned to most of the privately owned rural lands in the County, excluding prime agricultural land and land located in or near the Delta. Most AL lands are in hilly portions of the County and are used for grazing livestock or dry grain farming. The purpose of the Agricultural Lands designation is to preserve lands capable of and generally used for the production of food, fiber, and plant materials. In addition to agricultural uses, a wide range of non-urban uses are permitted in the AL land use category, including landfills, facilities for processing agricultural products produced in the County (e.g., dairies, feed mills), agricultural support services, and small-scale visitor-serving uses (e.g., wine tasting rooms, "bed and breakfast" inns).

North Area Alternative D2: This alignment would extend from the existing San Ramon substation to the proposed Dublin substation. The area from approximately Milepost B21.1 to the San Ramon substation is within the jurisdiction of the City of San Ramon, addressed separately below. As noted previously, the Dublin substation is designated AL (Agricultural Lands) by Contra Costa County. Heading westward, the D2 alignment remains within this land use category until about Milepost B 18.5, at which point it briefly crosses an area designated OS (Open Space), then passes into an SM (Single-Family Residential, Medium Density) designation. The Open Space designation includes publicly-owned open space lands not assigned one of the County's other open space designations (Public and Semi-Public, Watershed, or Parks and Recreation) and privately-owned properties that have been deeded to a public or private agency. The SM category permits single-family residential development to a density of 3.0 to 4.9 units per net acre, with secondary uses compatible with the primary use permitted, including churches, child care facilities, and uses and structures incidental to residential use. Continuing west, at about Milepost B19.4 the D2 alignment crosses back into an OS designation until it passes out of the County's jurisdiction at approximately Milepost B21.1, with the exception of the area between about Milepost B20.4 and Milepost B20.6, which is assigned the ML (Multiple-Family Residential, Low Density) land use category. The ML designation allows multiple-family residential development at a density between 7.3 and 11.9 units per net acre. Permitted residences may include

attached single-family units, as well as condominiums, townhouses, apartments, and mobile home parks, with similar secondary uses to those permitted in the SM category.

Alternative D2 may include reconductoring of the existing San Ramon-Pittsburg 230 kV line, which crosses multiple jurisdictions for a distance of about 20 miles. The large number of land use designations crossed by this line are not presented in detail in this discussion because the line is an established transmission line corridor and reconductoring would not have the potential for land use compatibility conflicts. (The land use designations for the Stanislaus Corridor were described above because construction in this corridor would entail removal of existing support towers and construction of new ones, whereas this corridor would entail removal of existing support towers and construction of new ones, whereas reconductoring of the San Ramon-Pittsburg line would not require any demolition or new construction).

City of Pleasanton General Plan

South Area. All of the project alignment lies within the City of Pleasanton or within Pleasanton's 75-square-mile planning area. Although the area outside the City's incorporation boundaries (encompassing 22.4 square miles) but within its planning area is subject to the jurisdictional authority of Alameda County, the City's General Plan Land Use Map assigns land use designations to the entire area within its planning area. Consequently, although the southern portion of the project alignment lies within unincorporated Alameda County, the City of Pleasanton's land use designations for that portion of the alignment are included in this discussion for informational purposes.

From Mileposts M0 to M3, the alignment lies within the Public Health and Safety Open Space land use designation, with a Wildlands Overlay. The Public Health and Safety designation is one of four Open Space land use categories identified in the *Pleasanton General Plan*. It is assigned to land that is set aside for the protection of the public health and safety due to geologic, topographic, fire, or other hazards. No development on Public Health and Safety Open Space lands is permitted other than one single-family home on existing lots of record as of September 16, 1986, subject to applicable planning guidelines and restrictions. The Wildlands Overlay applies to lands identified as wildlife corridors or valuable habitats, including arroyos, highly vegetated areas, and areas needed to maintain significant populations of plant and wildlife species. Although it is an "additive" land use designation to the primary underlying land use category, the allowable development within the overlay is the same as that identified for the Public Health and Safety Open Space category.

At approximately Milepost M3, the Proposed Project alignment passes into Pleasanton's sphere of influence, which represents the ultimate limits of the City's urban development at buildout of the General Plan. At Milepost M2.75 it passes into the City's incorporated limits. From Milepost M3 to about Milepost M4 the alignment is designated Rural Density Residential, which has an allowable density of one dwelling unit per gross 5 acres, with clustering on lots 1 acre and larger encouraged. All standard housing types, including attached and detached single-family homes, duplexes, townhouses, condominiums, and apartments, are allowed within this and the City's other three residential land use designations, subject to applicable zoning requirements. Religious facilities,

schools, daycare facilities, and other community facilities are also permitted uses within the residential designations.

The alignment is in the Low Density Residential land use category between Milepost M4 and approximately Milepost M4.6. This designation permits less than two dwelling units per gross developable acre. The Proposed Project alignment passes into a Medium Density Residential area, with an allowable density of two to eight dwelling units acre, at about Milepost M4.6. As the alignment heads north up Bernal Avenue, the area to the west of this arterial is designated Medium Density Residential, while the east side is designated Low Density Residential. Continuing north, the alignment passes briefly through a High Density Residential area, which allows more than eight dwelling units per gross developable acre. North of Kottinger Drive, the next roughly 500 feet of alignment are within a Parks and Recreation Open Space area. This designation is assigned to neighborhood, community, and regional parks, and no significant development is allowed in these areas.

From Kottinger Park until Arroyo del Valle, a distance of over 3,000 feet, the area on the west side of the alignment is designated Medium Density Residential, while the east side of Bernal Avenue is first Medium Density Residential, then becomes High Density Residential. Between Palomino Drive and Tawny Drive, the east side of Bernal is designated Retail/Highway/Service Commercial, Business and Professional Offices. The General Plan does not explicitly specify allowable uses within this designation, though such uses are implicitly defined by the designation itself. With respect to allowable densities within this land use category, Floor Area Ratios (FARs) are not to exceed 0.6, except for hotels or motels, which should not exceed 0.7, and projects within the Central Business District (CBD), which should not exceed 2.0. Higher densities for certain uses with minimal employee density and traffic generation (e.g., warehouses) may be permitted as Planned Unit Developments (PUDs).

North of Tawny Drive, the east side of the alignment briefly passes through another Parks and Recreation Open Space area assigned to Tawny Park, then re-enters a High Density Residential area which continues to the Arroyo del Valle. The corridor flanking the arroyo is designated Public Health and Safety Open Space with a Wildlands Overlay. North of the arroyo, both sides of Bernal Avenue are designated Retail/Highway/Service Commercial, Business and Professional Offices. At approximately Milepost M5.2, the alignment turns east and heads into the Vineyard Substation, which is designated Public and Institutional Community Facilities. This category is assigned to any public or institutional use, including utility substations, City Hall, religious facilities, libraries, post offices, cemeteries, corporation yards, sewage treatment facilities, community centers, and senior centers. FARs are not to exceed 0.6 in this land use category unless they are approved as a PUD.

South Area Alternatives S1: The majority of this alignment is located in the City of Livermore or Alameda County; the applicable land use designations are described in the discussions of those jurisdictions. The City's eastern boundary along the S1 alignment coincides with the eastern boundary of Shadow Cliffs Regional Recreation Area. The Stanley Boulevard corridor is designated Public Health and Safety, while the regional park is designated Parks and Recreation; both of these land use categories were described above. The western end of Shadow Cliffs assigned the Retail/Highway/Service Commercial, Business and Professional Offices category. The area north of

Stanley Boulevard is designated Sand and Gravel Harvesting. As the name implies, this category is assigned to land or buildings used for the extraction of mineral resources and related low-intensity activities such as ready-mix facilities and asphalt batch plants. No significant development is allowed in these areas. As previously noted, the Vineyard substation site is designated Public and Institutional, while the area north of the substation is designated General and Limited Industrial. The former category was previously described, while the latter is for industrial activities with FARs not to exceed 0.5. Higher FARs may be permitted for certain uses where employee density and traffic generation are minimal, such as warehouses, provided they are submitted as a PUD.

South Area Alternative S2: Enters the City of Pleasanton just west of Isabel Avenue. The area flanking the south side of Vineyard Avenue is assigned the Agriculture and Grazing designation, which is assigned to land or buildings used for agricultural production or livestock grazing, with no significant development allowed. The Ruby Hill subdivision bordered by these Agriculture and Grazing lands is designated Low Density Residential. The area north of Vineyard Avenue is categorized Sand and Gravel Harvesting, with the exception of a corridor around the Arroyo del Valle, which is identified as Public Health and Safety with a Wildlands Overlay. All of the above designations were described above for the Proposed Project.

West of Ruby Hill, the Alternative S2 alignment passes into the planning area of the *Vineyard Avenue Corridor Specific Plan*, adopted by the City on June 1, 1999. The Specific Plan uses land use categories distinct from those contained in the parent General Plan. About the first 300 feet into the east side of the planning area, both sides of Vineyard Avenue are designated Vineyard, which is identified as a key land use component in the Specific Plan. Vineyards are to be the principle use, intended to create a pleasing driving experience for motorists traveling on Vineyard Avenue and buffer future residential neighborhoods from traffic noise following the planned realignment of Vineyard Avenue approximately 1,000 feet to the north (see Section C.11, Transportation and Traffic). An estate home and support facilities is permitted on each of the five large lots in the 66 acres with this land use category. The next segment of Vineyard Avenue is designated Medium Density Residential (MDR), which allows single-family homes on lots with a minimum size of 10,000 square feet. Assigned to the flatter portions of the Specific Plan area, MDR areas are intended to be developed as individual neighborhoods designed with clusters of detached housing surrounded by vineyards, reminiscent of small rural European "vineyard villages." As Vineyard turns to the northwest, the north of the roadway continues in the MDR category, while the south side is designated Open Space (OS), which is generally intended to preserve the natural features of the hillside areas to the south. No homes are permitted on OS lands.

The next 500 feet or so of the S2 alignment is Open Space on the north side and Low Density Residential (LDR) on the south side. LDR is primarily assigned to the rolling hills south of Vineyard Avenue and permits single-family homes on lots at least 20,000 square feet in size. Continuing toward the northwest, the south side of the alignment is designated Open Space, interspersed with small pockets of Hillside Residential (HR) land, often associated with an existing home. The HR category provides for single homes on minimum lots of 40,000 square feet. It is intended to cluster homes in well-defined areas of the hills in order to preserve ridgelines, hilltops, oak woodland, creeks, steep

slopes, and other significant natural features. On the north side of Vineyard Avenue is a 12-acre parcel designated Elementary School. A school on this site is expected to occupy 6 acres of building and parking areas and 6 acres of paved and turfed play areas. The school is intended to serve outlying residential areas to the east and west, in addition to residents of the Specific Plan area. A strip of Open Space flanks the school site on the west, followed by an area designated MDR. An area immediately east of the school site is also assigned the MDR category. Continuing to the northwest, the S2 alignment alternately passes through land designated LDR and Open Space for the remainder of the Specific Plan area, with the exception of a 20-acre parcel designated Community Park. The community park is intended to serve the Specific Plan area and outlying areas. Specific uses might include picnic areas, trails, limited unlighted ballfields, and passive landscaped open space/buffer areas between the park and neighboring homes.

The final stretch of Vineyard Avenue leading to Bernal Avenue is designated Medium Density Residential on both sides, followed by High Density Residential on both sides. At Bernal Avenue, the Alternative S2 alignment turns north and rejoins the proposed alignment for the final run into the Vineyard Substation. The land use designations for this portion of the alignment were described above for the Proposed Project.

South Area Alternative S4: identical to the Proposed Project alignment from the tap point to the transition structure at Milepost M3.1. At this point, the underground alignment veers sharply east and crosses from land designated Rural Density Residential by the City of Pleasanton to land in the City's Public Health and Safety category. Just to the west of the Ruby Hill subdivision, the alignment turns north. At about 1,400 feet south of Vineyard Avenue, the alignment crosses into the *Vineyard Avenue Corridor Specific Plan* area. The alignment passes first into Semi-Rural Residential (SRR) land and then Vineyard-designated land. The SRR category permits custom single-family homes on lots of at least 5 acres. It is assigned to three parcels in the Specific Plan area, two of which are associated with existing homes. The SRR lots are intended to provide a transitional buffer between residential uses to the north and agricultural land to the south. From Vineyard Avenue westward, the S3 alignment is identical to the S2 alignment.

North Area Alternative D1: As discussed previously, this is considered a North Area alternative. The alternative originates at the Vineyard substation, which as already noted is designated Public and Institutional Community Facilities by the City of Pleasanton. North of Stanley Boulevard, the alignment is within the General and Limited Industrial category, previously defined. The alignment passes out of Pleasanton's jurisdiction north of Busch Road. Refer to the discussions on Alameda County and the City of Dublin for the land use designations along the remainder of the D1 alignment.

