C.12 VISUAL RESOURCES

C.12.1	Environm	ental Baseline and Regulatory Setting
	C.12.1.1	Regional Overview
	C.12.1.2	Environmental Setting C.12-1
	C.12.1.3	Applicable Regulations, Plans, and Standards
C.12.2	Environm	ental Impacts and Mitigation Measures for the Proposed Project C.12-7
	C.12.2.1	Introduction C.12-7
	C.12.2.2	Definition and Use of Significance Criteria C.12-8
	C.12.2.3	Applicant Proposed Measures
	C.12.2.4	Applicable Regulations, Plans, and Standards
	C.12.2.5	Short-Term Construction Impacts
	C.12.2.6	Proposed 230kV Transmission Line Route
	C.12.2.7	Proposed Substation Site and 115kV Lines
	C.12.2.8	Proposed Trimble-Montague Upgrade
	C.12.2.9	Cumulative Impacts And Mitigation Measures
C.12.3	Fnuironm	ental Impacts and Mitigation Measures: Alternatives
0.12.3	C.12.3.1	Underground Through Business Park
	C.12.3.1 C.12.3.2	I-880-A Alternative
	C.12.3.2 C.12.3.3	I-880-B Alternative
	C.12.3.4	Westerly Route Alternative
	C.12.3.4 C.12.3.5	Westerly Upgrade Alternative
	C.12.3.6	Substation Alternatives
	C.12.3.7	Trimble-Montague 115kV Upgrade Alternatives
	0.12.0.1	
C.12.4	The No P	roject Alternative
C.12.5	Mitigation	n Monitoring Program
C.12.6	Reference	s

C.12 VISUAL RESOURCES

C.12.1 ENVIRONMENTAL BASELINE AND REGULATORY SETTING

C.12.1.1 Regional Overview

The proposed project is located in Santa Clara Valley, bordering the southern portion of San Francisco Bay. The Santa Clara Valley is part of the California Coast Ranges, which are classed as a section of the Pacific Border Province (Hunt, 1967). The Valley is defined by the Santa Cruz Mountain range to the south and west, the Diablo Mountain range to the east, and San Francisco Bay to the north. The landform of the valley floor is generally level and exhibits the visual characteristics of an environment transitioning from its historical agricultural use to that with a highly urbanized character, primarily defined by industrial, commercial, office, and residential development; infrastructure; and vegetation typical of landscaped urban parks and streetscapes. While some vestiges of the Valley's historical agricultural activity remain, views within this urban environment are typically confined by, and encompass, built structures. Sandwiched between the Valley's rapidly developing urban areas that today are collectively referred to as "Silicon Valley," and the expansive southern portion of San Francisco Bay, are the Bay margin wetlands, sloughs, and diked salt ponds. Views in the wetlands and along the dike trails are afforded open, panoramic vistas, punctuated by development and infrastructure.

C.12.1.2 Environmental Setting

C.12.1.2.1 Visual Setting Terminology

Before addressing the environmental setting, it is important to briefly review the concepts and terminology that are commonly used in characterizing and evaluating existing landscapes and viewsheds.

The visual resources of a given area consist of the landforms, vegetation, water features, and cultural modifications (physical changes caused by human activities) that impart an overall visual impression of the area landscape. There are a number of factors that are considered in the evaluation of a landscape's visual resources in order to assess the potential for one or more visual impacts to occur (visual impact susceptibility), including: visual quality, visual absorption capacity, viewer sensitivity, and viewer exposure. Each of these factors is generally expressed as low, moderate, or high as discussed below.

Visual Quality is a measure of the overall impression or appeal of an area as determined by the particular landscape characteristics such as landforms, rockforms, water features, and vegetation patterns, as well as associated public values. The attributes of variety, vividness, coherence, uniqueness, harmony, and pattern contribute to visual quality classifications of indistinctive (low), common (moderate), and distinctive (high). Visual quality is studied as a point of reference to assess whether a given project would appear compatible with the established features of the setting or would contrast noticeably and unfavorably with them.

Visual Absorption Capacity is a landscape's ability to accept alteration without diminishment of visual quality (or creation of visual contrast). A landscape can accommodate a project more effectively if the existing landforms and vegetation are able to screen the project from view or if the proposed project tends to replicate the existing forms, lines, colors, and/or textures of the landscape and not appreciably change the balance of natural and cultural elements. For example, it is possible for new structures to be compatible with predominantly natural settings if such settings already contain structures that are similar to the proposed structures or contain similar visual characteristics.

Viewer Sensitivity addresses the level of interest or concern of viewers regarding an area's visual resources and is closely associated with viewers' expectations for the area. Viewer sensitivity reflects the importance placed on a given landscape based on the human perceptions of the intrinsic beauty of the existing landforms, rockforms, water features, vegetation patterns, and even cultural features.

Viewer Exposure describes the degree to which viewers are exposed to views of the landscape. Viewer exposure considers landscape visibility (the ability to see the landscape), distance zones (proximity of viewers to the subject landscape), number of viewers, and the duration of view. Landscape visibility can be a function of several interconnected considerations including proximity to viewing point, degree of discernible detail, seasonal variations (snow, fog, and haze can obscure landscapes), time of day, and presence or absence of screening features such as landforms, vegetation, and/or built structures. Even though a landscape may have highly scenic qualities, it may be remote, receiving relatively few visitors and, thus, have a low degree of viewer exposure. Conversely, a subject landscape or project may be situated in relatively close proximity to a major road or highway utilized by a substantial number of motorists and yet still result in relatively low viewer exposure if the rate of travel speed on the roadway is high and viewing times are brief, or if the landscape is partially screened by vegetation or other Frequently, it is the subject area's proximity to viewers or *distance zone*, that is of particular features. importance in determining viewer exposure. Landscapes are generally subdivided into three or four distance zones based on relative visibility from travel routes or observation points. Distance zones typically include: foreground, middleground, and background. The actual number of zones and distance assigned to each zone is dependent on the existing terrain characteristics and public policy and is often determined on a project by project basis.

Visual Impact Susceptibility is a concluding assessment as to the degree of probability that a given landscape will demonstrate a noticeable visual impact with project implementation. Visual impact susceptibility is derived from a comparison of existing visual quality, visual absorption capability, viewer sensitivity, and viewer exposure.

C.12.1.2.2 Proposed 230 kV Transmission Line Route

The proposed route passes through a variety of landscapes between Newark Substation and the proposed Los Esteros Substation site, including the open, panoramic landscapes of Bay margin wetlands and salt ponds, alkali grassland, urban to rural transition zones adjacent to developing business parks, and landscapes exhibiting the extensive land modification associated with landfill operations and wastewater treatment facilities. Views of the proposed route are generally limited to occupants of the adjacent business parks, motorists on Interstate-880 and SR 237, and users of the recreation trails that access the wetlands. The most sensitive viewers along the proposed route are considered to be the recreational users of the numerous trails throughout the study area.

In order to characterize the visual setting along the proposed route (and alternatives), a number of *Key Viewpoints* were established from which to focus the analysis. Key Viewpoints (KVPs) are locations selected to be representative of the most critical locations from which the project will be seen. KVPs are often located in an effort to evaluate impacts on visual resources with various levels of sensitivity, in different landscape types and terrain, and from various vantage points. Typical KVP locations for the present project include: (1) along major or significant travel corridors or points of visual access; (2) at key vista points; (3) at significant recreation areas; and (4) at locations that provide good examples of the existing visual context. Figure C.12-1 shows the location of each of Key Viewpoint selected for detailed analysis. (Note that all figures are at the end of this section.)

Key Viewpoint 1 was established on the south side of Auto Mall Parkway, just west of the proposed route's crossing of Auto Mall Parkway (see KVP 1 Visual Analysis Data Sheet at the end of this section). Viewing to the south, along the proposed alignment, this location was selected to generally characterize the existing landscape along the northern portion of the route between Milepost (MP) 0.3 and approximately MP 2.5. Views of the proposed route encompass an urban fringe setting of industrial development, paved surfaces, and infrastructure, bordering foreground to middleground. The existing transmission lines and industrial development dominate the foreground landscape. This route also parallels a proposed Bay Trail route segment and borders on the east side of the Warm Springs Seasonal Wetland (until MP 1.7) before crossing Cargill Salt Ponds A22 and A23 (MP 1.7 to MP 2.5).

Overall visual quality is considered relatively indistinctive (low) along this portion of the route. Although much of the route is characterized by level, open terrain with minimal screening opportunities, these characteristics are countered by the existing context of similar built vertical structures and other facilities of industrial character. Overall visual absorption capability is rated moderate at this location. Overall viewer sensitivity is rated low at this location. Although the proposed route would be highly visible in the foreground of views from KVP 1 and along the proposed Bay Trail route segment, this is somewhat balanced by the low to moderate numbers of viewers and brief to moderate durations of view from Auto Mall Parkway. Therefore, overall viewer exposure is rated moderate. Due to relatively the low visual quality of this portion of the route, the moderate visual absorption capability provided by existing structures and transmission lines, and the low viewer sensitivity, overall visual impact susceptibility, as experienced from KVP 1, is considered low.

South of the existing industrial building at Auto Mall Parkway and extending to the Bayside Business Park near MP 2.7, the absence of buildings along the route result in a more naturally appearing landscape that has higher visual quality, lower visual absorption capability, and higher viewer sensitivity for recreationists

on the nearby trails (since viewer expectations are for a more naturally appearing environment). Visual impact susceptibility along this portion of the route is considered moderate, particularly between MP 2.2 and 2.7 since the proposed route diverges from the existing transmission lines at MP 2.2.

Once the proposed route converges on Bayside Business Park near MP 2.7, it once again parallels urban development. **Key Viewpoint 2** was established on a recreational trail/levee access trail near the northwest corner of Bayside Business Park (see KVP 2 Visual Analysis Data Sheet). This viewpoint was selected to evaluate the visual setting in proximity to the business park and the adjacent segment of the Bay Trail bordering the wetland mitigation pond to the west of the business park. Views of the proposed route include an urban fringe setting of built geometric forms and formal landscaping juxtaposed against the natural character of wetland habitat, tidal ponds, and undeveloped open space. Overall visual quality of this transition landscape as viewed in its panoramic context from this viewpoint is considered moderate. Although the route is characterized by level, open terrain with minimal screening opportunities, these characteristics are somewhat countered by the presence of the business park's built geometric structures in that they provide somewhat of a developed background for the proposed project. However, the business park presents a relatively low, horizontal profile which will limit its effectiveness as a backdrop to tall vertical forms. Thus, visual absorption capability is rated low to moderate.

Users of the Bay Trail presently anticipate a developed landscape to the east of the mitigation pond in the form of the business park and a more open, expansive, and undeveloped landscape to the west of the pond and trail. Therefore, viewer sensitivity is considered low to moderate for the western perimeter of the business park and proposed route. Viewer exposure is rated moderate and reflects a balance between high visibility and long duration of view with low numbers of viewers. Overall visual impact susceptibility for the route segment extending from MP 2.7 to approximately MP 4.1 is considered moderate.

Between MP 4.1 and MP 5.6, the proposed route passes through a landscape that exhibits the effects of considerable past and present landscape modifications associated with the abandoned Fremont Airport, the Newby Island Landfill, and the San Jose/Santa Clara Water Pollution Control Plant. At MP 5.6, the proposed route converges on, and then parallels Coyote Creek to MP 6.7. The proposed route will be located adjacent and to the west of Coyote Creek, along the eastern border of the San Jose/Santa Clara Water Pollution Control Plant sludge drying ponds.

