

3.1 AESTHETICS

3.1 AESTHETICS

3.1.1 Definitions

Aesthetic resources include the visual character and quality of an area, consisting of both the landscape features and the social environment from which it is viewed. The landscape features may be natural (e.g., mountain views) or manmade (e.g., a city’s skyline). Aesthetic resources include, but are not limited to:

- Federal, state, and local designated scenic resources
- Designated federal, state, and local historic properties
- Areas of high visual quality (i.e., scenic vistas, hiking trails, rivers, and highways)
- Recreation areas characterized by high numbers of users with sensitivity to visual quality (i.e., parks and preserves)
- Landscape features, including canyons and gorges, valleys, and mountains
- Dark night skies

Terms used to describe aesthetic resources are defined in Table 3.1-1.

Table 3.1-1 Definition of Visual Resources Terms

Term	Definition
Glare	Sunlight or another brilliant luminary reflecting off a specular (mirror-like) surface. The intensity of the reflection can be distracting, discomforting, or debilitating.
Intactness	The integrity of visual order in the natural and built landscape and the extent to which the landscape is free from visual encroachment.
Key Observation Point (KOP)	A location from which a viewer can see either iconic or representative landscapes of the project. Used for visual simulations.
Landscape Character Unit (LCU)	Defined areas that have similar visual features, homogeneous visual character, and frequently, a single viewshed. The spatial unit typically used to assess visual impacts.
Scenic Vista	A distant public view that is recognized or valued for its visual quality, located along or through an opening or corridor.
Scenic Landscape Unit	Landscapes of special importance to Sonoma County that have little capacity to absorb development without significant visual impact.
Unity	The degree to which the visual resources of the landscape join to form a coherent, harmonious visual pattern; the compositional harmony or inter-compatibility between landscape elements.
Viewer Exposure	A measure of proximity (distance between viewer and the visual resource being viewed), extent (number of viewers viewing), and duration (how long the visual resource is being viewed). The greater the exposure, the more viewers will be concerned about visual impacts.
Viewer Sensitivity	The degree to which viewers are sensitive to changes in the visual character of visual resources. Considers both viewer exposure and viewer awareness.
Viewshed	The surface area visible from a location (e.g., an overlook) or sequence of locations (e.g., a roadway or trail).

3.1 AESTHETICS

Term	Definition
Visual Quality	What viewers like and dislike about visual resources that compose the visual character of a scene. Viewers may evaluate visual resources differently based on their interests in natural harmony, cultural order, and project coherence.
Visual Simulation	Two or three-dimensional depictions of the visual character of a future state. Simulations range from artistic renderings to computer animations.
Viewer	A person located within the project viewshed who can observe the project.
Vividness	The visual power or memorability of the visual impression received from contrasting landscape elements as they combine in distinctive visual patterns.

Sources: (FHWA 1988, FHWA 2015, County of Sonoma 2008)

3.1.2 Environmental Setting

Regional Setting

The proposed project would be in central Sonoma County and would straddle the northeastern edge of the Santa Rosa Valley within northern California's inner Coast Range. The City of Santa Rosa dominates the southern portion of the valley. At its northern end, the valley is defined by the confluence of Dry Creek and the Russian River, which, coupled with the nearby historic City of Healdsburg, constitute a regional tourist destination. The fertile floodplain of the Russian River extends across much of the valley floor and supports a diverse landscape of small- to medium-sized agricultural uses, including vineyards and ancillary facilities.

US 101 is a major transportation corridor that runs the length of Sonoma Valley. Concentrated areas of commercial and residential development are found along both sides of US 101 between Healdsburg and Santa Rosa, most notably around the communities of Fulton, Larkfield-Wikiup, and Windsor.

Land uses in the proposed project area include rural residential areas, suburban areas in the Town of Windsor, limited commercial facilities, parks, open space preserves, rangeland, and agriculture. The Southern Segment of the proposed project would be located within the community of Larkfield-Wikiup, which is a considerably more developed area than the Northern Segment. The Northern Segment would pass through rolling foothills, including extensive areas of oak woodland, punctuated by occasional vineyards and open rangeland. The proposed project area is characterized by a scattered mix of rural residences that include modest single-family dwellings and larger estate-style properties.