City of Dublin General Plan

***North Area Alternatives*:** Only **Alternative D1** lies within the City of Dublin's jurisdiction. Crossing north of I-580, the D1 alignment passes into the City. This portion of Dublin is within the *Eastern Dublin Specific Plan* area, recently amended with the approval of the Dublin Ranch Planned Development. The Specific Plan serves as the reference general plan document in this area. The alignment crosses an area designated Campus Office for about 400 feet and then enters an area

designated General Commercial, which includes the remainder of the alignment and the D1 substation site. The Campus Office category is for office and other non-retail commercial uses in a campus-like setting, with an allowable FAR of 0.25 to 0.60. Commercial uses should not generate nuisances related to air emissions, noise, odors, or outdoor storage and operations. Residential uses (up to 50 percent of the developed area) may be permitted as part of a master planned mixed use development. The General Commercial category accommodates a range of regional and community-serving retail, service, and office uses, with an allowable FAR of 0.20 to 0.60. Mixed use projects are encouraged and may incorporate residential uses when location and design ensure compatibility.

City of San Ramon General Plan

North Area Alternatives: The majority of the **Alternative D2** alignment is within unincorporated Contra Costa County and the land use designations for that portion of the alignment are addressed above under the discussion of Contra Costa County. The D2 alignment crosses into San Ramon's jurisdiction at approximately Milepost B21.1. From this point to Alcosta Boulevard, the D2 alignment is designated Open Space by San Ramon. The Open Space designation provides land that is protected from development and primarily held in its natural vegetative state, not necessarily open to the public. It may be privately owned and used for agricultural purposes. The net FAR is not to exceed 0.10. West of Alcosta Boulevard, the alignment is briefly within an area designated Parks, which provides public and private recreation sites and facilities, such as neighborhood and community parks, pocket parks, and swim clubs. Limited commercial uses that support park uses may be permitted in this category, which also has an average net FAR limit of 0.10. The substation site is designated Public and Semipublic, which allows schools, hospitals, religious institutions, utilities, and quasi-public uses, with a net FAR of 0.25 to 0.35.

City of Livermore

As with most of the jurisdictions already discussed above, in addition to the community-wide General Plan governing planning in the City of Livermore, the City has also adopted Specific Plans for certain portions of the incorporated and unincorporated areas within its Sphere of Influence. For the other jurisdictions the discussion of Specific Plan designations was woven into the General Plan discussion, a convention that is continued in this discussion of Livermore's General Plan. However, in addition to an adopted *North Livermore General Plan Amendment*, which functions as a Specific Plan and which encompasses portions of the project and some alternatives alignments, the City and Alameda County have recently prepared the *North Livermore Specific Plan*, which encompasses approximately the same area as the *North Livermore General Plan Amendment* area. This plan was prepared as part of a settlement agreement arising out of lawsuits brought against the City and County for their adoptions of the *North Livermore General Plan Amendment* and the *East County Area Plan*, respectively. The court ordered the two jurisdictions to jointly develop a plan that incorporated the basic development parameters established in the challenged documents. Once adopted, the *North Livermore Specific Plan* will replace both the City and County plans previously adopted. While it hasn't yet been formally adopted, the *North Livermore Specific Plan* is discussed separately below, and potential conflicts with

the draft plan are identified in the impacts and mitigation measures discussion. The present discussion focuses on the currently adopted General Plan and Specific Plans.

South Area Alternative S1: The tap point is located in Subarea 7 of the *South Livermore Valley Specific Plan* planning area. Although this area is currently unincorporated, new development proposals within the Specific Plan area are generally subject to the policies and development standards promulgated in the Specific Plan, in addition to any County standards that may be more restrictive. The area surrounding the tap point is designated Park in the Specific Plan. This designation is intended to protect existing natural resources, enhance Sycamore Grove Park, and secure a permanent southern boundary for the urban area. As the alignment follows the previous park boundary (recently expanded) toward the northwest, it passes into an area designated Agriculture, which is for the establishment of vineyards on 20-acre residential estates. The S1 alignment passes out of the Specific Plan area at the western edge of Sycamore Grove Park and into incorporated Livermore.

From the western park boundary to Vallecitos Road (Highway 84), the area south of the alignment is designated Agriculture/Viticulture on the *Livermore Community General Plan 1976-2000* land use map, while the area north of Foley Road is designated Limited Agriculture. The intent of the Agriculture/Viticulture category is to preserve and promote agricultural and viticultural uses in locations suitable for cultivated agriculture, and to protect sensitive or unique environmental and land characteristics, including an area's rural character. This land use category has a minimum parcel size of 100 acres and a maximum density of 1 to 5 dwelling units per 100 acres. The General Plan does not explicitly define the Limited Agriculture land use category, though the land use map indicates a minimum parcel size of 20 acres for this category. Crossing Highway 84, the Alternative S1 alignment continues as Agriculture/Viticulture on the south and on the north is designated Parks, Trailways, and Recreation, Corridor, and Protected Areas. At Vineyard and Isabel Avenues, the Alternative S1 alignment heads north along the west side of Isabel, which is just outside the Livermore city limits. Nonetheless, the City designates this quarry area as General Agriculture, which is a designation intended to define the limits of urbanization and to respect the integrity of agricultural lands. There is a 100-acre minimum lot size in the General Agriculture category, and one residential dwelling unit per 100 acres is allowed.

The east side of Isabel as the S1 alignment heads north is designated Parks, Trailways, and Recreation, Corridor, and Protected Areas. The area between Alden Lane and Concannon Boulevard is designated Urban Low Residential, which is assigned to areas having amenities worthy of preservation or which have development restraints so that low-density residential development is the best use of the land. Such areas may be either rural in character or may be developed with a higher density character and provide commensurate open space through density transfer. The allowable development density varies, but is 2.0 dwelling units per acre in this particular area. North of Concannon for about 1,500 feet, the land is designated Urban Low Medium Residential by the City of Livermore. This and the Urban Medium Residential categories constitute the majority of residential land in Livermore and form a transition from lower to higher densities as one approaches the center of the community. According to the General Plan map, the Urban Low Medium Residential category has an average density of 3.0 units per acre. Continuing north along the east side of Isabel Avenue, a small area associated with Holmwell

Park next designated Parks, Trailways, and Recreation, Corridor, and Protected Areas. North of that, an extensive area is assigned the Urban Medium Residential category. As mentioned previously, this is a transition category; the allowable density is up to 4.5 dwelling units per acre. Prior to the Stanley Boulevard, the land use designation transitions to Urban High Residential, which continues on the other side of Stanley. The Urban High Residential designation is divided into four density categories. Category 2, which is assigned to the area of discussion, is generally assigned to outlying areas within the City. The allowable density is 18 to 22 dwelling units per acre.

At Stanley Boulevard, the Alternative S1 alignment turns west and follows the north side of the street. The City has designated the northwest corner of the Stanley/Isabel intersection as a Light Rail Transit (LRT) Station associated with a future LRT line down the north side of Stanley Boulevard. A large area surrounding the LRT station at this northwest corner area is in the Low Intensity Industrial land use category, which is primarily assigned to areas surrounding Livermore Municipal Airport. The City has designated the remainder of the unincorporated area north and south of Stanley Boulevard as General Agriculture.

South Area Alternative S2: Identical to the alignment of Alternative S1 from the tap point to Isabel Avenue. West of Isabel Avenue the S2 alignment crosses into the City of Pleasanton. The land use designations for the remainder of the Alternative S2 alignment are discussed under the heading for that city.

North Area. The origin of the project alignment (Milepost B10.4) is in unincorporated Alameda County, but just inside the eastern boundary of the *North Livermore General Plan Amendment (NLGPA)* planning area. A Proposed Trail alignment is located just to the east of Milepost B10.4, which is within a Hillside Conservation land use category intended to protect the natural resources of the area (ridgetops, steep slopes, unstable soils, and biological resources), avoid development in areas with potentially hazardous hillside conditions, maintain the visual quality of the hills and ridgelines, retain the rural character of the canyons, maintain the viability of small-scale agriculture and grazing, limit costly infrastructure extensions, and create a public trail system. Special provisions are to be established by the City and applied to all parcels in Hillside Conservation areas to regulate subdivisions and the design and placement of new structures. Typical uses in the Hillside Conservation district are ranching and rural residential development. Although the allowable density varies depending on slope, it ranges from 1 unit per 20 acres to 1 unit per 100 acres.

From about Milepost B10.5 to Milepost B13.3, the North Area project alignment is primarily within land designated General Agriculture (described below), though from about Milepost B11.5 to Milepost B11.9 it crosses Hillside Conservation land again. It also briefly crosses narrow bands of Greenbelt/Buffer Overlay at Mileposts B11.25, B11.5, B12.55, B12.75, and B13.2. The Greenbelt at about Milepost B12.55 is a wider one, roughly 500 feet in width, associated with Cayetano Creek and coincident with a Proposed Trail. The General Agriculture category is intended to confine the urbanized portions of the planning area south of May School Road, protect sensitive environmental features and wildlife habitat, and maintain existing agricultural uses. Although the base density is 1 unit per 100 acres, the City has a density bonus program for property owners who permanently set

aside open space through use of a conservation easement or other mechanism. Discussion of the Greenbelt/Buffer Overlay in the NLGPA is specific to two broad areas (up to 1/2-mile wide), one of which flanks May School Road, and is intended to confine urban development to the south and discourage "leapfrog" development, while protecting the existing agricultural uses to the north. The proposed North Livermore substation would be located in this greenbelt, along with the transmission line from about Milepost V0.6 to Milepost V1. North of Milepost V0.6 (i.e., between Milepost V0 and Milepost V0.6), the alignment is designated General Agriculture.

West of Milepost B13.3, until it passes out of the NLGPA planning area and into Contra Costa County, the northern alignment is located in Hillside Conservation-designated land, and crosses narrow Greenbelt/Buffer Overlay corridors at approximately Mileposts B14, B14.8, and B16. Proposed Trails are associated with each of these greenbelt corridors, and an additional Proposed Trail alignment (with no greenbelt) is crossed at approximately Milepost B14.55.

North Area Alternative L1: Although this alignment is located primarily in unincorporated Alameda County (discussed previously), west of Dagnino Road it lies within the *North Livermore General Plan Amendment* (NLGPA) planning area, which designates the alignment and the Alternative L1 substation site as Rural Estate/TDC Receiver Site Overlay. This designation is for clustered rural residential development with a maximum density of one dwelling unit per 10 acres. It is intended to maximize small-scale agricultural viability, avoid piecemeal development, utilize the land efficiently, and maintain a rural atmosphere. The overlay designation indicates that the land is within a Transfer of Development Credits (TDC) Receiver Site, which allows agricultural land owners a density bonus (up to two units per acre in the Rural Estate category) to permanently set aside 100 percent of their land as open space, with the development credits and base density transferred to the receiver site.

North Area Alternative L2: Also passes through the City of Livermore, following the same route as Alternative S1 from the tap point to the Isabel/Stanley intersection. At this point, the L2 alignment diverges from S1 and continues north along the west side of the Isabel Avenue extension, which will link up with Kitty Hawk Road when completed. The west side of the alignment continues north as Low Intensity Industrial land to West Jack London Boulevard. The east side transitions from the previously mentioned Urban High Residential, through a band of Parks, Trailways, and Recreation, Corridor, and Protected Areas associated with Arroyo Mocho, into an area designated Urban Medium High Residential. This latter category permits cluster development of residences to permit the development of urban open spaces. It is assigned to existing residential areas where the allowable density of 4.5 to 6.0 units/acre currently occur, which is the case with the area under discussion, and as a "floating" designation where the potential for such densities exist. From approximately Olivina and Cascade Avenues north to Jack London Boulevard, the east side of the alignment is assigned the Urban Medium Residential category.

At this point, the L2 alignment would convert to underground and would head west on Jack London Boulevard. As previously noted, the area south of Jack London is designated Low Intensity Industrial, while the north side is designated Community Facilities. The Community Facilities designation is assigned both to the Livermore Wastewater Treatment Plant which the alignment passes, and to the

Livermore Municipal Airport. After passing the water treatment plant, the alignment heads north, passing between the treatment plant on the east and the airport runways on the west. North of the airport, the alignment heads briefly east, then northeast, crossing Airway Boulevard and then Interstate 580. This segment of the L2 alignment passes first through Business and Commercial Park, then Low Intensity Industrial, then Service Commercial designations. The Business and Commercial Park category is assigned to locations along major streets and in the general vicinity of freeway interchanges where a mix of limited service and highway commercial, community/regional commercial retail, office, and light industrial activities may be appropriate. Employment-generating activities adjacent to destination-oriented and limited retail commercial uses are encouraged. Minimum parcel size is 20 acres, with an FAR ranging from 0.3 to 0.45, depending on use. Service Commercial areas reflect present land use and a recognition of the continuing need for land uses which support other activities in the Central Business District (CBD), such as auto sales and service, nurseries, home maintenance centers, and wholesale establishments. The Service Commercial category is assigned to locations outside the CBD along major streets, in the general vicinity of freeway interchanges, or at other locations with significant access potential from the community at large.