Key Viewpoint 3 was established on the levee immediately east of Coyote Creek (across from approximately MP 5.9) and west of McCarthy Boulevard to evaluate the landscape along Coyote Creek and a proposed segment of the Bay Trail that would run along the eastern levee (see KVP 3 Visual Analysis Data Sheet). The view from KVP 3 encompasses a landscape in transition from historical agricultural uses and a more rural creekside habitat to that of contemporary urban development immediately to the east along McCarthy Boulevard and the adjacent Interstate I-880. Overall visual quality along Coyote Creek at this location is rated moderate and reflects the influence of a semi-pastoral agricultural scene and more naturally-appearing riparian corridor. Visual absorption capability is also considered moderate owing primarily to the partial screening of the proposed project that would be

provided by the trees along Coyote Creek. Viewers along the eastside levee (and proposed Bay Trail route) are typically recreationists enjoying the mostly natural scenes and open landscapes along the Coyote Creek corridor. Viewer expectations are for a less-developed, more rural and open landscape in contrast to, and as a respite from, the adjacent, intensively developed urban areas. Therefore, viewer sensitivity is considered moderate to high. Viewer exposure is also rated moderate based on the balancing of moderate project visibility, foreground to middleground distance zones, and extended view opportunities, with the relatively low numbers of viewers that access the trail in this region. Since the moderate visual quality and viewer exposure, and moderate to high viewer sensitivity are somewhat balanced by the moderate visual absorption capability, overall visual impact susceptibility is considered moderate.

Due west of this proposed route segment, at a distance of approximately 1.8 miles, is the Don Edwards San Francisco Bay Wildlife Refuge and Environmental Education Center. Because of the importance of visual quality to users of the Education Center and surrounding trails within the Refuge, **Key Viewpoint 4** was established on a levee trail near the Environmental Education Center. Views from KVP 4 are panoramic in extent, affording sweeping views of much of the landscape at the southern end of San Francisco Bay. Viewing to the east, toward the proposed route segment MP 4.9 to 6.7, the foreground landscape is dominated by wetland habitat and the open expanse of Cargill Salt Pond A18. The middleground landscape is also predominantly wetland/pond habitat but also includes two existing 115 kV transmission lines and the Zanker Road Landfill. The proposed route would be located in the distant middleground, backdropped by the Diablo Range foothills (East Bay Hills) extending along the horizon from north to south. Considerable development is evident along the I-880 corridor and along the lower benches of the East Bay Hills to the east. Overall visual quality of the foreground to middleground landscape is rated moderate.

As viewed from KVP 4, the proposed route segment between MP 4.9 and 6.7 would be located within a viewshed that offers considerable screening opportunities from the intervening landform modifications associated with the landfill, and the existing transmission lines, as well as the solid and complex background provided by the East Bay hills and urban development along the I-880 corridor. Therefore, visual absorption capability is rated high, as viewed from KVP 4.

Viewers in the San Francisco Bay National Wildlife Refuge are typically recreationists enjoying the predominantly open and panoramic landscapes and wildlife viewing opportunities. Viewer expectations are high and anticipate unobstructed, expansive views of predominantly undeveloped foreground to middleground wetland scenes as a respite from adjacent urban areas. Therefore, overall viewer sensitivity is rated high.

Viewer exposure at KVP 4 is rated low due to the considerable distance between the viewer and the proposed route segment and the relatively low numbers of viewers accessing the Refuge trails. Although visual quality is rated moderate and viewer sensitivity is considered high, these factors are substantially balanced by the high visual absorption capability and low viewer exposure, leading to an overall rating of low for visual impact susceptibility.

C.12.1.2.3 Proposed Substation Site and 115 kV Lines

From MP 6.7, the proposed project turns west to converge on and enter the proposed Los Esteros Substation site at MP 7.2. Between MP 6.7 and 7.0, the proposed route would parallel the southern boundary of the Water Pollution Control Plant's sludge drying ponds. This route segment location is also proposed for an extension of the Bay Trail. **Key Viewpoint 5** was established at the eastbound on-ramp to SR 237 from northbound Zanker Road. Viewing to the northeast, this viewpoint affords a panoramic view of the proposed substation site and the transmission line route approach from Coyote Creek to the east of the site.

Views of the substation site from KVP 4 encompass foreground panoramic scenes of an urban fringe environment in transition from a historical rural landscape currently comprised of an open field and greenhouses, to one of urban development consisting of buildings, infrastructure, roads, and landscaping, backdropped by the rolling East Bay Hills and ridges. Overall visual quality of this complex landscape is considered low to moderate.

The proposed substation would be located on level terrain currently occupied by greenhouses and agricultural operations on the northern portion of the parcel. While those structures would be replaced by the substation, it is understood that the southern portion of the site, closest to SR 237, would also likely be developed in the future, which could provide some screening potential. Also, the solid landform backdrop provided by the distant East Bay hills and the foreground vertical utility infrastructure will contribute to the landscape's overall visual absorption capability, which is rated low to moderate.

Motorists on SR 237 are witness to the ongoing urbanization of the entire region, including the project site, and viewer expectations can reasonably anticipate continued urbanization and construction of additional infrastructure. Therefore, overall viewer sensitivity is rated low. Project visibility would be moderate to high (particularly for the new power lines that would exit the substation and converge on, and then parallel, SR 237) as a foreground visual element and would be visible to high numbers of viewers though the duration of view would be brief to moderate depending on travel speed. Overall viewer exposure is rated moderate for the substation site and high for the 115 kV transmission lines adjacent to SR 237.

The low to moderate visual quality and moderate to high viewer exposure are somewhat balanced by the low to moderate visual absorption capability and low viewer sensitivity, leading to a low rating for overall visual impact susceptibility as viewed from KVP 5.

C.12.1.2.4 Trimble-Montague Upgrade

This portion of the proposed project involves the upgrade of an existing line along the south side of Trimble Road and Montague Expressway between Zanker Road on the west and Montague Substation, immediately adjacent and to the east of Interstate-880. The upgrade route passes through heavily urbanized area of San Jose. The viewshed along this route segment encompasses a typical streetscape comprised of urban development on both sides of a heavily traveled transportation artery that is generally lined with landscaping on both the north and south sides of the street.

C.12.1.3 Applicable Regulations, Plans, and Standards

Public agencies and planning policy establish visual resource management objectives in order to protect and enhance public scenic resources. Goals, objectives, policies, and implementation strategies and guidance are typically contained in resource management plans, comprehensive plans and elements, and local specific plans. Section C.7 of this Environmental Impact Report (Land Use and Public Recreation) presents a comprehensive discussion of regulations, plans, and standards that pertain to the proposed project and alternatives. There are four agencies that have policies and/or planning guidance pertinent to visual resources for the proposed project. In total, there are 13 policies, objectives, or designations that pertain to visual resources. The proposed project's consistency with each of these relevant planning directives is discussed in Section C.12.2.4.1

C.12.2 Environmental Impacts and Mitigation Measures for the Proposed Project

C.12.2.1 Introduction

An *adverse visual impact* occurs within public view when: (1) an action perceptibly changes existing features of the physical environment so that they no longer appear to be characteristic of the subject locality or region; (2) an action introduces new features to the physical environment that are perceptibly uncharacteristic of the region and/or locale; or (3) aesthetic features of the landscape become less visible (e.g., partially or totally blocked from view) or are removed. Changes that seem uncharacteristic are those that appear out of place, discordant, or distracting. The degree of the visual impact depends upon how noticeable the adverse change may be. The noticeability of a visual impact is a function of project features, context, and viewing conditions (angle of view, distance, and primary viewing directions). The key factors for consideration in determining the degree of visual impact or *Visual Impact Severity* are visual contrast, project dominance, and view impairment:

Visual Contrast evaluates a potential project's or activity's consistency with the visual elements of form, line, color, and texture already established in the landscape. Other elements that are considered in evaluating visual contrast include the degree of natural screening by vegetation and landforms, placement of structures relative to existing vegetation and landforms, distance from the point of observation, and relative size or scale. Generally, visual contrast inversely correlates with visual absorption capability (discussed in Section C.12.1.2).

Project Dominance refers to the project's relationship to other visible landscape components in terms of vertical and horizontal extent. A project's scale and spatial relationship to the existing landscape can be categorized as subordinate, co-dominant, or dominant.

View Impairment refers to the extent to which a project's scale and position result in the blockage of higher quality visual elements by lower quality elements.

Visual Impact Severity characterizes the degree of impact caused by a project on a given landscape or viewshed, typically, as experienced from key viewpoints. The assessment of visual impact severity is based on an analysis of visual contrast, project dominance, and the impairment (or blockage) of views from key viewpoints.

C.12.2.2 Definition and Use of Significance Criteria

The criteria used to assess the significance of visual impacts resulting from a project take into consideration the factors described above, as well as federal, state, and local policies and guidelines pertaining to visual resources. Appendix G of the CEQA Guidelines identifies the following four circumstances that can lead to a determination of significant visual impact:

- 1) The project has a substantial adverse effect on a scenic vista;
- 2) The project substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- 3) The project substantially degrades the existing visual character or quality of the site and its surroundings; and
- 4) The project creates a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

A fifth circumstance potentially leading to a significant visual impact would be:

5) The project results in an inconsistency with regulations, plans, and standards applicable to the protection of visual resources.

In the present methodology, the degree of impact significance is generally arrived at as a function of impact susceptibility and impact severity. Table C.12-1 illustrates the interrelationship between impact susceptibility and impact severity leading to the determination of impact significance.

IMPACT	IMPACT SEVERITY					
SUSCEPTIBILITY	Low	Moderate	High			
Low	Insignificant ¹ to Adverse but Not Significant	Insignificant ¹ to Adverse but Not Significant	Adverse but Not Significant ²			
Moderate	Insignificant ¹ to Adverse but Not Significant	Adverse but Not Significant	Significant ³			
High	Insignificant ¹ to Adverse but Not Significant	Adverse but Not Significant	Significant			

 Table C.12-1 General Guidance for Determination of Impact Significance

- 1 Insignificant impacts may or may not be perceptible but are considered minor in the context of existing landscape characteristics and view opportunity.
- 2 Adverse but Not Significant Impacts are perceived as negative but do not exceed environmental thresholds.
- 3 Significant impacts can be mitigated to a level that is not significant or can be avoided all together with feasible mitigation.
- Without mitigation, the impact would exceed environmental thresholds.

The interrelationships presented in Table C.12-1 are intended as guidance only, recognizing that site specific circumstances may warrant a different outcome. However, it is reasonable to conclude that lower impact susceptibility ratings paired with lower impact severity ratings will generally correlate well with lower degrees of impact significance when viewed on site. Conversely, higher impact susceptibility ratings paired with the to result in higher degrees of visual impact occurring at the site.

Implicit in this rating methodology is the acknowledgment that, for a visual impact to be considered significant, two conditions must exist: (1) the existing landscape must be of reasonably high quality and be highly valued by the public; and (2) the perceived incompatibility of one or more proposed project elements or characteristics must tend toward the high extreme, leading to a substantial reduction in visual quality. Furthermore, to aid in the assessment of project impacts, at each key viewpoint, a visual simulation has been prepared to illustrate the anticipated long-term appearance of the proposed project in the existing landscape.

Visual impacts are classified as defined in Section C.1: Class I (significant, cannot be mitigated to a level that is not significant), Class II (significant, can be mitigated to a level that is not significant), or Class III (adverse, but not significant).

It should be noted that there are occasions when a reduction in structure heights or the installation of vegetative screening (in close proximity to a viewpoint) may accomplish some level of impact reduction. However, for a transmission project of this scale (95- to 195-foot structure heights), there is relatively little opportunity, aside from route relocation, to mitigate significant visual impacts to a level of non-significance. In most cases, either significant and unavoidable (Class I) or adverse but not significant (Class III) visual impacts will occur.

C.12.2.3 Applicant Proposed Measures

There are no Applicant proposed measures for the visual impacts of the proposed project.

C.12.2.4 Applicable Regulations, Plans, and Standards

The policies and planning guidance pertinent to visual resources is summarized in Table C.12-2. As indicated in the table, in six instances, the proposed project was found to be consistent with the applicable policy while in three cases it was found to be partially consistent. In five instances, the proposed project was deemed inconsistent with the applicable policy. A brief discussion of policy consistency is provided

for those cases where the project was found to be either partially consistent or inconsistent. In those cases where the project was deemed consistent with applicable policy, the reader is referred to Section C.7 (Land Use and Public Recreation) for further discussion. The impact significance of project inconsistency with applicable regulations, plans, and standards is presented in each key viewpoint discussion in Sections C.12.2.6, 7, and 8.

Section/Policy #	Policy Statement Consistency Determination				
-	Bay Conservation and Development Commission				
Appearance, Design, and Scenic Views Policy No. 4	Structures and facilities that do not take advantage of or visually complement the Bay should be located and designed so as not to impact visually on the Bay and shoreline.	Inconsistent. While visual impacts have been identified, no mitigation measures are available to reduce those impacts. The Proposed Project would therefore create a visual impact on the Bay shoreline and would not visually complement the Bay.			
Appearance, Design, and Scenic Views Policy No. 10	Towers, bridges, or other structures near or over the Bay should be designed as landmarks that suggest the location of the waterfront when it is not visible, especially in flat areas. But such landmarks should be low enough to assure the continued visual dominance of the hills around the Bay.	Partially Consistent. The transmission towers for the Proposed Project are not intended to be landmarks for the Bay or shoreline. However, to those familiar with their locations, it may be possible to use them as navigation aids, either from watercraft in the Bay or from land-based positions. While their height will enable them to be seen at locations from which the shoreline may not be visible, their presence will not negate the visual dominance of the hills to the east.			
Other Uses of the Bay and Shoreline Policy No. 5	High voltage transmission lines should be placed in the Bay only when there is no reasonable alternative. Whenever high voltage transmission lines must be placed in the Bay or in shoreline areas: (a) New routes should avoid interfering with scenic views and with wildlife, to the greatest extent possible; and (b) The most pleasing tower and pole design possible should be used. High voltage transmission lines should be placed underground as soon as this is technically and economically feasible.	Consistent			
Other Uses of the Bay and Shoreline Policy No. 6	Power distribution and telephone lines should either be placed underground (or in an attractive combination of underground lines with streamlined overhead facilities) in any new residential, commercial, public, or view area near the shores of the Bay.	Inconsistent to Partially Consistent. As currently proposed, the Proposed Project would not include any underground segments due to prohibitive cost and unacceptable environmental impacts associated with construction. The Proposed Project would be inconsistent with this policy. However, an alternative is evaluated in this EIR that includes an underground segment of approximately 1.4 miles through Bayside Business Park. If the decision makers elect to implement this alternative, the project would be partially consistent with Policy No. 6.			
City of Fremont					
General Plan Natural Resource Objective NR 13.1	Preservation of the visual character of the City's Open Space frame and other unique natural visual elements of Fremont. The frame includes the Hill Face, Bay lands, Alameda Creek flood control channel and adjacent publicly owned open space areas (Ardenwood Regional Park, Alameda Creek Quarries).	Consistent			

Section/Policy #	Policy Statement	Consistency Determination
(1) General Plan Natural Resource Policy NR 13.1.1; (2) Implementation No. 1	(1) Seek permanent protection of unique visual elements within the City. Minimize any negative development impacts on the visual characteristics of the resource when permanent protection is not feasible.	Consistent
	(2) Prepare and adopt guidelines for visual impact assessments. Conduct a visual impact assessment of any proposed public or private project on an identified visual resource. Mitigate negative visual impacts to the degree feasible.	
(1) General Plan Natural Resource Policy NR 13.3.1;	 (1) Reduce the visual impacts of signs, utility lines and poles. (2) Continue to promote undergrounding of utilities, and require 	Consistent
(2) Implementation No. 2	undergrounding of utilities in new development.	
(1) General Plan Natural Resource Policy NR 14.1.1;	(1) The following routes are designated scenic routes for the City of Fremont: Fremont Boulevard.	Consistent
(2) Policy NR 14.1.2;	(2) The impacts of development on the scenic character of scenic routes and on the routes' visual access to scenic resources shall be considered prior to approval of industrial and commercial projects adjacent to scenic routes.	
(3) Implementation No. 1;	(3) Visual impact assessments shall be conducted for projects over two stories high adjacent to a scenic route. Guidelines for scenic impact assessment shall be prepared.	
(4) Implementation No. 2	(4) Proposed uses that could have a negative impact on the quality of the visual character of an area adjacent to a scenic route shall be required to screen or in other ways limit the visual impacts of the use.	
	City of San Jose	
General Plan Land Use Designations	The substation site is designated Light Industrial in the Alviso Specific Plan and on Map 12 of the General Plan. As defined in the Specific Plan and the General Plan, this designation allows a wide variety of industrial uses, such as warehousing, wholesaling, light manufacturing, and industrial service and supply businesses, as long as any hazardous or nuisance effects are mitigated. Only low-intensity uses (i.e., those with low employment densities) are permitted in the Light Industrial area near Coyote Creek in which the substation site would be located, and requires appropriate screening and landscaping, particularly along the SR 237 frontage. Coyote Creek must be protected from potential negative environmental impacts.	Inconsistent. As presently proposed, the Los Esteros Substation would not include landscaping. Also, adverse, though not significant, visual impacts are anticipated for portions of the Coyote Creek Corridor between MP 5.6 and MP 6.7.
Urban Design Policy No. 11	Non-residential building height, including all elements of a building whether occupied space or decorative feature, but not roof equipment or screening, should not exceed 45 feet except: - For structures other than buildings, where substantial height is intrinsic to the function of the structures and where such structures are located to avoid significant adverse effects on adjacent properties, height limits may be established in the context of project review. - In accordance with the conditions set forth in the Alviso Master Plan, the maximum building height may be 90 feet for planned commercial and industrial development between the Water Pollution Control Plant lands and the Guadalupe River, and on the former Cargill landfill site.	Consistent.

Section/Policy #	Policy Statement	Consistency Determination		
Trails and Pathways Policy No. 1	The City should control land development along designated Trails and Pathways Corridors in order to provide sufficient trail right-of- way and to ensure that new development adjacent to the corridors does not compromise safe trail access nor detract from the scenic and aesthetic qualities of the corridor.	Inconsistent. Adverse though not significant, visual impacts are anticipated for portions of the Coyote Creek Corridor between MP 5.6 and MP 5.7.		
	Alviso			
Alviso Specific Plan; Lands Outside of the Village Area Design Objective	Given the high visibility of most of this area, development should be attractive; should fit in the context of the larger community; and should reflect some of the elements and materials of seaside styles to contribute to Alviso's sense of place.	Partially Consistent. The Light Industrial area in which the Los Esteros Substation would be located is specifically referenced in the discussion of this Alviso Master Plan policy. The nature of the substation facilities precludes an attractive design that contributes to the community's sense of place. However, the site is well removed from the residential and office development in and around the Village area that comprises the heart of Alviso. The site is also near the large industrial site containing the treatment facilities for the San Jose/Santa Clara Water Pollution Control Plant. The substation would be consistent in appearance and use with this facility.		
Alviso Specific Plan; Landscaping Policy No. 3	Landscaping should be used to screen unattractive uses and soften the effect of taller buildings due to the flood protection requirements.	Inconsistent. As presently proposed, the Los Esteros Substation would not include landscaping.		

C.12.2.5 Short-Term Construction Impacts

Construction impacts on visual resources would result from the presence of equipment, materials, and work force at the substation sites and staging areas and along the route, and from the temporary alteration of landforms and vegetation along the right of way (ROW). Vehicles, heavy equipment, facility components, and workers would be visible during site clearing, grading, substation construction, structure erection, conductor stringing, and site/ROW clean-up and restoration. Construction equipment and activities would be seen by various viewers in close proximity to the sites and ROW including recreationists on trails, motorists on roads, workers in industrial, commercial, business, and residential facilities, and nearby residents. View durations would vary from brief to extended. Construction activities would be most visible for those elements of the proposed project adjacent to major travel corridors (such as Interstate-880 and SR 237).

The construction of the transmission line and substation, and use of construction staging areas would result in the visual intrusion of construction vehicles, equipment, storage materials, and workers. Due to the relatively short duration of project construction, and because most of the project area is within urban or urban fringe environments that are undergoing significant development as evidenced by widespread construction activities, project construction impacts would generally constitute adverse, but not significant (**Class III**) visual impacts of the Proposed Project, and no mitigation measures are recommended.

C.12.2.6 Proposed 230 kV Transmission Line Route

Assessment of the likely visual impacts that would occur as a result of operation of the proposed 230 kV transmission line was accomplished by establishing representative viewpoints from which to conduct a detailed analysis of the project. At each of these Key Viewpoints (KVPs), field analysis included assessment of visual contrast, project dominance, and view impairment. Subsequently, a conclusion was made regarding the severity of the probable impact, and taken together with the existing landscape's visual impact susceptibility, the level of probable visual impact significance was determined. This preliminary determination was then compared with the visual simulation prepared for that KVP to reach a final conclusion on probable impact significance.

C.12.2.6.1 Key Viewpoint 1 - Auto Mall Parkway

Figure C.12-2A (top image on next odd numbered page) presents the existing view to the southeast from Key Viewpoint 1, located on the eastbound shoulder of Auto Mall Parkway. Figure C.12-2B (lower image on next odd numbered page) presents a visual simulation that depicts the proposed transmission line as it would appear once constructed. Most obvious in the visual simulation are the new vertical forms of the tubular transmission line structures. Though there are fewer structural members for the proposed structures than for the "lattice" structures of the existing lines, the proposed tubular steel structures are more massive. By comparison, the lattice structures have more structural members but are less massive and tend to be more "transparent" when viewed at a distance. The project would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 1). The introduction of the new structures would result in a moderate degree of visual contrast with respect to form However, given the context provided the existing and a low degree of contrast regarding color. transmission lines, essentially no visual contrast would occur with respect to the vertical lines of the structures or horizontal line of the conductors. Overall visual contrast is rated moderate. The project is rated co-dominant in comparison to the existing transmission structures and light industrial buildings, and view impairment would be low. Overall visual impact severity is rated low to moderate and in the context of the existing landscape's low visual impact susceptibility rating, the resulting visual impact is anticipated to be adverse, but not significant (Class III).

This portion of the proposed route would be inconsistent with BCDC Appearance, Design, and Scenic Views Polity No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). However, in the context of the existing development and structures, this policy inconsistency would not change the adverse impact (Class III) assessment for this route segment.

C.12.2.6.2 Pacific Commons Development to Bayside Business Park

South of the existing industrial building at Auto Mall Parkway and extending to the Bayside Business Park near MP 2.7, the absence of buildings results in a more naturally appearing landscape with a moderate to high impact susceptibility rating, particularly after the proposed route diverges from the existing transmission lines (MP 2.2 to MP 2.7). Structural visual contrast along this portion of the route would be moderate to high. The project would appear dominant in the foreground to middleground of views from levee trails and view impairment would be moderate. Overall visual impact severity would be moderate to high and the resulting visual impact would be significant and unavoidable (**Class I**).

This portion of the proposed route would be inconsistent with BCDC Appearance, Design, and Scenic Views Polity No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). Lacking the developed context of the more northerly portion of the route, this policy inconsistency is contributory to the Class I visual impact assessment.

C.12.2.6.3 Key Viewpoint 2 - Bayside Business Park

Figure C.12-3A presents the existing view to the southeast from Key Viewpoint 2, down the wetland mitigation pond immediately adjacent to, and west of, Bayside Business Park. KVP 2 is located on the levee access trail near the northwest corner of Bayside Business Park. This levee trail is also part of the Bay Trail system. Figure C.12-3B presents a visual simulation that illustrates the proposed transmission line as it would appear along the west side of Bayside Business Park. Most prominent in the visual simulation are the vertical forms and lines of the single tube transmission line structures. Although the project would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 2). The vertical structural form and line would contrast with the geometric block forms and low horizontal line of the business park. Visual contrast would be moderate which, combined with the project's co-dominant foreground to middleground appearance and moderate view impairment, lead to a moderate rating for visual impact severity. The resulting visual impact would be adverse, but not significant (**Class III**).