Crossing I-580 and a future BART route, the L2 alignment crosses into the *North Livermore General Plan Amendment (NLGPA)* planning area. As with the *South Livermore Valley Specific Plan*, the County generally considers and applies policies contained in this document when considering development proposals in unincorporated portions of the planning area, though most of the L2 alignment is incorporated. Just north of the freeway, the alignment is designated Business and Commercial Park and Regional Commercial on the land use map for the *NLGPA*. The NLGPA notes that the Business and Commercial Park area would permit a wide variety of light industrial, office, and commercial uses, and that the owner of most of the area, Triad Business Park, has an approved Planned Development Permit for a mix of commercial, research and development, and warehouse uses, including the existing Triad facilities and a gas station and small motel across from the Airway Boulevard interchange. The Business and Commercial Park category has a minimum FAR of 0.2 and a maximum FAR of 0.35. The Regional Commercial designation is centered on the North Canyons Parkway/Isabel Parkway intersection, and is anticipated to include a variety of "big box" retail uses. The L2 alignment continues north into a Schools designation associated with Las Positas College, then crosses parallel alignments designated Creeks and Drainageways and Proposed Trails, respectively.

Continuing to the northeast, the alignment passes briefly through an area designated Very Low Density Single Family, then terminates at the L2 substation site study zone on land in the Low Density Single Family category. Both of these residential categories are intended for standard single-family residential development, while the latter category also permits small-lot single-family development. The Very Low Density allowable densities are a minimum of two units and a maximum of six units per acre; in the Low Density category, these figures are four and eight units, respectively.

North Livermore Specific Plan—Land Use Designations

As noted previously, the *North Livermore Specific Plan* has not yet been adopted and, until it has been, the *North Livermore General Plan Amendment* and the *East County Area Plan* remain the governing

documents for the North Livermore area. Throughout the preparation of this DEIR, it appeared likely the Specific Plan would be adopted prior to implementation of the Proposed Project. For this reason, the project's consistency with applicable policies in the Specific Plan is evaluated in Appendix 1, and land use categories assigned by the Specific Plan to the project areas are identified in this subsection. However, as this DEIR was being finalized for publication, the national and local elections were held in which Alameda County's Measure D was approved by the voters. This anti-growth measure may affect future development in the East County planning area and alter some of the growth assumptions behind the need for the Proposed Project. Effective upon certification of the election, Measure D amends the East County Area Plan (ECAP), the adopted General Plan governing development in the Dublin and Pleasanton areas and the rest of Alameda County east of those cities. Altogether, Measure D deletes 31 existing programs and policies from the ECAP, adds 12 new ones, and modifies 26 others. Among its many provisions, the measure amends the County Urban Growth Boundary and increases restrictions on development outside the boundary; reserves more land for agriculture and less land for urban development; and withdraws the County's participation in the North Livermore planning process. Because the North Livermore area is outside the modified Urban Growth Boundary (UGB) and no urban land use designations are permitted outside the UGB, the measure effectively blocks the County's approval of the proposed development of 12,500 homes, as planned for in the North Livermore Specific Plan.

In addition, Measure D designates the entire North Livermore area outside Livermore's incorporation limits as a North Livermore Intensive Agriculture Area, and precludes urbanization of the area. Agricultural parcels may be subdivided, but only to a minimum 20-acre size, only for cultivated agricultural production, only upon preparation of an environmental impact report and economic analysis, and only upon findings of the Board of Supervisors making the following findings:

(1) that there will be an adequate, sustainable, safe supply of water for projected cultivated agriculture and other uses;
(2) that cultivation and irrigation will not cause significant harm to groundwater, soil, biota, or other environmental qualities (including visual qualities); and
(3) that the parcels, with cultivated agriculture, will be economically viable before it may permit the creation of subsize parcels in those areas.

However, Measure D does not prevent the City of Livermore from annexing the area (subject to approval by the Local Agency Formation Commission) and proceeding with development plans without the County's participation. City staff indicate that, in fact, the City of Livermore is likely to continue with the North Livermore planning process that was initiated in the early 1990s with preparation of the *North Livermore General Plan Amendment*.[7]

North Area: The *North Livermore Specific Plan* is divided into three separate volumes, the first two of which address separate geographical areas within the planning area as a whole. The planning area is divided into four planning zones. Zone A, the Urban Area, is addressed in Volume II of the Specific Plan, while the Rural Area is covered in Volume I, encompassing the other three zones: Zone B: Rural Management/Agricultural Enhancement Area; Zone C: Large Parcel Agriculture/Resource

[7] William Kettler, Associate Planner, City of Livermore, personal communication, November 9, 2000.

Management; and Zone D: Large Parcel Agriculture/Resource Management (hillier northern, northwestern, and northeastern portions of planning area). The North Area alignment of the Proposed Project lies entirely within the Rural Area, and crosses through both Zones D and B. All of Zone D, which includes the alignment from Milepost B10.4 to Milepost B17, is designated Resource Management Area on the Specific Plan land use map. The Specific Plan does not explicitly define this land use category, but provides a table of permitted, conditional, and accessory land uses within Zones C and D. Permitted uses are restricted to single-family residences, secondary residences (subject to restrictions), riding and hiking trails, and certain agricultural uses. Additional agricultural uses are permitted as accessory or conditional uses. Conditional uses within Zones C and D include public utility buildings or uses.

From immediately south of Milepost V0 to Milepost V1, the North Area project alignment as well as the proposed North Livermore substation are located in Zone B, which is designated Large Parcel Agriculture. The Specific Plan states that land uses in Zone B shall be limited to those that are compatible with the creation of an attractive and productive high-value rural residential and agricultural zone. The list of permissible uses is similar to that described above for Zones C and D, and includes public utility buildings or uses as conditional uses.

North Area Alternative Variants P1 and P2: These variants on the Proposed Project in the North Livermore area, **Variant P–1** and **Variant P-2**, would follow the same alignment as the Proposed Project; the land use designations for these variants are therefore identical to those described previously for the Proposed Project's North Area alignment.

North Area Alternative L1: The first three-quarters of this alignment are located in an unincorporated area immediately to the north of the Springtown area of the City of Livermore. The land use designations for this section of the alignment are described previously in the discussion of Alameda County. West of Dagnino Road, the alternative alignment would be within the planning area of the *North Livermore Specific Plan*, and would be within Zone A, the Urban Area. This westerly portion of the L1 alignment and the alternative substation site are designated Residential–Medium (RM), the predominant planned land use in North Livermore. Although single-family detached homes are intended to be the primary use, detached auto-court homes, low-density townhomes, and small lots with non-rectangular configurations may also be permitted. Allowable densities range from four to ten units per acre.

Two *North Livermore Specific Plan* land use designations adjacent to the Alternative L1 alignment warrant notice. The land to the south of the Alternative L1 substation site is designated Institutional (I), and is occupied by the Federal Communications Commission (FCC) monitoring station. This area of approximately 120 acres is intended to provide the necessary clearances for the FCC monitoring antennas. Refer to the previous discussion on the FCC for additional information. Although outside the Specific Plan area, the area south of the L1 alignment between Ames Road and Dagnino Road is owned by the City of Livermore and is identified in the *North Livermore Specific Plan* as the Birds' Beak/Alkali Sink Reserve, which is intended to protect and enhance this sensitive habitat area. Please refer to Section C.3, Biological Resources, and Section C.6, Hydrology and Water Quality, for

additional discussion of this habitat area. *North Livermore Specific Plan* policies on the FCC monitoring station and on the Alkali Sink Reserve that are applicable to Alternative L1 are evaluated in Appendix 1.

North Area Alternative L2: Alignment passes into the *North Livermore Specific Plan* planning boundary, about three-quarters of a mile north of I-580, it is within Zone A, the Urban Area. The northern extent of the L2 alignment is within the RL (Residential, Low Density) land use category assigned by the Specific Plan primarily to areas at the perimeter of the community and adjacent to the greenbelt and hillside open space. This designation is for single-family detached housing on medium to large lots with allowable densities of two to five units per acre. The L2 substation site study zone is designated RL and RM (Residential, Medium Density). The RM category is intended to provide a wider range of residential densities than the RL category. Although housing types will consist primarily of detached homes on small to medium lots, they may also include auto-court homes, small lots with non-rectangular configurations, and low-density townhomes. Allowable densities range from four to ten units per acre.

C.7.2 ENVIRONMENTAL IMPACT ANALYSIS AND APPLICANT PROPOSED MEASURES

C.7.2.1 Introduction

Due to the wide geographic area encompassed by the Proposed Project and the alternatives to the project, the impact analysis in this subsection is organized by geographic subregion. Project and alternatives impacts that would affect the Pleasanton area are addressed in Section C.7.3, which evaluates the proposed South Area alignment, Vineyard substation upgrades, Alternative S4, and the portions of Alternatives S1 and S2 located within the City of Pleasanton. Section C.7.4, which covers the Dublin area, addresses the impacts of the proposed North Area alignment west of Milepost B13.2 and Alternatives D1 and D2, including the reconductoring of the San Ramon-Pittsburg line. Section C.7.5 covers the North Livermore area, and addresses impacts of the proposed North Area alignment from the tap point to Milepost B13.2, two variants (P1 and P2) to the Proposed Project, and Alternatives L1 and L2. Section C.7.6 addresses Phase 2 impacts, and covers the impacts associated with the proposed connection to the Tesla substation, the Brushy Peak Alternative, and the Stanislaus Corridor Alternative.

C.7.2.2 Definition and Use of Significance Criteria

The CEQA Guidelines (Appendix G, Environmental Checklist Form, Sections II, IX, and XIV), indicate that a significant adverse land use, planning, or recreation impact would result if a project would:

(a) Physically divide an established community

(b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect

(c) Conflict with any applicable habitat conservation plan or natural community conservation plan

(d) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non–agricultural use

(e) Conflict with existing zoning for agricultural use, or a Williamson Act contract

(f) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non–agricultural use

(g) Increase the use of existing neighborhood and regional parks or recreational facilities such that substantial deterioration of the facility would occur or be accelerate

(h) Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse effect on the environment

(i) Adversely affect the use or enjoyment of existing recreational facilities.

These standards of significance are adopted for purposes of this EIR. *In addition*, this analysis considers substantial conflicts or incompatibility with established land uses or with planned recreational uses in the project vicinity to constitute a significant impact.

C.7.2.3 Applicant Proposed Measures

Measures proposed by the applicant to reduce potential land use impacts are listed in Table C.7-2. There are no applicant-proposed measures for impacts to recreation or impacts related to planning issues.

Table C.7-2 Applicant-Proposed Measures for Land Use Impacts

Measure No.	Text of Measure
5.1	All new access roads will be gated and locked at fence lines.
5.2	All new access roads will have a "No Trespassing" sign posted at their entrance from a public roadway.
5.3	PG&E will pay restitution for relocating wind turbines and restricting wind farm operations that are currently located outside of PG&E's existing easement.

Source: PEA, 1999

C.7.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES: PLEASANTON AREA

Some of the impacts identified in this section relate to conflicts with adopted planning policies within the jurisdictions traversed by the proposed transmission line. These policies are identified in Appendix 1. The reader is referred to this table as an accompaniment to the impact discussions that follow.

C.7.3.1 Proposed Project

C.7.3.1.1 *Construction*

Construction Noise, Dust, and Odor Impacts on Residents

Construction of the 230-kV transmission line would generate noise, dust, and diesel exhaust odors that would adversely affect residents in homes adjacent to the alignment along Benedict Court, a short segment of Smallwood Court, Hearst Drive, and Bernal Avenue. Residents on adjacent or nearby streets may also be affected. This would represent a conflict with an established land use. Construction of the trench and splice vaults would require operating concrete saws, pavement-breaking machines, jackhammers, backhoes, and other powered construction equipment that would generate noise that could disturb nearby workers. Other noise-generating equipment would include trucks to haul equipment, materials, and personnel; mobile cranes to install prefabricated splice vaults and lay concrete duct banks; a cable-puller truck to pull transmission cables through conduits; air tampers to compact soil; concrete trucks to pour backfill slurry; power generators, air compressors, and more.

Installation of the splice vaults would occur prior to trenching and would take between three and five days at any given location. Trenching would occur simultaneously at two separate locations, one at each end of the alignment. A maximum of 300 linear feet of trench would be open at any one time, with construction at that location lasting up to three weeks, from the initial cutting of existing pavement to completion of backfilling and repaving following installation of the duct bank. The cable pulling and splicing would be performed after the duct banks and splice vaults have been installed. This phase of construction would also require a lane closure and would generate noise from a diesel-powered cable puller. The cable pulling would require approximately five working days at some locations, and as many as ten work days at others. Noise levels and diesel odors generated from all phases of construction would be representative of typical construction projects, while the dust that would be generated from trench excavation would be limited due to the 300-foot by 3-foot exposure of soil required for the active trench. While some dust may settle onto cars parked in the vicinity and horizontal surfaces of nearby homes, the amount of dust would be limited, and would constitute a minor nuisance. Residents could readily avoid fugitive diesel odors by closing their windows, but their enjoyment of their yards, particularly their front yards, would be restricted during construction. Due to the relatively short duration of these nuisance effects, this impact would be adverse, but not significant (**Class III**). Please refer to Section C.2 for additional discussion of construction-related air quality impacts and to Section C.8 for a more detailed discussion of noise impacts.