This portion of the proposed route would be inconsistent with BCDC Appearance, Design, and Scenic Views Polity No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). However, in the context of the existing business park development, this policy inconsistency would not change the adverse but not significant (**Class III**) impact assessment for this route segment.

C.12.2.6.4 Key Viewpoint 3 - Bay Trail Along Coyote Creek

Figure C.12-4A presents the existing view to the southwest from Key Viewpoint 3, along a proposed Bay Trail route, adjacent to Coyote Creek and west of McCarthy Boulevard. Figure C.12-4B presents a visual simulation that depicts the proposed transmission line as it would appear over the trees along the Coyote Creek riparian corridor. The tubular structures would be placed along the existing sludge drying ponds on the west side of Coyote Creek (out of sight behind the trees in the photograph). The transmission line structures would appear as prominent foreground vertical elements in the viewshed from KVP 3, but would diminish in prominence as the line recedes to the middleground, due to the presence of other utility poles and the screening provided by the trees in the riparian corridor.

The project would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 3), but would cause a moderate degree of visual contrast with respect to the form and line of the transmission line structures. Overall visual contrast would be moderate and, combined with the co-dominant prominence of the structures, results in a moderate impact severity rating. The resulting visual impact is rated adverse but not significant (**Class III**) and is substantially less than what otherwise would occur, due to the screening provided by the riparian trees along Coyote Creek and the presence of adjacent development along McCarthy Boulevard (out of view of the photograph).

This portion of the proposed route would be inconsistent with BCDC Appearance, Design, and Scenic Views Polity No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6, inconsistent with the City of San Jose General Plan Land Use Designation requirements for Coyote Creek, and inconsistent with the City of San Jose Trails and Pathways Policy No. 1 (see Table C.12-2). However, in the context of the existing development along McCarthy Boulevard and the adjacent I-880 corridor, this policy inconsistency would not change the adverse but not significant (**Class III**) impact assessment for this route segment.

Mitigation Measure for Visual Impacts (MP 5.6 to 6.7)

The following Mitigation Measure would lessen (though not eliminate) the adverse (Class III) visual impact of the transmission line on views along Coyote Creek.

V-1 Reduce structure heights as much as practical from MP 5.6 to MP 6.7.

C.12.2.6.5 Key Viewpoint 4 - San Francisco Bay National Wildlife Refuge Environmental Education Center

Figure C.12-5A presents the existing view to the east from Key Viewpoint 4, on a levee trail near the San Francisco Bay National Wildlife Refuge Environmental Education Center. Figure C.12-5B presents a visual simulation that shows the proposed transmission line as it would appear in the distance beyond the existing transmission lines and foreground and middleground wetlands and salt pond. The tubular structures are barely visible as light vertical lines in the photograph. As a result of the substantial distance between the viewer and the proposed project (approximately 1.8 miles) and the presence of developed features along the Interstate-880 corridor, the project would not result in any visual contrast. The proposed project would remain a subordinate visual element in the viewshed from KVP 4 and would not cause any view impairment. As a result, no visual impact would be experienced at the Refuge or Environmental Education Center.

C.12.2.7 Proposed Substation Site and 115 kV Lines

Figure C.12-6A presents the existing view to the northeast from Key Viewpoint 5, at the eastbound onramp to SR 237 from northbound Zanker Road. Figure C.12-6B provides a visual simulation that shows the proposed Los Esteros Substation, the 230 kV transmission line entering the substation, and the 115 kV transmission lines exiting the station to connect with Agnews Electric Generation Plant, Montague Substation, Trimble Substation, and the Nortech Substation (under construction). As can be seen in the simulation, Los Esteros Substation would replace the greenhouses on the northern portion of the parcel. The substation would appear as a complex industrial feature in the foreground of views from SR 237. However, the actual direction of view for motorists on SR 237 would be east and west and not to the north toward the substation. Westbound motorists would likely not notice the substation and eastbound motorists would have only brief views of the site due to the rate of travel. The more prominent of the proposed facilities would be the connecting 115 kV structures paralleling the north side and then crossing of SR 237.

Due to the presence of an existing power line along the north side of SR 237, which then crosses SR 237 (this line would be removed with construction of the proposed project) and other roadside infrastructure, the vertical forms and lines of the transmission structures and substation would result in a moderate degree of visual contrast. The various foreground project elements would appear co-dominant with the background landforms of the East Bay hills in the views afforded eastbound motorists. View impairment would be low to moderate and overall visual impact severity would be moderate. The resulting visual impact would be adverse but not significant (**Class III**) in the context of existing infrastructure and rapid development along the SR 237 corridor.

The substation would be inconsistent with the San Jose General Plan Land Use Designation requirements for site landscaping and the Alviso Specific Plan Landscaping Policy No. 3 requirement for site landscaping. The proposed substation would be partially inconsistent with the Alviso Specific Plan Lands Outside of the Village Area Design Objective to promote attractive design. Mitigation Measure V-2 will reduce the potential impact of this policy inconsistency to a level that is not significant **(Class II)**.

V-2 PG&E shall develop and implement a landscaping plan for the Los Esteros Substation. Prior to implementation of the plan, the Applicant shall submit the plan to the City of San Jose's Department of Planning, Building, and Code Enforcement and to the CPUC for review and approval.

C.12.2.8 Proposed Trimble Montague Upgrade

Figure C.12-7A presents the existing view to the east along Trimble Road, just east of Zanker Road (7A and 7B reprinted with permission from the Proponent's Environmental Assessment). Figure C.12-7B provides a visual simulation that shows the proposed Upgrade as it would appear along Trimble Road (and Montague Expressway). While the proposed structures are more massive than the existing structures, the resulting visual contrast would be low to moderate given the intensity of development and existing infrastructure along the route. The project would be co-dominant with existing adjacent buildings and view impairment would be low along this highly urbanized streetscape. The overall visual impact severity is

considered low and in the context of the existing urban landscape's low rating for visual impact susceptibility, the resulting visual impact would be considered adverse but not significant (**Class III**).

C.12.2.9 Cumulative Impacts and Mitigation Measures

Cumulative impacts to visual resources would occur where project facilities occupy the same field of view as other built facilities or impacted landscapes. It is also possible that a cumulative impact could occur if a viewer's perception is that the general visual quality of an area is diminished by the proliferation of visible structures (or construction effects such as disturbed vegetation), even if the new structures are not within the same field of view as existing structures. The significance of the cumulative impact would depend on the degree to which (1) the viewshed is altered; (2) visual access to scenic resources is impaired; (3) scenic character is diminished; or (4) the project's visual contrast is increased.

The following projects from the Cumulative Projects List would be located within the same viewshed as some segment(s) of the proposed route (listed from north to south):

- **Catellus Pacific Commons.** This project is located east of I-880 and south of Auto Mall Parkway on both sides of Auto Mall Circle/Cushing Parkway. This project would be located immediately adjacent to the proposed transmission line project just south of Auto Mall Parkway. The resulting cumulative impact is considered adverse but not significant (**Class III**) given the presence of existing light industrial development and energy transmission infrastructure.
- **Bayside Business Park Grading Plan Project.** This project is located immediately south of Bayside Business Park and is generally bound on east by I-880, on the west by Newby Island Landfill, and on the south by Dixon Landing Road. The grading project would be visible within the same field of view as route segment MP 4.1 to approximately MP 4.8. Given the degree of existing land disturbance associated with the abandoned Fremont Airport and the adjacent Newby Island Landfill, as well as the existing visual context provided by the adjacent I-880 travel corridor, the resulting cumulative visual impact is considered adverse but not significant (**Class III**).
- Juan Bautista de Anza National Historic Trail. Although this trail project would conceivably be visible in the same field of view as portions of the proposed transmission line project, particularly along route segment MP 6.7 to MP 7.0, the trail project would not result in substantial visible evidence of its presence. Therefore, no cumulative impact is anticipated.
- **Cadence Design (Buildings 9 and 10).** This project would be visible in the same field of view as the Trimble Montague Upgrade, along Trimble Road and Montague Expressway. However, in the context of the intensive development and existing infrastructure in that location, no cumulative visual impact is anticipated.

Short-term cumulative visual impacts may occur if other future projects (such as those listed above) are constructed in the vicinity of the proposed project and at the same time as the proposed project. In such a circumstance, construction activities and/or equipment associated with the transmission line project and other construction projects may be visible within the same field of view at some locations, compounding the visual impact as viewed from those locations. Such a cumulative visual impact is considered a short-term impact because the construction period for each project component is relatively short. Therefore, such cumulative construction impacts would generally be considered adverse but not significant **(Class III)**.

C.12.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES: ALTERNATIVES

C.12.3.1 Underground Through Business Park

C.12.3.1.1 Existing Landscape

The Underground Through Business Park Alternative extends from the north boundary of Bayside Business Park, underground along the right of way of the existing Newark-Montague 115kV transmission line, until reconnecting with the Proposed Project, just south of the business park. The route generally runs through parking lots located behind industrial buildings (see Figure C.12-8). The only above-ground structures associated with this alternative are the overhead/underground transition structures at each end of the business park (see Figure B.6-4). The viewshed along this route is primarily comprised of buildings, parking lots, and surface streets associated with the business park. Views of the transition structures are limited to the parking lot at the north end of the business park and the south terminus of Fremont Boulevard and the buildings on either side of Fremont Boulevard at the south terminus. The most sensitive viewers would be the users of the recreation trail that extends from the south end of Fremont Boulevard.

C.12.3.1.2 Environmental Impacts and Mitigation Measures

Short-term Construction Impacts. Short-term construction impacts as previously described in Section C.12.2.5 would result in adverse, but not significant (Class III) visual impacts for the Underground Through Business Park Alternative.

Key Viewpoint 6 - **Bayside Business Park Parking Lot.** Key Viewpoint 6 was selected to characterize the visual impact that would occur in close proximity to the transition structures at the north end of Bayside Business Park, and along the 115kV corridor. Figure C.12-8 presents the existing view to the northwest from Key Viewpoint 6, located in the parking lot just west of Fremont Boulevard at the north end of Bayside Business Park. The Underground Through Business Park Alternative would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 6). The introduction of the new structures would result in a low degree of visual contrast. The transition structures would be co-dominant in comparison to the existing 115kV transmission lines and industrial buildings, while view impairment would be low. Overall visual impact severity would be low and in the context of the existing landscape's low visual impact susceptibility assessment, the resulting visual impact associated with the transition structures is anticipated to be adverse, but not significant (Class III). This alternative would not result in any policy inconsistencies.

Cumulative Impacts and Mitigation Measures. One project from the Cumulative Projects List would be located within the same viewshed as the Underground Through Business Park Alternative. The Bayside Business Park Grading Plan Project is located immediately south of Bayside Business Park and is generally bound on the east by I-880, on the west by Newby Island Landfill, and on the south by Dixon Landing Road. The grading project would be visible within the same field of view as the south transition structure. Given the degree of existing land disturbance associated with the abandoned Fremont Airport

and the adjacent Newby Island Landfill, as well as the existing visual context provided by the adjacent I-880 travel corridor and Bayside Business Park, the resulting cumulative visual impact is considered adverse but not significant (**Class III**).

C.12.3.2 I-880-A Alternative

C.12.3.2.1 Existing Landscape

The I-880-A Alternative extends from the tap point off the existing Newark-Metcalf 230kV line, just south of Auto Mall Parkway, to the northwest corner of Bayside Business Park, where it reconnects to the Proposed Project route. Landscapes viewed along this alternative route include the urbanized I-880 corridor, open, undeveloped lands south of Auto Mall Parkway, the wetland habitat of the proposed Pacific Commons Preserve, developed business park structures and parking lots along Northport Loop, and the salt ponds between Cushing Parkway and Bayside Business Park. Views of this route alternative are frequently panoramic in scope, encompassing broad open foreground landscapes with vistas to distant hills (to the east) or across expansive wetlands and salt ponds along the southern margin of San Francisco Bay. Views are available from Auto Mall Parkway, Christy Street, I-880, Cushing Parkway, the buildings along Northport Loop West, and the recreation trails along the salt ponds. The most sensitive viewers would be the users of the recreation trails along Cargill Salt Ponds A22 and A23.

C.12.3.2.2 Environmental Impacts and Mitigation Measures

Short-term Construction Impacts. Short-term construction impacts as previously described in Section C.12.2.5 would result in adverse, but not significant (**Class III**) visual impacts for the I-880-A Alternative.

Key Viewpoint 7 - Auto Mall Parkway. Key Viewpoint 7 was selected to assess the potential visual impact that would be experienced by motorists along Auto Mall Parkway, Christy Street, and I-880. Figure C.12-9A presents the existing view to the southeast from Key Viewpoint 7, located on the eastbound shoulder of Auto Mall Parkway, west of Christy Street. Figure C.12-9B presents a photosimulation that depicts the proposed transmission line as it would appear once constructed. Most obvious in the photosimulation are the new vertical forms of the tubular transmission line structures. This portion of the I-880-A Alternative would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 7). The introduction of the new structures would result in a low degree of visual contrast. The project is rated co-dominant in comparison to the existing development along the I-880 corridor and view impairment would be low. Overall visual impact severity would be low and in the context of the existing landscape's moderate visual impact susceptibility assessment, the resulting visual impact is anticipated to be adverse, but not significant (**Class III**).

This portion of the I-880-A Alternative would be inconsistent with Bay Conservation and Development Commission (BCDC) Appearance, Design, and Scenic Views Policy No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with

Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). However, in the context of the existing development and structures, this policy inconsistency would not change the Class III rating for this route segment. The reader is referred to Table C.12-2 for further discussion of BCDC policy consistency.

Key Viewpoint 8 - South Terminus of Christy Street. Key Viewpoint 8 was established to characterize the potential visual impact to the open space and wetlands that are to be transferred to the San Francisco Bay National Wildlife Refuge. Figure C.12-10A presents the existing view to the southeast from Key Viewpoint 8, located at the south terminus of Christy Street. Figure C.12-10B presents a photosimulation that depicts the proposed transmission line as it would appear once constructed. Most obvious in the photosimulation are the new vertical forms of the tubular transmission line structures. While this portion of the I-880-A Alternative would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 8), the introduction of the new structures would result in a moderate degree of visual contrast. The project is rated co-dominant in comparison to the existing development along the I-880 corridor and view impairment would be low though some skylining at the twin-legged angle structure would occur. Overall visual impact severity would be low to moderate and in the context of the existing landscape's moderate visual impact susceptibility assessment and urban backdrop, the resulting visual impact is anticipated to be adverse, but not significant (**Class III**).

This portion of the I-880-A Alternative would be inconsistent with Bay Conservation and Development Commission (BCDC) Appearance, Design, and Scenic Views Polity No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). However, in the context of the existing development and structures, this policy inconsistency would not change the Class III rating for this route segment. The reader is referred to Table C.12-2 for further discussion of BCDC policy consistency.

Cushing Parkway to Bayside Business Park. South of Cushing Parkway and extending to Bayside Business Park near MP 2.7, the I-880-A Alternative crosses Cargill Salt Ponds A22 and A23. The absence of buildings along this route segment result in a more naturally appearing landscape with a moderate to high impact susceptibility rating, particularly between the Newark-Montague 115kV transmission line and the Newark-Scott, Newark-Trimble, and Newark-Kifer 115kV transmission lines. Structural visual contrast along this portion of the route would be moderate to high. The project would effectively result in a third transmission corridor between the two existing corridors. This proliferation of infrastructure would actually cause more impairment of views than if it was located adjacent to an existing corridor. Overall visual impact severity would be moderate to high and the resulting visual impact would be significant but mitigable (**Class II**).

This portion of the I-880-A Alternative Route would be inconsistent with BCDC Appearance, Design, and Scenic Views Polity No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). Lacking the developed context of the more northerly portion of the route, this policy inconsistency is contributory to the Class II visual impact rating.

The following mitigation measure would reduce the significant visual impact of the transmission line as it crosses Salt Ponds A22 and A23 to an impact level that would be adverse but not significant (**Class II**):

V-3 At the point where the I-880-A Alternative intersects the Newark-Montague 115kV Line, revise the route to turn southeast to parallel Newark-Montague to the north side of Bayside Business Park, then either (a) turn west to re-connect to the Proposed Route at MP 2.7, or (b) at the north boundary of Bayside Business Park, connect to the Underground Through Bayside Business Park Alternative Route.

Cumulative Impacts and Mitigation Measures. Two projects from the Cumulative Projects List (Table B.8-1) would be located within the same viewshed as some segment(s) of the I-880-A Alternative Route (listed from north to south), and would result in cumulative visual impacts. The Catellus Pacific Commons project is located west of I-880 and south of Auto Mall Parkway on both sides of Auto Mall Circle/Cushing Parkway. This project would be immediately adjacent and to the west of the I-880-A Alternative just south of Auto Mall Parkway. The resulting cumulative impact is considered adverse but not significant (**Class III**) given the presence of existing urban development and energy infrastructure along the I-880 corridor.

The Baccarrat Fremont Developers project is located south of Cushing Parkway and west of Fremont Boulevard, east of the I-880-A Alternative crossing of Cargill Salt Pond A23. The resulting cumulative impact is considered adverse but not significant (**Class III**) given the presence of existing energy transmission infrastructure.

C.12.3.3 I-880-B Alternative

C.12.3.3.1 Existing Landscape

The I-880-B Alternative extends from the western terminus (currently) of Cushing Parkway, east along Cushing Parkway to I-880, south along I-880 to the southern boundary of Bayside Business Park and then west to the south terminus of Fremont Boulevard where it would angle to the southwest to rejoin the Proposed Route. Landscapes viewed along this alternative route are primarily urban in character and include the business/industrial parks and hotels along Cushing Parkway, the urbanized I-880 corridor, and the open, undeveloped lands and wetlands south of Bayside Business Park. Views of this route alternative tend to be confined by urban development though the view from KVP 11 at the south terminus of Fremont Boulevard (viewing the southern-most segment of the I-880-B Alternative) is panoramic in scope, encompassing broad open foreground landscapes with vistas to distant hills (to the south and east). Views of the route are available from Cushing Parkway, I-880, Kato Road, West Warren Avenue, Lakeview Drive, and Fremont Boulevard. The most sensitive viewers would be those recreationists accessing the trail at the southern portion of Bayside Business Park and occupants of the various business/industrial buildings passed by the route.

C.12.3.3.2 Environmental Impacts and Mitigation Measures

Short-term Construction Impacts. Short-term construction impacts as previously described in Section C.12.2.5 would result in adverse, but not significant (**Class III**) visual impacts for the I-880-B Alternative.

Key Viewpoint 9 - Westbound Cushing Parkway. Key Viewpoint 9 was selected to assess the characteristic visual impact along Cushing Parkway specifically but also the impact to adjacent business/industrial parks along the route in general. Figure C.12-11A presents the existing view to the southwest from Key Viewpoint 9, located on the westbound shoulder of Cushing Parkway, just east of Northport Loop East. Figure C.12-11B presents a photosimulation that depicts the proposed transmission line as it would appear once constructed along Cushing Parkway. As can be see from the photosimulation, the I-880-B Alternative would introduce prominent vertical forms along the south side of Cushing Parkway. With the exception of the removal of some trees that would be necessary in close proximity to the right of way, minimal change would occur to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 9). The introduction of the new structures would result in a moderate The project would be visually dominant in comparison to the existing degree of visual contrast. development along Cushing Parkway and view impairment would be low. Overall visual impact severity would be moderate. In the context of the existing urban development and the route landscape's moderate visual impact susceptibility assessment, the resulting visual impact is anticipated to be adverse, but not significant (**Class III**). This alternative would not result in any policy inconsistencies.

Key Viewpoint 10 - Intersection of Kato Road and Page Avenue. Key Viewpoint 10 was selected to characterize the typical visual impact that would be experienced along the I-880 travel corridor. Figure C.12-12A provides the existing view to the north from the intersection of Kato Road and Page Avenue, immediately adjacent, and to the east of I-880. Figure C.12-12B presents a photosimulation that depicts the proposed transmission line as it would appear once constructed along I-880. As can be seen from the photosimulation, the I-880-B Alternative would introduce a series of prominent vertical forms along the west side of I-880. With the exception of the removal of some trees that would be necessary in close proximity to the right of way, minimal change would occur to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 10). Although the transmission tower structures would not be characteristic of the existing low, horizontal, geometric structures of the adjacent business/industrial parks or the low linear profile of I-880, the intensity of development along the I-880 corridor would help to absorb the moderately contrasting structural forms. The rate of travel speed along I-880 and motorist attention to traffic conditions would effectively preclude the occurrence of significant visual impacts being experienced by motorists on I-880. The project would be visually co-dominant in comparison to the existing development along I-880 and view impairment would be low. Overall visual impact severity would be low and given the context of the existing urban development and the route landscape's low to moderate visual impact susceptibility assessment, the resulting visual impact is anticipated to be adverse, but not significant (**Class III**). This alternative would not result in any policy inconsistencies.

Key Viewpoint 11 - *South Terminus of Fremont Boulevard.* Key Viewpoint 11 was selected to assess the probable visual impact along the most visually sensitive portion of the route, the undeveloped open

space and wetlands south of Bayside Business Park. Figure C.12-13 provides the existing view to the south from the south terminus (currently) of Fremont Boulevard. The I-880-B transmission line diverges away from the I-880 corridor along the southern boundary of the Bayside Business Park (current boundary) and angles to the southwest, toward the reconnection point with the Proposed Route, which would be located in the middleground of Figure C.12-13. The I-880-B Alternative would introduce prominent vertical forms in the open area shown in the photograph. Minimal change would occur to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 11).

It should be noted that this area is proposed for further expansion of Bayside Business Park. Either now in its undeveloped state or in the future following expansion of the Business Park, the transmission tower structures would not be characteristic of the existing low, landform profile or horizontal, geometric structures of the future business/industrial park expansion. However, the intensity of the existing development along the I-880 corridor to the east and the Bayside Business Park to the north would help to absorb the highly contrasting structural forms. The project would be visually dominant in comparison to either the existing open landscape or the future business park structures (assuming that the relatively low, horizontal structural profile of the existing business park is carried forward in future development). View impairment would be moderate. Overall visual impact severity would be moderate. The resulting visual impact is anticipated to be adverse, but not significant (**Class III**).

This portion of the I-880-B Alternative Route would be inconsistent with BCDC Appearance, Design, and Scenic Views Polity No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). However, in the context of the adjacent existing development and structures (including the I-880 corridor [east], Bayside Business Park [north], Newby Island Landfill [west], and the closed Fremont Airport [south]), this policy inconsistency would not change the Class III rating for this route segment. The reader is referred to Table C.12-2 for further discussion of BCDC policy consistency.

Cumulative Impacts and Mitigation Measures. One project from the Cumulative Projects List would be located within the same viewshed as the I-880-B Alternative Route segment visible from Key Viewpoint 11 and would result in a cumulative visual impact. The Bayside Business Park Grading Plan Project is located immediately south of Bayside Business Park and is generally bound on the east by I-880, on the west by Newby Island Landfill, and on the south by Dixon Landing Road. The grading project would be visible within the same field of view as the southern segment of the I-880-B Alternative extending south from Bayside Business Park. Given the degree of existing land disturbance associated with the abandoned Fremont Airport and the adjacent Newby Island Landfill, as well as the existing visual context provided by the adjacent I-880 travel corridor, and Bayside Business Park, the resulting cumulative visual impact is considered adverse but not significant (**Class III**).