Mitigation Measures for Construction Noise, Dust, and Odor Impacts on Residents

Mitigation measures recommended in the Air Quality (Section C.2) and Noise (Section C.8) impact analyses would reduce land use disturbances to residents along the alignment. While significant impacts have not been identified, the following measures would further reduce impacts on residents.

Impact 7-1: Temporary noise, dust, and odor impacts on residential receptors (**Class III**).

L-1 PG&E Co. or its construction contractor shall provide advance notice, between two and four weeks prior to construction, by mail to all residents and property owners within 300 feet of the

construction right-of-way. The announcement shall state specifically where and when construction will occur in the area. If construction delays of more than seven days occur, an additional notice shall be made, either in person or by mail. Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction. PG&E Co. shall also publish a notice of impending construction in local newspapers, stating when and where construction will occur.

L-2 PG&E Co. shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring residents about noise, dust, and other construction disturbance. PG&E Co. shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for promptly responding to callers and recording the disposition of calls (procedures to be approved by the CPUC). Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public in accordance with Mitigation Measure L-1.

Blocked Access to Residences During Construction

During excavation of the trench for the underground cable, residents' access to their driveways would be disrupted, potentially denying them full use of their properties. This would represent a conflict with an established land use. The trench would be excavated in one lane of the roadways along the alignment route through residential Pleasanton, thereby cutting across driveways on one side of the street. Residents would thus potentially be unable to drive their cars to or from their homes during the trench construction phase of construction. This would be a potentially significant, but mitigable impact (**Class II**) addressed by Mitigation Measures T-5 and T-6 (Section C.11, Transportation and Traffic).

Mitigation Measures for Blocked Access to Residences During Construction

Impact 7-2: Blocked residential driveway access during construction. (**Class II**).

See Mitigation Measures T-5 and T-6 in Section C.11.3.1.1.

Temporary Closure of Public Lawn

Trenching activities at the intersection of Smallwood Court and Hearst Drive would require temporary closure of a grass lawn to the north of the tennis courts for the Kottinger Ranch residents. This would represent a conflict with an established land use. To keep onlookers away from trenching activities, a barricade would be placed on the lawn area during the construction period at this intersection, which would last for five to ten working days. The exposed trench would be covered with steel plates and the barricade would be removed in the evenings and weekends during this period, allowing use of the lawn at these times. The lawn appears to receive little if any use by area residents; during multiple visits to the area during project planning and preparation of this EIR, no people were ever observed on the lawn. For this reason and due to the brief period of time that the lawn would be barricaded, this would be an adverse but not significant impact (**Class III**).

Mitigation Measures for Temporary Closure of Public Lawn

Impact 7-3: Temporary closure of grass lawn on Hearst Drive during construction (**Class III**).

No mitigation measures are required or recommended.

Construction Impacts on Cattle Grazing

Construction of the South Area transmission line from Milepost MX0 to Milepost M2.8 would cross private grazing land. Construction activities along the alignment would temporarily disrupt and displace cattle grazing within the right-of-way. This would represent a conflict with an established land use. Approximately 0.8 miles of a gravel access road would be constructed along the alignment, and an additional 0.8 miles of grazing land would be traversed cross-country (the remainder of the alignment would be accessed via existing dirt roads). The removal of vegetation and the movement and operation of workers and equipment along the alignment would disturb and displace grazing cattle during all phases of construction (i.e., road grading, tower construction, and conductor stringing). In addition, although there is an Applicant-proposed measure to provide gates with locks at all fencelines, there is some potential for gates to be inadvertently left open during construction, which would allow cattle to leave property and possibly get lost or injured. Although this is a fairly remote possibility, mitigation is recommended below to address such an eventuality. As noted below in the discussion of operational impacts, the loss of grazing land along the new access road would be permanent. The temporary construction disturbance would be an adverse, but not significant impact (**Class III**) because only a narrow corridor within a large expanse of grazing land would be temporarily disrupted, and it is assumed that any cattle disturbed by construction noise would move further away. The amount of removed vegetation would be insignificant relative to the amount that would remain for grazing.

Mitigation Measures for Construction Impacts on Cattle Grazing

Impact 7-4: Temporary disruption of cattle grazing (**Class III**).

Although no mitigation is required, implementation of Mitigation Measure L-1 would provide grazing land owners with advance notification of construction, permitting them to relocate cattle if they were concerned about construction disturbance. Implementation of Mitigation Measure L-2 would provide affected ranchers with a contact person to notify if any gates were left open before, during, or after construction. PG&E Co. shall continue to provide a contact person to respond to complaints following project construction and continuing indefinitely.

C.7.3.1.2 *Operation and Maintenance*

Loss of Grazing Land

Following completion of construction and the associated impact on grazing cattle identified above, approximately 0.8 miles of new access road would remain along the south alignment, thereby permanently displacing cattle grazing from the land occupied by the new roadway. However, the landowner would be compensated for the loss by PG&E's purchase of the easement, and the amount of lost grazing land would be insignificant relative to the amount that would remain. Ranchers typically require roads across their grazing land to provide access to cattle and for fence maintenance; the

presence of these roads does not detract from the viability of the grazing lands they cross, and they are an integral component of modern-day ranching operations. Therefore, this would be an adverse, but not significant impact (**Class III**). Similar to the construction impacts on grazing identified above, there is also the potential for gates to be accidentally left open during maintenance activities, providing an opportunity for cattle to escape. The same mitigation identified for the construction impact would address this eventuality.

Mitigation Measures for Loss of Grazing Land

Impact 7-5: Permanent loss of grazing land along new access road (**Class III**).

No mitigation measures are required or recommended.

Impact on Recreational Trail Users

The South Area alignment would cross the future alignment of the EBRPD's Pleasanton Ridge to Shadow Cliffs Regional Trail, which would run north of and parallel to Highway 84 in the vicinity of the project's crossing of the highway. Hikers on this future trail would cross under the transmission line and, depending on final location of the support towers and the trail, could pass adjacent to one of the support towers. This would adversely affect the use and enjoyment of recreation facilities. The presence of the transmission line and support tower would visually degrade the recreational experience at this location. Because the exact alignment of the trail has not been determined and will not be determined prior to project construction, it is not feasible for PG&E to coordinate the placement of transmission line support towers with the EBRPD so that a tower is not placed adjacent to the trail. Although the District will be acquiring an easement rather than a purchased right-of-way, it is assumed the District will have some flexibility in determining the ultimate trail alignment, and will be able to avoid tower locations. Hikers would only view the transmission line for a short time while approaching and passing under it. Depending on direction of approach and ultimate trail alignment, topography and vegetation could obscure the line from all but a short passage of the trail. The substantial existing Tesla-Newark and Contra Costa-Newark transmission corridors are nearby and would likely be more visible from the trail, and for a longer period of time, since they run parallel to the planned trail alignment. Hikers would not enjoy a pristine nature experience on the future trail due to other manmade facilities in the vicinity, including Highway 84 and the Vallecitos Nuclear Center, which would also be visible from the trail. The EBRPD anticipates that this trail would receive relatively light usage.[8] For the reasons enumerated, this would be an adverse, but not significant impact (**Class III**).

Mitigation Measures for Impact on Recreational Trail Users

Impact 7-6: Transmission line visible to future hikers passing underneath (**Class III**).

No mitigation measures are required or recommended.

8 Steve Fiala, Trails Specialist, East Bay Regional Park District, personal communication August 30, 2000.

C.7.3.2 Alternative S1: Vineyard-Isabel-Stanley

C.7.3.2.1 *Construction Disturbance in Regional Park*

Construction activities in Sycamore Grove Regional Park would adversely affect park users in the vicinity of the construction through the generation of noise, dust, and diesel equipment odors. Approximately 2,000 feet of the S1 alignment would be constructed across park land. This would require construction of two or three support towers and would subsequently require pull and tension activities at the tap point. Disruptions would be short-term, isolated in location (rather than continuous along the alignment), limited in a real extent, and would occur at intervals. Park users would be able to avoid active construction areas, while bikers and hikers would quickly pass by the construction areas and into undisturbed areas of the park. For these reasons, this would be an adverse, but not significant, impact (**Class III**).

Mitigation Measures for Construction Disturbance in Regional Park

Impact 7-7: Disturbance of park users by construction noise, dust, and odor (**Class III**).

L-4 Temporary barricades and signs shall be placed to route park users around each construction site in the park. To the extent feasible, specific tower locations that would minimize disruption of park patrons shall be selected.

Potential Disruption of Grape Harvesting

Construction of the S1 alternative along Vineyard Avenue has the potential to disrupt grape harvesting in the vineyards to the south, depending on the timing of construction. The underground trench would be constructed in the dirt access roads that are adjacent to the vineyards and provide access to workers and equipment. Utilization of these roads is particularly intensive during the annual fall grape harvest, which can take place any time between mid-August and the end of October, depending on weather conditions during the growing season. The presence of construction equipment and activities during the grape harvest would block or disrupt access to the vineyards and interfere with harvesting operations. This would be a significant but mitigable impact (**Class II**).

Mitigation Measures for Potential Disruption of Grape Harvesting

Impact 7-8: Construction interference with grape harvesting (**Class II**).

L-5 Construction of the underground alignment along Vineyard Avenue shall be timed so as to avoid the fall grape harvest, potentially occurring between mid-August and the end of October.

Adverse Impacts on Sycamore Grove Regional Park

The Applicant has indicated that tubular steel poles or lattice support towers would be used for overhead segments of the transmission line. The latter would be particularly intrusive to hikers and other park users encountering them at ground level. The South Livermore Valley Agricultural Land Trust (SLVALT) owns conservation easements on this portion of the park which require the land to be retained in open space. The transmission line would conflict both the SLVALT's conservation

easements and the LARPD's intended character of regional parks under its jurisdiction. The LARPD *Master Plan 1995* establishes standards for regional parks which state that they should provide minimal developed area, with any development designed to be low-impact and to enhance the enjoyment of the site's natural character. The Master Plan also states that the viewshed should enhance the natural character of the site. The Alternative S1 transmission line would be visually incompatible with the scenic value of Sycamore Grove Regional Park and would adversely affect park users through the visual intrusion of power lines and support towers. This would therefore be a significant, but mitigable impact (**Class II**).

Mitigation Measures for Adverse Impacts on Sycamore Grove Regional Park

Impact 7-9: Incompatibility with scenic value and enjoyment of regional park (**Class II**).

L-6 To minimize the footprint of the support towers inside the park, tubular steel support poles shall be used, rather than lattice towers.

L-7 PG&E Co. shall remove the existing 60-kV transmission line that crosses the park on the same approximate alignment as the S1 alignment. If this isn't feasible, the 230-kV alignment through the park shall be placed underground or the tap point and transmission line shall be aligned along the access road to the Zone 7 Water Treatment Plant.

L-8 To compensate for the conflict with the conservation easement, PG&E Co. shall make a contribution to the South Livermore Valley Agricultural Land Trust equal to the cost of purchasing conservation easements elsewhere in the South Livermore area. The required acreage of easements to be purchased shall be determined by multiplying the distance of land under conservation easement traversed by the transmission line multiplied by 200 feet.

Loss of Important Farmland

The Alternative S1 overhead/underground transition structure east of Highway 84 would be located on land designated as Farmland of Statewide Importance by the California Department of Conservation. While not in active production, the site is immediately adjacent to cultivated vineyards, and the proximity of the structure could interfere with the movement of agricultural equipment working in the vineyard. The vineyard could also feasibly be expanded to include the currently vacant area where the transition structure would be erected. The presence of the structure would preclude cultivation of the site, thereby effectively removing approximately one-half acre of Farmland of Statewide Importance. According to the *CEQA Guidelines*, this would constitute a significant, but mitigable impact (**Class II**).

Mitigation Measures for Loss of Important Farmland

Impact 7-10: State-designated Farmland of Statewide Importance removed from potential production by transition structure (**Class II**).

L-9 PG&E Co. shall make a contribution to the South Livermore Valley Agricultural Land Trust sufficient to allow the Trust to purchase a conservation easement on one acre of vineyard or comparable agricultural land in the South Livermore area.

Conflict with Alameda County Scenic Route Policies

Highway 84 (Vallecitos Road) is designated a scenic route by the County. Alternative S1 would be inconsistent with the following *Alameda County General Plan* Scenic Route Element principles:

> Locate Transmission Towers and Lines Outside of Scenic Route Corridors When Feasible. New overhead transmission towers and lines should not be located within scenic corridors when it is feasible to locate them elsewhere.
>
> Preserve and Enhance Natural Scenic Qualities in Areas Beyond the Scenic Corridor. Views from scenic routes will comprise essentially all of the remainder of the county beyond the limits of the scenic corridor: The corridor is intended to establish a framework for the observation of the views beyond. Therefore, in all areas in the county extending beyond the scenic route corridors, scenic qualities should be preserved through retaining the general character of natural slopes and natural formations, and through preservation and enhancement of water areas, water courses, vegetation and wildlife habitats. Development of lands adjacent to scenic route corridors should not obstruct views of scenic areas and development should be visually compatible with the natural scenic qualities.

Because the overhead/underground transition structure that would be located adjacent to Highway 84 under this alternative would be conspicuous from the roadway, it would be inconsistent with the first policy listed above. It would also conflict with *East County Area Plan* Land Use Policy 117, which requires that utility lines be placed underground whenever feasible, and that above ground utility lines and supporting structures be sited to minimize their visual impact. Because the overhead segment of the transmission line leading into the transition structure would also be highly visible from the scenic corridor and would be incompatible with the scenic qualities of adjacent Sycamore Grove Regional Park, Alternative S1 would also be inconsistent with the second policy listed. This would be a significant, but mitigable impact (**Class II**).

Mitigation for Conflict with Alameda County Scenic Route Policies

Impact 7-11: Conflict with Alameda County policies for scenic routes and their corridors (**Class II**).

L-10 The conversion of the Alternative S1 transmission line to an underground segment shall be located further away from Highway 84 so that the transition structure and the overhead lines leading to it are not so conspicuous from the scenic route.

Penetration of Livermore Airport Airspace

The transmission lines and support towers of Alternative S1 along Stanley Boulevard would protrude into one of the imaginary Federal Aviation Administration (FAA) boundaries around Livermore Municipal Airport. As discussed in more detail in Section C.7.1.2.1, construction of any object greater than 60 feet in height within 6,000 of the airport would require referral to the FAA for evaluation of whether it would constitute a hazard to air navigation. The alignment along Stanley Boulevard would also be within the General Referral Area established around the airport by the Alameda County Airport Land Use Commission (ALUC), and this alternative would therefore subject to review by that agency. The 120-foot towers would not penetrate any of the imaginary FAA surfaces that define obstructions to

air navigation. Therefore, subject to FAA concurrence that the alternative would not constitute a flight hazard, this would be an adverse, but not significant, impact (**Class III**). (Note that this issue is also addressed in Section C.11, Transportation and Traffic).

Mitigation Measures for Penetration of Livermore Airport Airspace

Impact 7-12: Transmission lines and support towers would penetrate airspace requiring referral to Federal Aviation Administration for Aeronautical Study (**Class III**).

L-11 If Alternative S1 is approved by the CPUC, PG&E Co. shall immediately initiate an FAA Aeronautical Study by submitting FAA Form 7460-1 to the Western Pacific Region of the FAA. The Applicant shall comply with any requirements identified by the FAA, including those pertaining to the marking and lighting of transmission line support towers.

Impacts on Shadow Cliffs Regional Park

The overhead alignment of the S1 alternative along Stanley Boulevard would be visible from trails, picnic areas, the swimming beach, and boats in the lake at Shadow Cliffs Regional Park in Pleasanton, thereby creating adverse impacts on the recreational experience within the park. (The visual impact is also addressed in Section C.12, Visual Resources.) The overhead line would be set back further from the park than the existing 60-kV transmission line on the north side of Stanley Boulevard and, despite its greater height, would be less visible than the existing line. While the addition of the transmission line would be visually incompatible with the recreational uses in the park, it would not substantially detract from the recreational experience there. This is due to the generally industrial character of the area surrounding the park. Heavy truck and auto traffic are clearly visible and audible from the park, and a freight train stored on a spur track north of Stanley Boulevard is also visible. The large conveyors, elevators, and other facilities associated with the gravel mining operations to the east of the park are also plainly visible from the park. Due to this existing context, the addition of the 230-kV transmission line along Stanley Boulevard would not significantly degrade visual conditions in the vicinity of the park. This would therefore be an adverse, but not significant impact (**Class III**).

Mitigation Measures for Impacts on Shadow Cliffs Regional Park

Impact 7-13: Visual impacts on Shadow Cliffs Regional Park patrons (**Class III**).

No mitigation measures are required or recommended.

Adverse Effects on Regional Trail Users

The placement of the S1 transmission line along Stanley Boulevard would adversely affect hikers and bicyclists along a planned regional trail on the north side of the roadway. The East Bay Regional Park District's *Master Plan 1997* trails and parks map designates the north side of Stanley Boulevard as the future alignment for the San Joaquin County to Shadow Cliffs Regional Trail. Future trail users would be exposed to EMFs and the visual intrusion of the overhead transmission line. Exposure to EMFs would be limited by the distance of the transmission lines from the trail and the short duration of exposure. In addition to the height of the lines above the trail, the trail would laterally separated from

the transmission line, which would closely parallel the Union Pacific Railroad tracks. While the exact trail alignment has not yet been determined, the railroad would be unlikely to allow a public-access trail immediately adjacent to an active rail corridor. For additional information on exposure to EMFs, please refer to Section C.9, Public Health, Safety, and Nuisance.

With respect to the visual effects, the transmission line would be located in a context of an industrial area that has few remaining natural amenities. The surrounding gravel mining operations, heavy truck and auto traffic, adjacent railroad operations, and existing power lines all contribute to degraded visual conditions in the area. In this context, the addition of the transmission line would create an adverse, but not significant, impact on future recreational trail users (**Class III**). More details on this visual impact are provided in Section C.12, Visual Resources.

Mitigation Measures for Adverse Effects on Regional Trail Users

Impact 7-14: Adverse effects on regional trail users (**Class III**).

No mitigation measures are required or recommended.

Visual Intrusion on Local Residents

The overhead alignment of the S1 alternative along Isabel Avenue would be visible from existing and future homes on the east side of Isabel Avenue and from homes in the Ruby Hills subdivision south of Vineyard Avenue, potentially interfering with the full use of these residential properties. (This visual impact is also addressed in Section C.12, Visual Resources.) The overhead line would not be visible from the ground floors of homes east of Isabel because an existing sound wall would block views. While it would be visible from second-story windows facing west, it is presumed that these second-story rooms are generally bedrooms, which are primarily used in the evening and nighttime hours (i.e., after dark), and that bedroom views are not noticed nearly as much as those from ground-floor rooms. The transmission line along Isabel Avenue would also be visible from some residents living in the Ruby Hills subdivision south of Vineyard Avenue. The closest residences would be approximately 2,000 feet away from the nearest support tower and overhead line, while the transmission line would be more than a mile away from many of the homes with views of the transmission line. Due to the intervening distance, the transmission line would not loom large in the viewsheds of these residents, and would not substantially conflict with the residents' use or enjoyment of their homes. Therefore, this would be an adverse but not significant impact (**Class III**).

Mitigation Measures for Visual Intrusion on Local Residents

Impact 7-15: Visual impacts on nearby residences (**Class III**).

No mitigation measures are required or recommended.

C.7.3.3 Alternative S2: Vineyard Avenue

All of the impacts and mitigation measures identified above for Alternative S1 would apply equally to Alternative S2, with the exception of the impacts on Shadow Cliffs Regional Park and the future regional trail along Stanley Boulevard and the impact pertaining to Livermore Airport. The potential

for disruption of agricultural activities in the adjacent vineyards would be somewhat greater under this alternative, due to the additional length of alignment adjacent to vineyards. The less than significant construction impacts on residents related to noise, dust, odors, and blocked driveway access that were identified for the Proposed Project would also apply to this alternative, although in a lower-density area; implementation of Mitigation Measures L-1 and L-2 would likewise further reduce the impacts. In addition, the following impact was identified for Alternative S2:

Construction Noise, Dust, and Odor Impacts on Elementary School

The noise, dust, and odor impacts described for the Proposed Project could also occur under Alternative S2 at a planned elementary school on Vineyard Avenue. These impacts would represent a conflict with a planned land use. The *Vineyard Avenue Corridor Specific Plan*, which was approved by the City of Pleasanton in June 1999, includes an Elementary School on Vineyard Avenue to serve the new residential housing planned for the Specific Plan area, as well as residents in neighboring areas. While the timing of school construction is not certain, it is expected to commence in 2001. It is therefore possible that construction of this alternative transmission line could occur following occupation of the school. The noise impacts on children in class would be particularly disruptive. The children would also be exposed to diesel emissions, dust, and odors during recess and other outdoor activities. This exposure could render them more susceptible to adverse respiratory health effects, particularly since children are more susceptible than the general population to adverse effects from exposure to air pollutants. For this reason, this would be a significant but mitigable impact (**Class II**).

Mitigation Measures for Construction Noise, Dust, and Odor Impacts on Elementary School

Impact 7-16: Potential exposure of elementary school children to construction emissions and noise (**Class II**).

L-12 If the planned elementary school is occupied prior to or during construction of the underground transmission line, construction activities within 1,000 feet of the school property's frontage on Vineyard Avenue shall be timed to occur during school breaks, such as summer vacation, Christmas break, and Spring break.

C.7.3.4 Alternative S4: Eastern Open Space

Due to common route elements, some of the construction-related impacts identified for the Proposed Project and Alternative S2 would also apply to Alternative S4: disruption of cattle grazing (project); noise, dust, and odor impacts on residential receptors and on the planned elementary school (S2); and blocked residential driveway access (S2). Implementation of Mitigation Measures L-1, L-2 and L-13 would further reduce these impacts to less-than-significant. Operational impacts identified for the Proposed Project would also apply to this alternative, including loss of grazing land, and impacts on future recreational trail users.

Visual Intrusion on Ruby Hill Residents

The overhead portion of the S4 transmission line on the ridgelines west of the Ruby Hill subdivision would be partially visible to some of the residents of this subdivision, conflicting with the existing

adjacent land use. While the overhead segment would be more than a mile from the nearest residents, several towers and cable segments would protrude above the skyline, and thus be quite noticeable from the lower elevations in Ruby Hill. Because the existing viewshed is limited to oak-dotted hillsides lacking any manmade elements, the introduction of the transmission line could be perceived as a significant degradation of the view, which could detract from the residents' enjoyment of their properties. This visual impact is addressed in greater detail in Section C.12, Visual Resources, which includes visual simulations of the view from Ruby Hill. While it is primarily a visual impact, it would adversely affect the existing residential use in the subdivision. For this reason, this would be a significant but mitigable impact (**Class II**).

Mitigation Measures for Visual Intrusion on Ruby Hill Residents

Impact 7-17: Visual Intrusion on Ruby Hill Residents (**Class II**).

L-13 Implementation of Mitigation Measure V-2 (Section C.12, Visual Resources) would reduce this impact to a less than significant level.

C.7.4 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES: DUBLIN AREA

C.7.4.1 Proposed Project

C.7.4.1.1 *Construction*

The construction impact on cattle grazing identified for the Proposed Project in the Pleasanton area would also apply to the North Area alignment from Milepost B13.2 to the proposed Dublin substation. The noise and dust impacts on residential receptors identified for the South Area alignment would also apply to the North Area alignment, though only a few farm residences would be affected and the magnitude of the impacts would be substantially smaller because they would occur only at tower locations, which would be more distant from the affected residences, and the duration of construction activities would be much shorter for overhead line construction. These nuisance impacts would be further reduced through implementation of Mitigation Measures L-1 and L-2.

C.7.4.1.2 *Operation and Maintenance*

The Class III impact on grazing operations as a result of the construction of new permanent access roads identified for the South Area alignment would also occur on the North Area project alignment. Less than 1 mile of new roads would be constructed. The Class III impact on future recreational trail users identified for the South Area alignment would also occur on the North Area project alignment. Following its construction, the Shadow Cliffs to Morgan Territory Regional Trail planned by the EBRPD would cross under the north alignment at approximately Milepost B13. No mitigation would be required for these impacts. The following additional impacts have been identified for the north alignment:

Crossing Over Equestrian Arena

The overhead transmission line would cross directly over an existing open-air equestrian arena (recently converted from a hay barn) on Collier Canyon Road, at Milepost B14.8. While such a crossing

potentially raises concerns about adequate clearance and fire hazards, the height of the arena is not such that it would interfere with adequate clearance for the transmission line. No flammable materials, such as hay, are expected to be stored in the arena, and no horses or humans would inhabit the arena. Therefore, the crossing does not create any safety hazards, and this would be an adverse but not significant impact (**Class III**).

Mitigation Measures for Crossing Over Equestrian Arena

Impact 7-18: Transmission line spanning equestrian arena (**Class III**).

No mitigation measures are required or recommended.

Reduction of Agricultural Preserve

The proposed Dublin substation site is part of a larger parcel currently under a Williamson Act contract, which requires the parcel to remain in agricultural production for the duration of the contract. The substation would remove 5 acres of land from its current use for cattle grazing. As discussed in more detail in the Setting section, electric transmission facilities are considered compatible uses on agricultural preserves (i.e., lands under Williamson Act contract) and notification of the Department of Conservation is not required for their construction and operation. Therefore, this would be an adverse but not significant impact (**Class III**).

Mitigation Measures for Reduction of Agricultural Preserve

Impact 7-19: Removal of grazing land from parcel under Williamson Act contract (**Class III**).

No mitigation measures are required or recommended.

C.7.4.2 Alternative D1: South Dublin

There is only one residential receptor along the D1 alignment. The Class III construction noise and dust impact identified for the proposed South Area alignment would occur to this residence, and would be mitigated by Mitigation Measures L-1 and L-2. The magnitude of this impact would be considerably less than the impact along the South Area alignment in Pleasanton.