C.12.3.4 Westerly Route Alternative

C.12.3.4.1 *Existing Landscape*

The Westerly Route Alternative extends southeast from Newark Substation, paralleling the existing Newark-Scott, Newark-San Jose B, and Newark-Kifer 115kV power lines across open space, wetlands, salt ponds, Coyote Creek, the westerly end of Newby Island Landfill and the San Francisco Bay National Wildlife Refuge. West of Zanker Road Landfill, the route diverges from the existing lines to cross the Santa Clara County Wastewater Pollution Control Plant before converging on, and than paralleling, Zanker Road to the Los Esteros Substation site. Landscapes viewed along this alternative route are primarily open, undeveloped Bay margin lands offering panoramic views to distant hills to the east, south, and west.

Views of the route are available from Auto Mall Parkway, Cushing Parkway, Bayside Business Park, San Francisco Bay National Wildlife Refuge, Zanker Road, and numerous recreation trails along the levees in the vicinity of the route. The most sensitive viewers would be those recreationists accessing the Wildlife Refuge and the levee recreation trails.

C.12.3.4.2 Environmental Impacts and Mitigation Measures

Short-term Construction Impacts. Short-term construction impacts as previously described in Section C.12.2.5 would result in adverse, but not significant (**Class III**) visual impacts for the Westerly Route Alternative.

From Newark Substation south to approximately milepost (MP) 2.2, the Westerly Route Alternative shares the same alignment as the Proposed Project. The reader is referred to Section C.12.2.6.1 and the discussion of Key Viewpoint (KVP) 1 regarding the adverse but not significant **(Class III)** visual impact that would occur along that portion of the route. Between MP 2.2 and approximately MP 5.2, the Westerly Route Alternative parallels an existing 115kV transmission line corridor. Two key viewpoints, KVP 12 and KVP 13 were established to assess the potential visual impacts along this three-mile long route segment.

Key Viewpoint 12 - **Bayside Business Park Mitigation Pond.** Key Viewpoint 12 was selected to assess the characteristic visual impact through the salt ponds and wetland areas as perceived from the east side of the route. Figure C.12-14A presents the existing view to the south from Key Viewpoint 12, located on the levee access trail, near the northwest corner of Bayside Business Park. Figure C.12-14B presents a photosimulation that depicts the Westerly Route Alternative as it would appear once constructed adjacent, and to the west of, the existing 115kV transmission lines. As can be see from the photosimulation, the Westerly Route Alternative would introduce additional prominent vertical forms along the utility corridor. This alternative would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 12, end of this section). The introduction of the new, more massive structures would result in a low to moderate degree of visual contrast with respect to structure form and line. The project would be noticeable and visually co-dominant in comparison to the existing transmission lines. View impairment would be low but apparent and overall visual impact severity would be low to moderate, reflecting some degree of offset of the introduction of new structures by the existing facility context. As a result, the low to moderate severity of the visual impact is anticipated to be adverse, but not significant (**Class III**).

This portion of the Westerly Route Alternative would be inconsistent with Bay Conservation and Development Commission (BCDC) Appearance, Design, and Scenic Views Polity No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). However, in the context of the adjacent, existing transmission line corridor, this policy inconsistency would not change the Class III rating for this route segment. The reader is referred to Table C.12-2 for further discussion of BCDC policy consistency.

Key Viewpoint 13 - **San Francisco Bay National Wildlife Refuge Environmental Education Center.** Key Viewpoint 13 was selected to characterize the visual impact that would be experienced by users of the Refuge. Figure C.12-15A provides the existing view to the east from Key Viewpoint 13, on a levee trail near the Refuge Education Center. Figure C.12-15B presents a photosimulation that depicts the Westerly Route Alternative as it would appear once constructed adjacent, and to the west of, the existing 115kV lines. As can be seen from the photosimulation, the Westerly Route Alternative would introduce a series of prominent vertical forms adjacent to the 115kV lines. This alternative would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 13). Although the transmission tower structures would not be characteristic of the existing low, horizontal landforms, the new structures would be somewhat similar, though more massive, in comparison to the existing structures, resulting in a low to moderate degree of visual contrast with respect to structure form and line. The project would be noticeable and visually co-dominant in comparison to the existing transmission lines. View impairment would be low yet apparent and overall visual impact severity would be low, reflecting some degree of offset of the introduction of new structures by the existing facility context. As a result, the low severity of the visual impact is anticipated to be adverse, but not significant (Class III).

This portion of the Westerly Route Alternative would be inconsistent with Bay Conservation and Development Commission (BCDC) Appearance, Design, and Scenic Views Policy No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). However, in the context of the adjacent, existing transmission line corridor, this policy inconsistency would not change the Class III rating for this route segment. The reader is referred to Table C.12-2 for further discussion of BCDC policy consistency.

Key Viewpoint 14 -Zanker Road to Los Esteros Substation Site. Key Viewpoint 14 was selected to characterize the visual impact that would be experienced by motorists along Zanker Road in the area of the proposed Los Esteros Substation site, the Santa Clara County Water Pollution Control Plant, and the Zanker Road Landfill. Figure C.12-16A provides the existing view to the north from Key Viewpoint 14, along northbound Zanker Road, just north of Highway 237. Figure C.12-16B presents a photosimulation that depicts the Westerly Route Alternative as it would appear once constructed. As illustrated in Figure C.12-20B, the Westerly Route Alternative would introduce a series of prominent vertical forms adjacent to Zanker Road on the north and east sides. This alternative would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 14). The new structures

would be somewhat similar to, though more massive and considerably larger than, the existing utility infrastructure along Zanker Road, resulting in a low to moderate degree of visual contrast with respect to structure form. The project would be noticeable and visually co-dominant in comparison to other existing developed structures in the landscape. View impairment would be low to moderate as would overall visual impact severity, reflecting some degree of offset of the visual impact by the existing facility context. As a result, the resulting visual impact is anticipated to be adverse, but not significant (**Class III**).

This route segment would be inconsistent with the San Jose General Plan Land Use Designation requirements for site landscaping and the Alviso Specific Plan Landscaping Policy No. 3 requirement for site landscaping. This portion of the Westerly Route Alternative would also be partially inconsistent with the Alviso Specific Plan Lands Outside of the Village Area Design Objective to promote attractive design. However, given the context of existing development along the Zanker Road corridor, this policy inconsistency would not change the Class III rating for this route segment.

Cumulative Impacts and Mitigation Measures. One project from the Cumulative Projects List would be located within the same viewshed as the Westerly Route Alternative as viewed from Key Viewpoint 12 and would result in a cumulative visual impact. The Catellus Pacific Commons project is located west of I-880 and south of Auto Mall Parkway on both sides of Auto Mall Circle/Cushing Parkway. This project would be located immediately adjacent to the Westerly Route Alternative just south of Auto Mall Parkway. The resulting cumulative impact is considered adverse but not significant (Class III) given the presence of existing light industrial development and energy transmission infrastructure.

C.12.3.5 Westerly Upgrade Alternative

C.12.3.5.1 Existing Landscape

The Westerly Upgrade Alternative extends southeast from Newark Substation, paralleling the route of the existing Newark-Scott, Newark-San Jose B, and Newark-Kifer 115kV power lines across open space, wetlands, salt ponds, Coyote Creek, the westerly end of Newby Island Landfill and the San Francisco Bay National Wildlife Refuge (Newark-Scott and Newark-Kifer would be removed following installation of the Westerly Upgrade lines). West of Zanker Road Landfill, the route would split—the easterly line would follow the Westerly Route Alternative alignment to the proposed Los Esteros Substation Site (see Section C.12.3.4), while the westerly line would turn southwest, passing south of Alviso before turning south and crossing Highway 237 to follow Lafayette Street to the City of Santa Clara's Northern Receiving Station substation site.

Landscapes viewed along this alternative route are primarily open, undeveloped Bay margin lands offering panoramic views to distant hills to the east, south, and west. South of Highway 237, the easterly line would pass through an urban landscape of residential and commercial development and infrastructure. Views of the route are available from Auto Mall Parkway, Cushing Parkway, Bayside Business Park, San Francisco Bay National Wildlife Refuge, Zanker Road, North First Street, Highway 237, and Lafayette

Street as well as numerous recreation trails along the salt pond levees in the vicinity of the route. The most sensitive viewers would be those recreationists accessing the Wildlife Refuge and the levee recreation trails, and the residents in close proximity to the westerly line in the vicinity of North First and Lafayette Streets.

C.12.3.5.2 Environmental Impacts and Mitigation Measures

Short-term Construction Impacts. Short-term construction impacts as previously described in Section C.12.2.5 would result in adverse, but not significant (**Class III**) visual impacts for the Westerly Upgrade Alternative.

From Newark Substation south to approximately milepost (MP) 2.2, the Westerly Upgrade Alternative shares the same alignment as the Westerly Alternative and the Proposed Project. Key Viewpoint 15 was established at the same location as KVP 1 in order to compare and contrast the Westerly Upgrade Alternative with the Proposed Project (and Westerly Route Alternative) along this 2.2 mile segment as viewed from Auto Mall Parkway.

Figure C.12-17A presents the existing view to the southeast from Key Viewpoint 15, located on the eastbound shoulder of Auto Mall Parkway. Figure C.12-17B presents a photosimulation that depicts the Westerly Upgrade as it would appear once constructed. Most obvious in the photosimulation are the new vertical forms of the tubular transmission line structures and the wider context of the transmission line corridor created by the additional lines. Though there are fewer structural members for the new structures, they are more massive. By comparison, the lattice structures have more structural members but are less massive and tend to be more "transparent" when viewed at a distance. With the removal of two of the existing lines and the spreading out of the corridor, the cluster of structures appears less dense. The project would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 15).

Although the structures are more massive, the fewer structures resulting from the removal of the existing line results in a visual appearance that is comparable to the Proposed Route and Westerly Alternative (see Figure C.12.2). The introduction of the new structures would result in a moderate degree of visual contrast with respect to form and a low degree of contrast regarding color. However, given the context provided the existing transmission lines, essentially no visual contrast would occur with respect to the vertical lines of the structures or horizontal line of the conductors. Overall visual contrast is rated low and reflects the net reduction of structural elements resulting from the removal of two of the existing lines. The project is rated co-dominant in comparison to the existing transmission structures and light industrial buildings, and view impairment would be low. Overall visual impact severity is rated low and in the context of the existing landscape's low visual impact susceptibility, the resulting visual impact is anticipated to be adverse, but not significant (**Class III**).

This portion of the proposed route would be inconsistent with BCDC Appearance, Design, and Scenic Views Polity No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). However, in the context of the existing development and structures, this policy inconsistency would not change the Class III rating for this route segment.

Between MP 2.2 and approximately MP 5.2, the Westerly Upgrade Alternative parallels an existing 115kV transmission line corridor. Two key viewpoints, KVP 16 and KVP 17 were established to assess the potential visual impacts along this three-mile long route segment.

Key Viewpoint 16 - **Bayside Business Park Mitigation Pond.** Key Viewpoint 16 was established at the same location as KVP 12 in order to assess the characteristic visual impact through the salt ponds and wetland areas as perceived from the east side of the route as well as to compare and contrast the Westerly Upgrade Alternative with the Westerly Route Alternative. Figure C.12-18A presents the existing view to the south from Key Viewpoint 16, located on the levee access trail, near the northwest corner of Bayside Business Park. Figure C.12-18B presents a photosimulation that depicts the Westerly Upgrade Alternative as it would appear once constructed adjacent and to the west of the existing 115kV transmission lines, and after the existing lines are removed. As can be see from the photosimulation, the Westerly Upgrade Alternative would introduce prominent vertical forms along the utility corridor that appear taller and somewhat more massive than the existing lattice structures.

This alternative would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 16). The introduction of the taller, more massive structures and removal of the existing lattice structures would result in a low degree of visual contrast with respect to structure form and line. The project would be noticeable but would appear equally dominant when compared to the existing structures. View impairment by the taller structures would be low and not substantially different from the existing structures while overall visual impact severity would be low, reflecting the built structural context established by the existing corridor, as well as the removal of the existing lines. As a result, the low severity of the visual impact is anticipated to be adverse, but not significant (**Class III**). This visual impact would be comparable to that resulting from the Westerly Route Alternative. Although the Westerly Upgrade Alternative results in more larger structures, this outcome is somewhat balanced by the net overall fewer number of structures as can be seen by comparing Figures C.12-14B with C.12-18B.

This portion of the Westerly Upgrade Alternative would be inconsistent with Bay Conservation and Development Commission (BCDC) Appearance, Design, and Scenic Views Policy No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). However, in the context of the existing transmission line corridor, this policy inconsistency would not change the Class III rating for this route segment. The reader is referred to Table C.12-2 for further discussion of BCDC policy consistency.

Key Viewpoint 17 - **San Francisco Bay National Wildlife Refuge Environmental Education Center.** Key Viewpoint 17 was established at the same location as KVPs 4 and 13 in order to characterize the visual impact that would be experienced by users of the Refuge and to provide a comparison with the Proposed Project (KVP 4) and the Westerly Route Alternative (KVP 13). Figure C.12-19A provides the existing view to the east from Key Viewpoint 17, on a levee trail near the Refuge Education Center. Figure C.12-19B presents a photosimulation that depicts the Westerly Upgrade Alternative as it would appear once constructed adjacent, and to the west of, the existing 115kV lines, and following their removal. As can be seen from the photosimulation, the Westerly Upgrade Alternative would introduce a series of prominent vertical forms in the same location as the existing 115kV lines.

This alternative would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 17). The introduction of the new, more massive structures and removal of the existing lattice structures would result in a low degree of visual contrast with respect to structure form and line. The taller structures associated with the Westerly Upgrade Alternative would be noticeable but would appear equally dominant when compared to the existing structures. View impairment by the taller structures would be low and not substantially different from the existing structures while overall visual impact severity would be low, reflecting the built structural context established by the existing corridor, as well as the removal of the existing lines. As a result, the low severity of the visual impact is anticipated to be adverse, but not significant (**Class III**). This visual impact would be comparable to that resulting from the Westerly Route Alternative. Although the Westerly Upgrade Alternative results in more larger structures, this outcome is somewhat balanced by the net overall fewer number of structures. From the perspective of KVP 17, the Westerly Upgrade Alternative would be appear less visually impacting than the Westerly Route Alternative due to the reduction in the number of structures and the ability to place structures as adjacent pairs (as can be seen by comparing Figures C.12-15B with C.12-19B).

This portion of the Westerly Route Alternative would be inconsistent with Bay Conservation and Development Commission (BCDC) Appearance, Design, and Scenic Views Policy No. 4; partially inconsistent with Appearance, Design, and Scenic Views Policy No. 10; and inconsistent to partially inconsistent with Other Uses of the Bay and Shoreline Policy No. 6 (see Table C.12-2). However, in the context of the adjacent, existing transmission line corridor, this policy inconsistency would not change the Class III rating for this route segment. The reader is referred to Table C.12-2 for further discussion of BCDC policy consistency.

West of the Zanker Road Landfill, the Westerly Upgrade Alternative splits into two lines, the easterly line following the Westerly Route Alternative to Los Esteros Substation (see discussion above for KVP 14), and the westerly line turning southwest to the Northern Receiving Station substation site as previously described. Key Viewpoint 18 was established to characterize the visual impact along the westerly line.

Key Viewpoint **18** - *North First Street.* Key Viewpoint 18 was selected to characterize the visual impact that would be experienced by motorists on North First Street north of Highway 237, as well as nearby

residents. Figure C.12-20A provides the existing view to the northwest from Key Viewpoint 18, from northbound North First Street, just north of Highway 237. Figure C.12-20B presents a photosimulation that depicts the Westerly Upgrade Alternative as it would appear once constructed. As illustrated in Figure C.12-20B, the Westerly Upgrade Alternative would introduce a series of prominent vertical forms in the foreground to middleground of views from North First Street, nearby residences, and Highway 237. This alternative would result in minimal change to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 18). The new structures would result in a moderate degree of visual contrast with respect to structure form and would be noticeable and visually co-dominant in comparison to other existing developed structures in the landscape. View impairment would also be moderate as would overall visual impact severity. However, in the context of the existing and ongoing development of built structures in this transitioning landscape, the overall visual impact is considered adverse but not significant (**Class III**).

This route segment would be inconsistent with the San Jose General Plan Land Use Designation requirements for site landscaping and the Alviso Specific Plan Landscaping Policy No. 3 requirement for site landscaping. This portion of the Westerly Upgrade Alternative would also be partially inconsistent with the Alviso Specific Plan Lands Outside of the Village Area Design Objective to promote attractive design. However, given the context of existing and ongoing development (much of the open area depicted in Figures C.12-20A and 20B would be occupied by a proposed Cisco campus), this policy inconsistency would not change the Class III rating for this route segment.

After crossing SR237, the Westerly Upgrade Alternative would be reconductored onto the existing structures along the west side of Lafayette Street (See Figure C.12-21) to its southern terminus at the alternative Northern Receiving Station substation site.

Cumulative Impacts and Mitigation Measures. One project from the Cumulative Projects List would be located within the same viewshed as the Westerly Upgrade Alternative as viewed from Key Viewpoint 18 and would result in a cumulative visual impact. The Cisco Systems, Inc. campus, Site 6, is a 2.35 million square feet project that would be located north of Highway 237 and south of Grand Boulevard and Los Esteros Road. The Westerly Upgrade Alternative would pass through the middle of the Cisco site. The resulting cumulative impact is considered adverse but not significant (**Class III**) given the presence of existing and ongoing development in the immediate vicinity of this portion of the route and along the adjacent Highway 237.

C.12.3.6 Substation Alternatives

Two substation alternatives have been identified as potential substitutes for the proposed Los Esteros Substation. The Northern Receiving Station Alternative is located off of Lafayette Street, south of Highway 237 and the Zanker Road Substation Alternative is located off of Zanker Road, south of Highway 237.

C.12.3.6.1 Northern Receiving Station Alternative

Existing Landscape. The Northern Receiving Station Alternative would be located on an undeveloped parcel adjacent to the west side of Lafayette Street, just south of the intersection with Calle De Primavera. This site would be connected to the Westerly Upgrade Alternative which would be placed on existing towers along the west side of Lafayette as previously described. The site landscape includes foreground views of the open, undeveloped field where the substation would be located. Presently, the field is occupied by single-leg transmission towers which connect to the adjacent (to the west) Silicon Valley Power generation plant (see Figure C.12-22). Bordering the site on the south and east (across Lafayette Street) is residential development. Immediately adjacent on the east is the railroad and to the north is the Forty-niners training camp.

Views are generally confined to foreground viewing distances by existing development. Visual quality is considered low and reflects the substantial urban development in the vicinity of the site. In spite of the site's open, level terrain, visual absorption capability is considered moderate due to the presence of adjacent infrastructure including roads, transmission lines, railroad, and power generation plant. Viewer sensitivity is rated moderate and reflects a balance between the presence of adjacent residents (typically considered highly sensitive) and the presence of existing infrastructure with similar visual character to the proposed facility (which typically results in lower viewer sensitivity). Viewer exposure is considered moderate to high as extended views are available from adjacent residences and brief views are afforded motorists on Lafayette Street. Overall visual impact susceptibility (an assessment of the site's vulnerability to visual impact) is considered moderate.

Environmental Impacts and Mitigation Measures

Short-term Construction Impacts. Short-term construction impacts as previously described in Section C.12.2.5 would result in adverse, but not significant (**Class III**) visual impacts for the Northern Receiving Station Alternative.

Key Viewpoint 19 - Lafayette Street and Calle De Primavera. Key Viewpoint 19 was established at the intersection of Lafayette Street and Calle De Primavera in order to assess the characteristic visual impact that would be experienced by residents and motorists in proximity to the substation site. Figure C.12-22 presents the existing view to the southwest from Key Viewpoint 19. The substation would appear as a complex industrial feature in the foreground of views from Lafayette Street and adjacent residences. It's visual character would be similar to the adjacent Silicon Valley Power generation plant. While the facility would be visible from Lafayette Street, the actual direction of view for motorists on Lafayette Street would be north and south and not to the west.

Frequently, the most noticeable components of a substation are the transmission line structures leading up to, and connecting with, the substation. However, for this alternative, the transmission structures are already in place (requiring only stringing of additional conductors) and would not contribute to the project's overall visual contrast, dominance, or view impairment. Due to the presence of the existing power lines, generation plant, railroad, and other roadside infrastructure, the complex forms and lines of the substation would result in a low to moderate degree of visual contrast (see Visual Analysis Data Sheet for Key Viewpoint 19). The various foreground project elements would appear co-dominant with the adjacent facilities and structures. View impairment would be low and overall visual impact severity would be low to moderate. The resulting visual impact would be adverse but not significant (Class III) in the context of existing development and the substantial infrastructure adjacent to the project site. The substation would be consistent with the goals, policies, and programs of the *City of Santa Clara General Plan*.

Cumulative Impacts and Mitigation Measures. Portions of the following project from the Cumulative Projects List would be located within the same viewshed as the Northern Receiving Station Substation Alternative as viewed from Key Viewpoint 19 and would result in a cumulative visual impact: **Bayshore North Redevelopment Program.** This project consists of 1,045,000 square feet of office space, 300 room and 150 room hotels, soccer complex with three soccer fields, 10 acres of parking facilities, and an electrical station. The project is generally bounded by Highway 237 on the north, Lafayette Street and Aquino Creek to the east, Highway 101 to the south, and Calabazas Creek to the west. The Northern Receiving Station Alternative would be located within the same field of view as some of the components of the Bayshore project. The resulting cumulative impact is considered adverse but not significant (**Class III**) given the presence of existing facilities and structures in the immediate vicinity of the site.

C.12.3.6.2 Zanker Road Substation Alternative

Existing Landscape. The Zanker Road Substation Alternative would be located on an undeveloped parcel adjacent to the east side of Zanker Road, just south of Highway 237. The site is bordered by Zanker Road on the east, a Santa Clara Valley Transportation Authority maintenance facility on the north, Coyote Creek on the east, and a Cisco Systems office campus on the south. The existing landscape can be characterized as an environment in transition from historical agricultural uses to that of a developed urban environment of office and industrial parks and infrastructure. Overall visual quality is considered low to moderate. Combined with the level terrain of the site and lack of screening from Zanker Road, visual absorption capability is considered low to moderate. Motorists on Zanker Road and the occupants of the nearby office industrial parks are witness to an ongoing urbanization of the entire region, including the vicinity of the Zanker Road Alternative Substation site. Viewer expectations for site development would more likely anticipate similar office development rather than the industrial-appearing substation. Viewer sensitivity is therefore, rated low to moderate. Viewer exposure would be moderate to high given the site's moderate to high visibility and foreground viewing distance from Zanker Road and adjacent buildings, and a moderate number of viewers with moderate to extended duration of views. Reflecting the low range for visual quality, the low to moderate visual absorption capability and viewer sensitivity, and moderate to high viewer exposure, overall visual impact susceptibility (an assessment of the site's vulnerability to visual impact) is considered moderate.

Environmental Impacts and Mitigation Measures

Short-term Construction Impacts. Short-term construction impacts as previously described in Section C.12.2.5 would result in adverse, but not significant (**Class III**) visual impacts for the Northern Receiving Station Alternative.