Similar to the impact identified for Alternative S1, this alternative would cross land designated by the State Department of Conservation as Prime Farmland, and the support towers would remove this land from potential production. Some of the designated land is currently being quarried for gravel. While the west side of El Charro Road south of I-580 and north of Milepost 15.2 is currently agricultural land, the transmission line support towers would be placed in the fire break along the edge of the roadway. Consequently, no active agricultural land would be removed from production. This would therefore be a Class III impact, requiring no mitigation.

In addition to these impacts, the following impact would be unique to Alternative D1:

Visual Intrusion on Planned Adjacent Land Uses

The Alternative D1 substation site would be located in the midst of the approved Dublin Ranch planned development, surrounded by commercial uses. Final siting and design have yet to be determined and could be arranged so as to block view of the substation from Dublin Boulevard. However, Dublin Boulevard would serve as a throughfare to Dublin Ranch, including the residential development that would be located along the north side of the roadway. If the substation were conspicuous from this roadway, its industrial character would be inconsistent with the neighboring land uses, although it has not been found to be a significant impact on Visual Resources (Section C.12). This is potentially a significant but mitigable impact (**Class II**).

Mitigation Measures for Visual Intrusion on Planned Adjacent Land Uses

Impact 7-20: D1 Substation visually inconsistent with planned, surrounding land uses (**Class II**).

L-14 If the D1 Alternative is approved by the CPUC, the exact location, exterior design, and landscaping plan for the Alternative D1 substation shall be developed in consultation with the City of Dublin and PG&E Co. shall make all reasonable efforts to comply with the City's design standards (as required by 6.0. 131-D). Potential treatments may include enclosure by attractive façade walls and screening landscaping or surrounding the substation with commercial buildings.

C.7.4.3 Alternative D2: Dublin-San Ramon

The Class III construction noise and dust impacts on residential receptors identified for the proposed South Area alignment would apply under this alternative to a small number of San Ramon residents located east of Alcosta Boulevard, and the mitigation measures recommended for the project would also be recommended for this alternative. Noise disturbance at residences could also result if reconductoring of the San Ramon-Pittsburg transmission line required augmentation of the existing tower cages at some locations to provide adequate clearance for the heavier cables. Construction work associated with this activity would generate noise that would be adequately mitigated by Mitigation Measures L-1 and L-2. The Class III construction impact on cattle grazing identified for the Proposed Project in the Pleasanton area would also apply to this alternative from the proposed Dublin substation westward to about Milepost B21.1; no mitigation would be required. In addition to these impacts, the following impacts would result from implementation of Alternative D2:

Incompatibility with Planned Recreational Uses

The Alternative D2 alignment would pass near the southern end of a planned 72-acre community park designated on the Community Facilities Map of the *Dougherty Valley Specific Plan* (City of San Ramon). From about Milepost B18.8 to Milepost B20.1 it would also be located in or adjacent to a planned recreational trail alignment designated on the Park and Trail Concept Map of the Specific Plan. The presence of transmission lines and towers would aesthetically detract from the recreational experience of future trail and park users along the affected portions of the alternative alignment. The planned trail would be adjacent to future residential development, and the presence of this nearby manmade development would lessen the severity of the impact on trail users. Because these future

recreational facilities would be situated in an urbanized context and the transmission line would not interfere with use of the trail or park, this would be an adverse, but not significant impact (**Class III**). The following measure is recommended to further reduce the magnitude of the impact.

Mitigation Measures for Incompatibility with Planned Recreational Uses

Impact 7-21: Alternative D2 alignment visually incompatible with planned park and trail (**Class III**).

L-15 PG&E Co. shall consult with the City of San Ramon prior to finalizing project design to ensure that the final location of support towers minimizes impacts on the planned community park and recreation trail.

Disturbance by Helicopters

The reconductoring of the San Ramon-Pittsburg transmission line that could be required under Alternative D2 would utilize a helicopter to string the new conductors. The noise and vibration generated by the helicopter hovering overhead would disturb residents and businesses located in proximity to the existing support towers, as well as recreational visitors in Mount Diablo State Park, which is crossed by the San Ramon-Pittsburg line. However, the disturbance at each tower location would be quite intermittent and short-lived. At each location, the helicopter would drop off a worker and materials, then depart, and return approximately 30 minutes later to pick the worker up. Each of these stops would require the helicopter to hover for no more than a minute or two. While annoying, this noise would not interfere with the use of most affected properties, including recreational use of the State Park. While normal use and activity could be precluded at some locations, the momentary disruption would not be substantial inconvenience. This would be an adverse, but not significant impact (**Class III**).

Mitigation Measures for Disturbance by Helicopters

Impact 7-22: Disturbance of residences, businesses, and State Park by helicopter noise (**Class III**).

No mitigation measures are required or recommended.

C.7.5 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES: NORTH LIVERMORE AREA

C.7.5.1 Proposed Project

C.7.5.1.1 *Construction*

The construction impact on cattle grazing identified for the Proposed Project in the Pleasanton area would also apply to the North Area project alignment in the North Livermore area, though most of this area appears to be devoted to hay production rather than cattle grazing. The noise and dust impacts on residential receptors identified for the South Area alignment would also apply to the North Area alignment, though only a few farm residences would be affected and the magnitude of the impacts would be substantially smaller because they would occur only at tower locations (for overhead line construction), which would be more distant from the affected residences, and the duration of construction activities would be much shorter. These impacts would be further reduced through implementation of Mitigation Measures L-1 and L-2.

C.7.5.1.2 *Operation and Maintenance*

Conflict with Alameda County Scenic Route and Open Space Policies

The transmission lines and support towers of the North Area project alignment would be highly visible from North Livermore Avenue and Manning Road, both County-designated scenic routes. Therefore, the north alignment would be inconsistent with the same *Alameda County General Plan* Scenic Route Element principles identified in the Alternative S1 discussion, though different mitigation would be required to render the project consistent with the policies. In addition to those policies, the following Scenic Route Element Principle and Open Space Element principle, respectively, would apply to the North Area alignment:

> Provide for Normal Uses of Land but Limit Overhead Utilities and Outdoor Advertising Structures. In both developed and undeveloped areas, outdoor advertising structures, utility and communication towers, poles and wires should be located only where they will not detract from significant scenic views. All other structures and use of land should be permitted as specified in the local zoning ordinance as supplemented by special height regulations (see General Scenic Development Standards, page 20).
>
> Utility Lines to be Consolidated and Located to Avoid Scenic Areas. Wherever feasible, power and pipe utility lines should be consolidated to prevent further severance of open space lands. Utility lines and aqueducts in open space areas should be located so as to avoid areas of outstanding beauty.

The North Area project alignment would traverse open space and be highly visible from the North Livermore area. The overhead transmission line would stand out against the hillsides that form the northern backdrop to the valley and constitute an important component of the beauty of the area. The transmission line would not be considered visually compatible with these significant, scenic natural hillsides. The visual impact of the North Area alignment is discussed in greater detail in Section C.12, Visual Resources. The conflict with Alameda County's planning policies would constitute a significant impact (**Class I**), which would be mitigable by the implementation of Alternative P2 (see Section C.7.5.3).

Conflict with North Livermore Greenbelt Policy

The proposed North Livermore substation would conflict with *North Livermore Specific Plan* Rural Area Land Use Policy 2.8.1, Rural Area Standards & Design Guidelines Policy 7.6.3, and Resource Conservation Program Policy 8.2, all of which establish a greenbelt buffer at May School Road. As proposed, the substation would be located within the designated greenbelt, and would be incompatible with the intended natural character of the greenbelt. This would be a significant, but mitigable impact (**Class II**).

Mitigation Measures for Conflict with North Livermore Greenbelt Policy

Impact 7-23: North Livermore substation incompatible with planned greenbelt (**Class II**).

L-16 The North Livermore substation shall be relocated at least 500 feet to the north, outside of the May School Road Greenbelt, and shall be screened along the southern exposure by sufficient

landscaping to render it inconspicuous as a manmade element, as viewed from the adjacent greenbelt. As required by 6.0. 131-D, PG&E Co. shall consult with the relevant local jurisdiction and make every reasonable effort to comply with local design standards. See also Mitigation Measure L-18 regarding landscaping.

Conflict with North Livermore Trail Policy

The North Livermore substation would conflict with *North Livermore Specific Plan* Rural Area Standards & Design Guidelines Policy 7.6.2(b), which calls for development of a regional multi-use trail corridor accommodating separate pedestrian/bicycle and equestrian facilities adjacent to the west side of North Livermore Avenue and the south side of Manning Road between North Livermore Avenue and Morgan Territory Road. This trail corridor, which will include a 25-foot-wide right-of-way, will connect to the planned trail system in the May School Road Greenbelt, discussed in the previous impact discussion. The proposed North Livermore substation property would lie within the multi-use trail corridor, although the substation itself would be set back approximately 60 feet from North Livermore Avenue. As currently proposed, the project does not include dedication of a trail right-of-way through the substation property. The substation would therefore be inconsistent with this policy, a significant but mitigable impact (**Class II**) with implementation of Mitigation Measure L-17 following.

In addition, the placement of support towers for the north alignment along North Livermore Avenue and Manning Road could interfere with the trail corridor, and would be visually incompatible with the recreational enjoyment of the trail. This would be a significant impact (**Class I**), mitigable by the adoption of Alternative P-2 (see Section C.7.5.3.).

Mitigation Measures for Conflict with North Livermore Trail Policy

Impact 7-24: Potential conflict with Specific Plan policy establishing trail right-of-way (**Class II**).

L-17 PG&E Co. shall deed a 25-foot-wide easement across the North Livermore substation site frontage to the relevant entity for dedication as a multi-use trail corridor (applies with adoption of Mitigation Measure L-16, as well).

Conflict with North Livermore Landscaping Policy

Depending on the type of landscaping installed, which hasn't yet been specified by the applicant, the North Livermore substation could conflict with Resource Protection Policy 19 of the *North Livermore General Plan Amendment*, which requires the use of drought-tolerant, native plant species, particularly in parks and other open space areas. The policy would be particularly applicable to the project because the substation would be located within a designated greenbelt. Although a mitigation measure has been identified above to relocate the substation outside the planned greenbelt (Mitigation Measure L-16), even with implementation of that measure, the project could still conflict with Resource Protection Policy 19 if non-native, drought-intolerant landscaping species were planted around the site. This would be a significant, but mitigable impact (**Class II**).

Mitigation Measures for Conflict with North Livermore Landscaping Policy

Impact 7-25: Potential conflict with Livermore policy requiring drought-resistant landscaping (**Class II**).

L-18 PG&E Co. shall landscape the North Livermore substation with drought-tolerant, native plant species. Pursuant to 6.0 131-D, PG&E Co. shall consult with the relevant jurisdiction and make every reasonable effort to comply with local design standards.

C.7.5.2 P1 Variant Alternative

The Class I impact related to inconsistency with Alameda County scenic route and open space policies identified for the North Area alignment would also apply to this Variant, but the severity would be reduced by undergrounding the transmission line segment adjacent to North Livermore Avenue.

C.7.5.3 P2 Variant Alternative

The Proposed Project's Class I impact related to inconsistency with Alameda County scenic route and open space policies identified for the north alignment would be avoided by this Variant. Also, there would be no conflict with the recreational trail along North Livermore Avenue and Manning Road, as identified for the Project alignment.

C.7.5.4 Alternative L1: Raymond Road

The noise and dust impacts on residential receptors identified for the South Area project alignment would also apply to this alternative, though only a few residences would be affected. These Class III impacts would be further reduced through implementation of Mitigation Measures L-1 and L-2. In addition, the following operational impacts would result from this alternative:

Interference with Operations of FCC Monitoring Station

Electrical conducting materials in and around the Alternative L1 substation may conflict with FCC requirements on height clearance and radio frequency noise in the vicinity of the FCC monitoring station. This would be a conflict with an established land use. While the station would be fed by an underground 230 kV transmission line, departing distribution lines would be overhead and could create electrical interference. The proposed microwave tower for remote control of the substation could also create radio interference with FCC monitoring equipment. There is also the potential for the substation to conflict with *North Livermore Specific Plan* Urban Area Land Use Policy 2.9.3, which specifies clearance requirements for the FCC facility. This would be a significant but mitigable impact (**Class II**), with implementation of Mitigation Measure S-2, in Section C.10.5.2 (Public Services).

Mitigation Measures for Interference with Operations of FCC Monitoring Station

Impact 7-26: Electrical disturbance of FCC Monitoring Station equipment (**Class II**).

See Mitigation Measure S-2 (Sec. C.10.5.2).

Conflict with North Livermore Specific Plan Alkali Sink Reserve Policy

Although the *North Livermore Specific Plan* has not been formally adopted by the City of Livermore and Alameda County, it is expected to be adopted before implementation of the Proposed Project (subject to the recent passage of Measure D, see Section C.7.1.2.3., North Livermore Specific Plan). Therefore, for purposes of this analysis, conflicts with the Specific Plan are considered to be significant impacts. Alternative L1 would conflict with Resource Conservation Program 2E, which requires utility trenches to be designed so as to allow the passage of water through permeable zones into the Birds' Beak/Alkali Sink Reserve in North Livermore. The underground Alternative L1 transmission line north of Raymond Road would interfere with groundwater flow into the alkali sink, as discussed in more detail in Section C.6.5. As discussed therein, no feasible mitigation has been identified to maintain adequate water flow with implementation of this alternative. This conflict with the Specific Plan is therefore a significant, unmitigable impact (**Class I**).