Key Viewpoint 20 - Southbound Zanker Road. Key Viewpoint 20 was established on southbound Zanker Road just south of the Highway 237 overpass in order to assess the characteristic visual impact that would be experienced by motorists and building occupants. This location was selected for its slightly elevated perspective and its ability to capture both the substation and connecting transmission line structures in the viewshed. Figure C.12-23a presents the existing view to the southwest from Key Viewpoint 20. Figure C.12-23b provides a photosimulation that shows a portion of the Zanker Road Substation and the more visible connecting 230kV transmission line. The substation and transmission line would appear as complex industrial features in the foreground of views from Zanker Road and adjacent buildings. The substation will be less visible than the transmission line when viewed from Zanker Road given its location east of Zanker Road and the typical north - south view orientation for motorists on Zanker Road.

The substation's industrial character will be somewhat inconsistent with the character of the office parks/development to the south and west. The complex forms and lines of the substation and transmission structures would result in a moderate degree of visual contrast with respect to form and line (see Visual Analysis Data Sheet for Key Viewpoint 20). In particular, the transmission structures would appear co-dominant with the adjacent facilities and structures. View impairment would be low to moderate and overall visual impact severity would moderate. The resulting visual impact would be adverse but not significant (**Class III**) in the context of existing development and the substantial infrastructure adjacent to the project site.

Also, the substation would be inconsistent with the San Jose General Plan Land Use Designation requirements for site landscaping. This policy inconsistency would result in a significant but mitigable (**Class II**) visual impact. Implementation of mitigation measure V-2 as described in section C.12.2.7 would reduce the policy inconsistency to a level that would be not significant.

Cumulative Impacts and Mitigation Measures. The following project from the Cumulative Projects List would be located within the same viewshed as the Zanker Road Substation Alternative as viewed from Key Viewpoint 20 and would result in a cumulative visual impact: **Cisco Systems.** This project consists of 3,300,000 square feet of industrial/office space and is located east of Zanker Road on both sides of Tasman. The portion of the project immediately adjacent to the substation site has been completed and is visible in the photograph from Key Viewpoint 20 (the buildings south of the field in Figure C.12-23a and 23b). This portion of the Cisco Systems project would be located within the same field of view as the substation and transmission line as viewed from KVP 20. The resulting cumulative impact is considered adverse but not significant (**Class III**) given the presence of existing facilities and structures in the immediate vicinity of the site, and the ongoing office/industrial development occurring all along Zanker Road and in the general project vicinity.

C.12.3.7 Trimble-Montague 115kV Upgrade Alternatives

Two alternatives to the 115kV upgrade along Trimble Road and Montague Expressway described in Section C.12.2.8 have been developed and include the Barber 115kV Alternative and the Underground Trimble-Montague 115kV Alternative.

C.12.3.7.1 Barber 115kV Alternative

Existing Landscape. The Barber 115kV Alternative would be a wood pole line extending south from Los Esteros Substation to cross Highway 237 before turning east (about 1,500 feet south of Highway 237) to cross Coyote Creek and parallel Industry Drive/Bellew Drive on the south side of the street. At Barber Lane, the route would turn south, following the west side of Barber Lane past the Tasman overcrossing to the I-880/Montague Expressway interchange. Here it would cross the interchange from northwest to southeast, directly into Montague Substation. Landscapes viewed along this alternative route are primarily urban in character and include the business/industrial parks and hotels along Industry Drive, Bellew Drive, and Barber Lane; the urbanized I-880 corridor adjacent to Barber Lane; and a few remaining undeveloped open parcels (south of the substation site and south of Industry Drive) that evidence the area's historical agricultural past. The viewsheds encompass an environment that has rapidly transitioned from an historical agricultural past to a modern business/industrial park landscape so characteristic of Silicon Views of this route alternative still offer some open, panoramic perspectives, but these Valley. opportunities are rapidly becoming more confined to streetscape corridors, bounded by adjacent development. Views of the route are available from Highway 237, Industry Drive/Bellew Drive, Barber Lane, Tasman Boulevard, Montague Expressway, and Interstate-880.

Overall visual quality is considered low, reflecting the substantial urban development that has occurred. Visual absorption capability is rated high since the substantial amount of existing and newly constructed infrastructure and buildings provide an existing context of vertical forms and lines that are very similar to that of the alternative 115kV wood pole line. The 115kV line would appear as a typical infrastructure component in this urban landscape. Motorists on adjacent streets and occupants of adjacent buildings would expect to see this type of infrastructure component in the project area and therefore, viewer sensitivity is considered low. Viewer exposure would be high given the transmission line's high visibility as a foreground visual element with a high number of viewers with moderate to extended viewing opportunities. However, project noticeability would be low and overall visual impact susceptibility would be low.

Environmental Impacts and Mitigation Measures

Short-term Construction Impacts. Short-term construction impacts as previously described in Section C.12.2.5 would result in adverse, but not significant (**Class III**) visual impacts for the I-880-B Alternative.

Key Viewpoint 21 - **Eastbound Industry Drive/Bellew Drive.** Key Viewpoint 21 was selected to assess the characteristic visual impact that would be experienced along the roadways adjacent to the transmission line.. Figure C.12-24A presents the existing view to the east from Key Viewpoint 21, located on eastbound Industry Drive/Bellew Drive at its western terminus (just east of Coyote Creek). Figure C.12-24B presents a photosimulation that depicts the wood pole transmission line as it would appear once constructed along Industry Drive/Bellew Drive. As can be see from the photosimulation, this alternative would introduce new vertical forms into the existing landscape. Minimal change would occur to existing landforms and vegetation (see Visual Analysis Data Sheet for Key Viewpoint 21). The introduction of the new structures would result in a low degree of visual contrast with respect to form and line. The project would be visually co-dominant in comparison to existing development but view impairment would be low. Overall visual impact severity would be low. In the context of the existing urban development and the route landscape's low visual impact susceptibility assessment, the resulting visual impact is anticipated to be adverse, but not significant (**Class III**). This alternative would not result in any policy inconsistencies with the San Jose and Milpitas General Plans.

Cumulative Impacts and Mitigation Measures. The following projects from the Cumulative Projects List would be located within the same viewshed as the Barber 115kV Alternative along Barber Lane and would result in a cumulative visual impact: **Cisco** (1+ million square foot R&D Campus on 75 acres at Tasman and Alder) and **Cisco Daycare** (55,000 square-foot, 450 child daycare facility at Tasman and Barber Lane). The resulting cumulative impact is considered adverse but not significant **(Class III)** given the existing and ongoing commercial and office/industrial development occurring all along the route and in the general project vicinity.

C.12.3.7.2 Underground Trimble-Montague 115kV Alternative

Existing Landscape. This alternative would result in the undergrounding of the Trimble-Montague singlecircuit 115kV line along Trimble Road and Montague Expressway as previously described in Section C.12.1.2.4. A single transition structure would be required at the corner of Zanker Road and Trimble Road. Another transition structure would be required west of I-880 where the lines would be brought back above-ground for an overhead crossing of I-880 to Montague Substation. The underground route passes through a heavily urbanized area of San Jose. The viewshed encompasses a typical streetscape comprised of urban development on both sides of a heavily traveled transportation artery that is generally lined with landscaping on both the north and south sides of the street. Views of the transition structures would be limited to motorists at the Zanker Road/Trimble Road intersection and along Montague Expressway west of I-880. The most sensitive viewers of the transition structures would be motorists on adjacent roadways.

Environmental Impacts and Mitigation Measures

Short-term Construction Impacts. Short-term construction impacts as previously described in Section C.12.2.5 would result in adverse, but not significant (**Class III**) visual impacts for the Underground Trimble-Montague 115kV Alternative.

Figure C.12-7A, previously provided in Section C.12.2.8, presents the existing view to the east along Trimble Road, just east of Zanker Road (7A reprinted with permission from the Proponent's Environmental Assessment).

This alternative would result in minimal change to existing landforms and vegetation. The introduction of the new transition structures would result in a low degree of visual contrast. The transition structures would generally appear subordinate in comparison to other adjacent structures and buildings. Project noticeability would be low as would view impairment. Overall visual impact severity would be low and the resulting visual impact associated with the transition structures is anticipated to be adverse, but not significant (**Class III**). This alternative would not result in any policy inconsistencies.

C.12.4 THE NO PROJECT ALTERNATIVE

Under the No Project Alternative, no new facilities would be introduced into existing landscapes and viewsheds and no visual impacts would occur.

C.12.5 MITIGATION MONITORING PROGRAM

Table C.12-3 presents the mitigation monitoring program for visual resources.

Impact	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing		
Proposed Project and Alternatives								
Adverse visual impact to a valued landscape resulting from the placement of new structures adjacent to Coyote Creek and a Bay Trail segment	V-1 Reduce structure heights as much as practical from Milepost (MP) 5.6 to Milepost 6.7	Proposed Project from MP 5.6 to MP 6.7	CPUC to verify that reduced structure heights have been achieved	Visibility of transmission structures will be reduced as viewed from the Bay Trail segment east of, and adjacent to, Coyote Creek in the vicinity of MP 5.6 to MP 6.7	CPUC	Confirm design prior to project construction. Confirm implementation following project construction		
Construction of the Proposed Los Esteros Substation (or Zanker Road Alternative Substation) without implementation of a Landscaping Plan would result in a policy inconsistency with the San Jose General Plan	V-2 PG&E shall develop and implement a landscaping plan for the Los Esteros Substation (or Zanker Road Alternative Substation). Prior to implementation of the plan, the Applicant shall submit the plan to the City of San Jose's Department of Planning, Building, and Code Enforcement and to the CPUC for review and approval.	Proposed Los Esteros Substation Zanker Road Substation Alternative	CPUC and City of San Jose Department of Planning, Building, and Code Enforcement to review and approve the <i>Landscaping</i> <i>Plan</i>	be eliminated and the adverse visual impact associated with	CPUC, City of San Jose Department of Planning, Building, and Code Enforcement	Review and approve Plan design prior to project construction and confirm plan implementation following construction		

Table C.12-3 Mitigation Monitoring Plan

Significant visual impact resulting from proliferation of transmission structures associated with the 1-880-A Alternative	V-3	the 1-880-A	The 1-880-A Alternative between the point where it intersects the Newark- Montague 115kV Line and Bayside Business Park	CPUC to verify design prior to construction and implementation following construction	The establishment of an additional transmission line corridor with additional visual impacts will be avoided and viewer perceptions of structure proliferation will be lessened	CPUC	CPUC to verify design prior to construction and implementation following construction
---	-----	-------------	---	--	---	------	---

C.12.6 REFERENCES

- Association of Bay Area Governments. 1989. The Bay Trail, Planning for a Recreational Ring Around San Francisco Bay, July.
- City of Fremont. 1991. Fremont General Plan, May 7.
- City of Milpitas. 1998. City of Milpitas Zoning Ordinance.
- _____. 1994. City of Milpitas General Plan.
- City of San Jose. 2000. Draft Bay Trail Master Plan, March 3.

_____. 1999. San Jose 2020 General Plan, revised December 7.

_____. 1998. Alviso Master Plan: A Specific Plan for the Alviso Community, December.

City of Santa Clara. 1992. City of Santa Clara General Plan, 1990-2005, July 28.

- PG&E Co. (Pacific Gas and Electric Company). 1999. Northeast San Jose Transmission Reinforcement Project, Supplemental Proponent's Environmental Assessment, September 9.
- _____. 1998. Northeast San Jose Transmission Reinforcement Project, Proponent's Environmental Assessment, June.

San Francisco Bay Conservation and Development Commission. 1969. San Francisco Bay Plan, 1969, as amended.

Santa Clara County. 1994. Santa Clara County General Plan, December 20.

_____. 1998. North San Jose Capacity Project, Proponent's Environmental Assessment, May.

NESJ TRANSMISSION REINFORCEMENT EIR C.12 Visual Resources