Mitigation Measures for Potential with North Livermore Specific Plan Alkali Sink Reserve Policy

Impact 7-27: Inconsistency with unadopted Specific Plan policy pertaining to hydrology of Alkali Sink Reserve (**Class I**).

There are no feasible measures to reduce or avoid this impact.

Conflict with North Livermore Specific Plan Lighting Policy

Due to its location within the urban area designated in the *North Livermore Specific Plan*, the Alternative L1 substation would conflict with the Specific Plan's Urban Area Community Design Policy 7.13.6, which states:

> Service Areas and Security Lighting. Lights in service areas shall be designed to avoid spillover onto adjacent use areas, and to shield the direct view of the light source. Building-mounted fixtures are prohibited unless the light source is completed shielded from view.
>
> a) Low-pressure sodium or other light types which contrast excessively with the normal use area lighting are prohibited.

Consistent with its North Livermore Substation plan, PG&E Co. would light the Alternative L1 substation with low-intensity sodium vapor lights, in conflict with this policy. While the lighting would be inward- and downward-directed to minimize the spillover of light beyond the perimeter of the substation site, the sodium vapor lights would contrast with the incandescent lighting that would be used in the planned residential neighborhood surrounding the site. Under CEQA, this policy conflict would be a significant but mitigable impact (**Class II**).

Mitigation Measures for Conflict with North Livermore Lighting Policy

Impact 7-28: Substation lighting type in conflict with requirements of unadopted Specific Plan policy (**Class II**).

L-19 Consistent with the requirements of 60.13D, PG&E Co. shall install a lighting type acceptable to the relevant jurisdiction for the security lighting around the Alternative L1 substation.

C.7.5.5 Alternative L2: Hartman Road

All of the impacts and mitigation measures identified for Alternative S1, with the exception of the adverse effects on Shadow Cliffs Regional Park and the recreational trail along Stanley Boulevard, would also apply to Alternative L2. With respect to the impact related to loss of important farmland described for Alternative S1, the Alternative L2 alignment would also cross additional Prime Farmland and Farmland of Statewide Importance north of Stanley Boulevard. However, this land shows no signs of being irrigated or recently cultivated, and the Department of Conservation has indicated that the status of this land will likely be downgraded during the next mapping update.[9] Therefore, the magnitude of the impact would not increase, and implementation of Mitigation Measure L-10 would sufficiently mitigate the impact. The (**Class III)** impact identified for the Proposed Project which noted that the Dublin substation would remove five acres of agricultural preserve land from production would also apply to the Alternative L2 substation site. Each of the three parcels that include a portion of the Alternative L2 substation study zone are currently under Williamson Act contract. No mitigation is recommended for this impact.

In addition to the above impacts, Alternative L2 would result in the following impacts:

Conflict with Livermore Zoning Ordinance Height Restrictions

The overhead section of the Alternative L2 transmission line north of Stanley Boulevard would exceed the height limit established in the *Livermore Zoning Ordinance* for all structures. Section 20.80 of the Ordinance establishes a height limit of 40 feet for all structures located within 5,000 feet of any airport runway, notwithstanding any other exceptions to height limitations in the Ordinance. The overhead portion of the L2 alignment in the vicinity of Kitty Hawk Road and Jack London Boulevard would be well within a 5,000-foot radius of Livermore Municipal Airport runways, and would therefore exceed the applicable height limit. This would be a significant, but mitigable impact (**Class II**).

Mitigation Measures for Conflict with Livermore Zoning Ordinance Height Restrictions

Impact 7-29: Exceedance of height restriction in Livermore Zoning Ordinance (**Class II**).

L-20 If the L2 Alternative is adopted by the CPUC, the conversion to underground cable in the L2 alignment shall be relocated approximately 4,000 feet to the south, to just north of Stanley Boulevard, in order to remove the overhead section from the 5,000-foot radius around Livermore Airport.

For an assessment of fault crossings and consistency with the City of Livermore's General Plan (Seismic Safety Policy), please see Section C.5.3.1.2, Impact 5-2 and Mitigation Measure G-2.

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9 Greg Poseley, Program Manager, Farmland Mapping and Monitoring Program, California Department of Conservation, personal communication, September 4, 2000.

C.7.6 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES: TESLA CONNECTION

C.7.6.1 Proposed Project—Phase 2

C.7.6.1.1 *Construction*

The temporary construction disturbance of grazing cattle identified for the proposed South Area alignment would also occur during Phase 2 construction. Although there would be no need to construct new access roads for the construction of Phase 2, there would a laydown area located in the vicinity of Milepost C5 and five pull-and-tension sites would be located along the Phase 2 alignment. As with the South Area alignment, the amount of land that would be temporarily removed from grazing would be miniscule relative to the total amount of grazing land in the area. No mitigation would be required for this Class III impact. No other construction impacts have been identified for the Phase 2 alignment.

C.7.6.1.2 *Operation and Maintenance*

Interference with Wind Farm Operations

PG&E Co. would require the removal of approximately 20 existing windmills that lie in or adjacent to the existing easement for the Proposed Phase 2 transmission line. Although any wind turbines lying within the easement would have to be removed at the owners' expense, in accordance with prior agreement with PG&E Co., the displacement of other windmills would adversely affect this established land use. While turbines outside the easement would not normally interfere with the transmission line, spinning turbine blades often fly off their supporting structures. The potential for one of these flying blades to strike the transmission line pose a risk unacceptable to the project applicant. Removal of the windmills would also conflict with *East County Area Plan* Policies 161 and 162, which state that the County shall discourage the development of uses and structures that are not compatible with wind energy operations within a designated Wind Resources Area and places the burden of mitigating any potential conflicts between a new use and an existing windfarm use on the new use. The portions of the Phase 2 alignment where removal of windmills would be required are located in the Wind Resources Area. These land use and policy conflicts would constitute a significant but mitigable impact (**Class II**).

Mitigation Measures for Interference with Wind Farm Operations

Impact 7-30: Displacement of existing wind turbines (**Class II**).

L-21 PG&E Co. shall pay for the relocation of any displaced windmills located outside its existing easement to a location within the County's designated Wind Resources Area that is acceptable to the affected wind farm operator(s).

Conflict with Recreational Use and EBRPD Master Plan Policy

The Phase 2 alignment would cross land recently acquired by the East Bay Regional Park District for inclusion in the Brushy Peak Regional Preserve. The Park District intends to use Laughlin Road, which would be crossed by the Phase 2 line, as the entrance into the Preserve once it becomes open to public use. The roadway also serves as the visual gateway into the Preserve, and the hillsides on either side of the roadway frame a view of Brushy Peak. The proposed crossing at Laughlin Road would

introduce a highly conspicuous and unattractive utility into the view of a very scenic and natural area. This would alter and degrade the recreational experience of visitors arriving at Brushy Peak. The overhead transmission line would also be inconsistent with an EBRPD Master Plan Planning and Acquisition Policy which requires the undergrounding of all utility lines on Park District land and asserts the District's intention to avoid the construction of high-voltage power lines within EBRPD park lands, particularly in areas of sensitive or aesthetically important resources and in preserve areas. Due to the presence of numerous sensitive biological resources in the Preserve (refer to Section C.3, Biological Resources), construction of an underground transmission line across the Brushy Peak preserve would be disruptive and destructive, and is therefore not recommended as mitigation for the visual intrusion on the regional preserve. This would be a significant impact (**Class I**), mitigable by the adoption of the Brushy Peak Alternative (Sec. C.7.6.2).

Mitigation Measures for Conflict with Recreational Use and EBRPD Master Plan Policy

Impact 7-31: Visual intrusion on regional preserve and conflict with EBRPD policy on transmission lines (**Class II**).

Adoption of the Brushy Peak Alternative (Sec. C.7.6.2) would avoid this impact.

C.7.6.2 Brushy Peak Alternative

C.7.6.2.1 Construction

The same type of construction impacts discussed for the Proposed Phase 2 line would apply to the Brushy Peak Alternative.

C.7.6.2.2 *Operation and Maintenance*

This alternative would avoid the Proposed Phase 2 line's impact on the Brushy Peak Regional Preserve (the related conflict with the *EBRPD Master Plan* policy).

C.7.6.3 Stanislaus Corridor

C.7.6.3.1 *Construction*

Reconstruction of the Stanislaus Corridor would result in the same construction impacts on cattle grazing identified for the proposed South Area alignment, though it would entail about nine more miles of construction, and so would marginally increase the magnitude of the impact. However, this would be balanced by no need to construct new access roads, and would remain a Class III impact. This alternative would also create the same construction disruption in Sycamore Grove Regional Park that was identified for Alternative S1. Although it would be a Class III impact with no mitigation required, implementation of Mitigation Measure L-4 is recommended for construction through the park. In addition to these impacts, the following construction impacts would occur under the Stanislaus Corridor Alternative:

Construction Disruption of Existing Land Uses

The Stanislaus Corridor crosses several properties where removal of the existing towers and/or construction of the new support towers would have the potential to disturb property owners and interfere with their use of the property. At approximately Milepost V7, the alignment crosses through a ranch property where the existing towers are immediately adjacent to a small, occupied horse paddock and in close proximity to a farm residence, barn, and animal stables. Given the sensitive nature of horses, demolition and construction activities would likely disturb the horses and possibly other animals housed in close proximity to the existing towers. Construction could interfere with farming or ranching activities on the site, as well as on a second ranch crossed in the vicinity of Milepost V7.8, where existing support towers are located in close proximity to a residence. The corridor crosses several miles of vineyards where, depending on timing, construction could interfere with spraying, harvesting, or other viticultural work. The alignment also passes through a motor home sales lot at roughly Milepost V9, and it is likely that vehicles parked on this property would have to be moved to accommodate construction. While in general, the construction disruption would be quite limited in duration at any one location and would typically be limited to less-than-significant noise and dust impacts, there is the possibility that more serious disruptions could result. While this impact is somewhat speculative in nature, some conflicts could potentially be significant, such as an interference with grape harvesting or an adverse health impact on horses. Therefore, this would be considered a potentially significant, but mitigable impact (**Class II**).

Mitigation Measures for Construction Disruption of Existing Land Uses

Impact 7-32: Construction disturbance and possible interference with use of property (**Class II**).

L-22 If the Stanislaus Corridor Alternative is adopted by the CPUC, PG&E Co. shall implement Mitigation Measures L-1 and L-2. In addition, PG&E Co. shall coordinate the removal of old towers, and the placement of the new, more widely-spaced towers, and the timing of each activity with the affected property owners to ensure that disruptions to the use of the property are minimized.

C.7.6.3.2 Operation and Maintenance

Similar to the proposed Phase 2 alignment, the Stanislaus Corridor crosses wind farms between approximately Milepost V1.5 and Milepost V4. While it is not known if this alternative would require removal of existing wind turbines, it is assumed for purposes of this analysis that one or more windmills would be displaced. Therefore, the same Class II impact identified for the proposed Phase 2 alignment would apply to this alternative and would be mitigated by implementation of Mitigation Measure L-25.

Displacement of Grape Vines

Reconstruction of the Stanislaus Corridor would entail the erection of new support towers at different, albeit fewer, locations from those currently occupied by towers. Between Greenville and Mines Roads, the alignment is primarily occupied by grape vineyards. The erection of new tubular support towers at new locations would displace productive grape vines, resulting in a loss of income and potential income

to the vineyard owners. This loss would be partially offset by the removal of a larger number of existing lattice towers, each with a larger footprint, which would free up additional land for future grape cultivation. Ultimately, the growers would be able to have more of their land in grape production. However, due to the length of time it takes to cultivate grape vines to a point of productivity, it would take at least three years before the newly vacant land would produce any profits for the owners, and would require the owners to make new investments to plant and cultivate the land. Displaced vines would result in a loss in income from the immediate planting season, as well as subsequent seasons prior to replacement vines becoming productive. Some vineyard land would also be temporarily displaced by the clearance needed around each tower during construction. This temporarily displaced land would also entail at least three seasons of lost income and would require new capital expenditures to replant. This temporary and permanent displacement of an existing land use and the resulting lost income would be a significant, but mitigable impact (**Class II**).

Mitigation Measures for Displacement of Grape Vines

Impact 7-33: Removal of existing productive grape vines for new support towers (**Class II**).

L-23 If the Stanislaus Corridor Alternative is adopted by the CPUC, PG&E Co. shall compensate affected vineyard property owners for three seasons of lost income from any displaced vines and shall pay the owners all costs associated with planting replacement vines and cultivating them to productivity. PG&E Co. shall only be responsible for compensation for vines directly displaced by the project, including construction right-of-way and access and continuing operations access.

C.7.7 MITIGATION MONITORING PROGRAM

Table C.7-3 presents the mitigation measures recommended in this section and identifies the location, responsible party, required monitoring activities, effectiveness criteria, and timing of each monitoring activity.

Table C.7-3 Mitigation Monitoring Program—Land Use And Recreation Impacts

Impact (Class)	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
Proposed Project and All Alternatives						
Construction noise, dust, and odor would adversely affect neighboring residents. (Class III) Construction activities would disrupt and displace cattle grazing from active construction areas. (Class III)	**L-1** PG&E Co. or its construction contractor shall provide advance notice, between two and four weeks prior to construction, by mail to all residents or property owners within 300 feet of the alignment. The announcement shall state specifically where and when construction will occur in the area. If construction delays of more than 7 days occur, an additional notice shall be made, either in person or by mail. Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction. PG&E Co. shall also publish a notice of impending construction in local newspapers, stating when and where construction will occur. **L-2** PG&E Co. shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring residents about noise, dust, and other construction disturbance. PG&E Co. shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers (procedures to be approved by the CPUC). Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public in accordance with Mitigation Measure L-1.	Various locations in project area	Mailing list and copies of notification letters submitted to Lead Agency.	Inclusion of Lead Agency contact on notification, with follow-up by Lead Agency in response to complaints.	CPUC	Prior to and during construction
Proposed South Alignment						
Trench excavation would temporarily block access to residential driveways. (Class II)	**L-3** deleted (see Mitigation Measures T-5 and T-6 in Section C.11)	Along underground trench alignment in Pleasanton.	Construction monitor (funded by PG&E Co.) to inspect construction site(s) weekly, with monthly inspection report filed with Lead Agency.	Field verification of compliance and lack of complaints by residents.	City of Pleasanton or CPUC	During construction
Alternatives S1, S2, and L2						
Construction activities in Sycamore Grove Regional Park would adversely affect park users in the vicinity of the construction through the generation of noise, dust, and diesel equipment odors. (Class III)	**L-4** Temporary barricades and signs shall be placed to route park users around each construction site in the park. To the extent feasible, tower locations that would minimize disruption of park patrons shall be selected.	Sycamore Grove Regional Park	Lead Agency to field verify placement of construction barricades and signs.	Placement of barricades and signs verified.	CPUC	During construction

Impact (Class)	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
Alternatives S1, S2, and L2						
Depending on timing, construction could interfere with grape harvesting south of Vineyard Avenue. (Class II)	**L-5** Construction of the underground alignment along Vineyard Avenue shall be timed so as to avoid the fall grape harvest, potentially occurring between mid-August and the end of October.	Vineyards south of Vineyard Avenue in Livermore and Pleasanton.	Certificate of Public Convenience and Necessity (CPCN) approval by Lead Agency shall be conditioned to preclude construction south of Vineyard Avenue during grape harvest.	Construction during harvest avoided.	CPUC	During construction
The overhead alignment through Sycamore Grove Regional Park would be visually incompatible with recreational use of the park and would conflict with conservation easements held by a regional land trust. (Class II)	**L-6** To minimize the footprint of the support towers inside the park, tubular steel support poles shall be used, rather than lattice towers. **L-7** PG&E Co. shall remove the existing 60-kV transmission line that crosses the park on the same approximate alignment as the S1 alignment. If this isn't feasible, the 230-kV alignment through the park shall be placed underground or the tap point shall be moved out of the park to the east, near the Zone 7 Water Treatment Plant. **L-8** To compensate for the conflict with the conservation easement, PG&E Co. shall make a contribution to the South Livermore Valley Agricultural Land Trust equal to the cost of purchasing conservation easements elsewhere in the South Livermore area. The required acreage of easements to be purchased shall be determined by multiplying the distance of land under conservation easement traversed by the transmission line multiplied by 200 feet.	Sycamore Grove Regional Park	Lead Agency approval to require tubular support towers in park and removal of existing 60-kV line, undergrounding through park, or realignment out of the park. Contribution to SLVALT routed through Lead Agency.	Erection of tubular towers and removal of existing 60-kV line, undergrounding through park, or realignment out of the park. Verification of contribution by SLVALT.	CPUC and SLVALT	Project approval/ Prior to construction
The overhead/underground transition structure east of Highway 84 would remove one-half acre of Farmland of Statewide Importance from potential agricultural production. (Class II)	**L-9** PG&E Co. shall make a contribution to the South Livermore Valley Agricultural Land Trust sufficient to allow the Trust to purchase a conservation easement on one acre of vineyard or comparable agricultural land in the South Livermore area.	Southeast corner of Highway 84 and Foley Road	Contribution to SLVALT routed through Lead Agency.	Verification of contribution by SLVALT.	CPUC and SLVALT	Prior to construction
The overhead/underground transition structure east of Highway 84 and the adjacent overhead transmission line would be inconsistent with Alameda County Scenic Route policies. (Class II)	**L-10** The conversion of the Alternative S1 transmission line to an underground segment shall be located further away from Highway 84 so that the transition structure and the overhead lines leading to it are not so conspicuous from the scenic route.	Southeast corner of Highway 84 and Foley Road	Lead Agency approval to require relocation of transmission facilities away from Scenic Route corridor.	Relocation of transmission facilities away from Scenic Route corridor.	CPUC	Project approval

Impact (Class)	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
Alternative S1						
Transmission lines and support towers would penetrate airspace requiring referral to Federal Aviation Administration for Aeronautical Study (Class III).	**L-11** If Alternative S1 is approved by the CPUC, PG&E Co. shall immediately initiate an FAA Aeronautical Study by submitting FAA Form 7460-1 to the Western Pacific Region of the FAA. The Applicant shall comply with any requirements identified by the FAA, including those pertaining to the marking and lighting of transmission line support towers.	Stanley Boulevard along Alternative S1	Verify FAA concurrence with Alternative S1.	Alternative S1 would not constitute a flight hazard.	FAA, CPUC	Prior to construction
Alternative S2						
Construction noise, dust, and air emissions could conflict with use of a planned elementary school on Vineyard Avenue. (Class II)	**L-12** If the planned elementary school has been occupied prior to commencement of construction of the underground transmission line, construction activities within 1,000 feet of the school property's frontage on Vineyard Avenue shall be timed to occur during school breaks, such as summer vacation, Christmas break, Spring break, etc.	Vineyard Avenue (City of Pleasanton)	Certificate of Public Convenience and Necessity (CPCN) approval by Lead Agency shall be conditioned to preclude construction within 1,000 feet of school while it is in session.	Construction adjacent to school avoided while school is in session	CPUC	During construction
Alternative S4						
Visual Intrusion on Ruby Hill Residents (**Class II**).	**L-13** Implementation of Mitigation Measure V-2 (Section C.12, Visual Resources) would reduce the visual impact to a less than significant level.	S4 Alternative, overhead portion	CPUC to verify project redesign prior to construction and implementation following construction.	Visibility of transmission structures will be significantly reduced as viewed from Sycamore Grove Regional Park and county-designated scenic route 84.	CPUC	Confirm redesign prior to project construction. Confirm implementation following project construction.
Alternative D2						
The overhead alignment would pass adjacent to a planned community park and the alignment for a planned recreational trail, and would be visually incompatible with these uses. (Class III)	**L-15** PG&E Co. shall coordinate with the City of San Ramon prior to finalizing project design to ensure that the final location of support towers minimizes impacts on the planned community park and recreation trail.	West of Alcosta Boulevard	Letter submitted by City of San Ramon planning department to Lead Agency following review of final alignment plans.	San Ramon approval of D2 alignment in vicinity of park and trail.	San Ramon, CPUC	Prior to construction
Alternative D1						
The substation would be incompatible with the planned surrounding office, commercial, and residential land uses. (Class II)	**L-15** The exact location, exterior design, and landscaping plan for the Alternative D1 substation shall be coordinated with the City of Dublin and subject to the City's approval. Potential treatments may include enclosure by attractive façade walls and screening landscaping or surrounding the substation by	Alternative D1 substation site (City of Dublin)	Letter submitted by City of Dublin Planning Department to Lead Agency following review of final design plans.	Substation design meets approval of City of Dublin.	City of Dublin, CPUC	Prior to project approval

Impact (Class)	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	commercial buildings.					
Proposed North Alignment and Variants P-1 and P-2						
The North Livermore Substation would conflict with *North Livermore Specific Plan* policies establishing the May School Road Greenbelt. (Class II)	**L-16** The North Livermore substation shall be relocated to the north, outside of the May School Road Greenbelt, and shall be screened along the southern exposure by sufficient landscaping to render it inconspicuous as a manmade element, as viewed from the adjacent greenbelt.	North Livermore substation site	Lead Agency approval to require relocation of substation outside greenbelt. Letter submitted by City of Livermore Planning Department to Lead Agency following review and approval of substation landscaping plan.	Substation located outside greenbelt. Landscaping plan meets City of Livermore approval.	City of Livermore, CPUC	Project approval
The North Livermore Substation would conflict with *North Livermore Specific Plan* Rural Area Standards & Design Guidelines Policy 7.6.2(b), which calls for development of a regional multi-use trail corridor. (Class II)	**L-17** PG&E Co. shall deed a 25-foot-wide easement across the North Livermore substation site frontage to Alameda County for dedication as a multi-use trail corridor.	North Livermore substation site	Copy of easement agreement submitted to Lead Agency. Lead Agency approval to require implementation of Variant P-2.	Easement agreement granting Alameda County trail corridor across substation property. North Livermore alignment segments placed underground.	Alameda County, CPUC	Prior to project approval
The North Livermore Substation would conflict with North Livermore General Plan Amendment Resource Protection Policy 19, which requires the use of drought-tolerant, native plant species. (Class II)	**L-18** PG&E Co. shall landscape the North Livermore substation with drought-tolerant, native plant species.	North Livermore substation site	Letter submitted by City of Livermore Planning Department to Lead Agency following review and approval of substation landscaping plan.	Landscaping plan meets City of Livermore approval.	City of Livermore, CPUC	Prior to project approval
Alternative L1						
The Alternative L1 substation would conflict with *North Livermore Specific Plan* Urban Area Community Design Policy 7.13.6, which prohibits the use of low-pressure sodium lights. (Class II)	**L-19** PG&E Co. shall install a lighting type to be approved by the City of Livermore for the security lighting around the Alternative L1 substation.	Alternative L1 substation site (North Livermore)	Letter submitted by City of Livermore Planning Department to Lead Agency following review and approval of substation lighting plan.	Lighting plan meets City of Livermore approval.	City of Livermore, CPUC	Prior to project approval
Alternative L2						
The overhead section of the Alternative L2	**L-20** The conversion to underground cable in the L2 alignment shall be relocated approximately 4,000 feet to	Alternative L2 alignment	Lead Agency approval to require relocation of	Overhead/underground transition located	CPUC	Project approval

Impact (Class)	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
transmission line north of Stanley Boulevard would exceed the height limit established in the Livermore Zoning Ordinance for all structures within 5,000 feet of an airport runway. (Class II)	the south, to just north of Stanley Boulevard, in order to remove the overhead section from the 5,000-foot radius around Livermore Airport.	segment between Stanley Boulevard and Jack London Boulevard	overhead/underground transition more than 5,000 feet from Livermore Airport.	more than 5,000 feet from Livermore Airport.		
Proposed Phase 2 and Phase 2 Alternatives						
The overhead transmission line would require the removal of existing windmills located in a Wind Resource Area, in conflict with *East County Area Plan* policies 161 and 162. (Class II)	**L-21** PG&E Co. shall pay for the relocation of any displaced windmills located outside their easement to an acceptable location, to be determined by the affected wind farm operator(s).	Eastern Alameda County Wind Resource Area	Copy of agreement(s) with affected property owner(s) submitted to Lead Agency and compensation routed through Lead Agency.	Property owners satisfactorily compensated.	CPUC	Prior to construction
Stanislaus Corridor Alternative						
Construction of the Stanislaus Corridor would disturb and possibly interfere with existing land uses along the alignment. (Class II)	**L-22** PG&E Co. shall coordinate the timing of construction with the affected property owners to ensure that disruptions to use of the properties are minimized.	South of Tesla Road and adjacent to Cross Road (eastern Alameda County)	Copies of signed agreements between Applicant and affected property owners submitted to Lead Agency.	Mutually acceptable construction schedule on affected properties.	CPUC	Prior to construction
New support towers along the Stanislaus Corridor would displace existing productive grape vineyards and deprive their owners of income. (Class II)	**L-23** PG&E Co. shall compensate affected vineyard property owners for three seasons of lost income from the displaced vines and shall pay the owners all costs associated with planting replacement vines and cultivating them to productivity. PG&E Co. shall only be responsible for compensation for vines directly displaced by the project.	South of Tesla Road (eastern Alameda County)	Copy of agreement(s) with affected property owner(s) submitted to Lead Agency and compensation routed through Lead Agency.	Property owners satisfactorily compensated.	CPUC	Prior to construction

C.7.8 REFERENCES

C.7.8.1 Persons Contacted

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Lisa Asche, Planner, Community Development Agency, Alameda County.

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Victor Voong, Assistant Engineer I, Public Works and Engineering Department, City of Pleasanton.

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