Local Setting

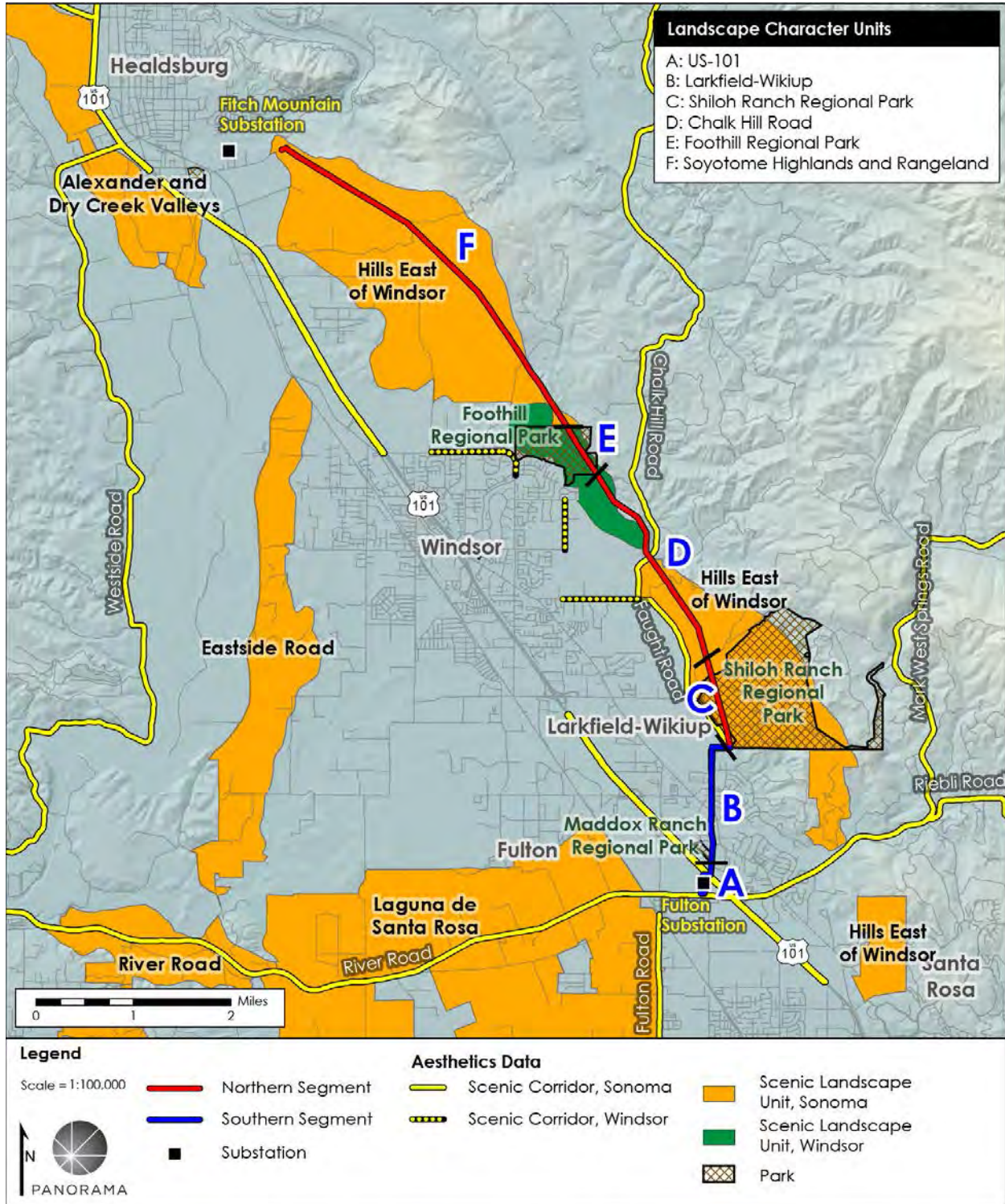
Scenic Corridors and Highways

The County of Sonoma and Town of Windsor have designated several roadways and one highway in the proposed project vicinity as scenic corridors. Scenic corridors are shown on Figure 3.1-1 and described in Table 3.1-2.

The nearest state-designated scenic highway is State Route (SR) 116 between SR 1 and the Sebastopol city limit (intersection of SR 116 and Mill Station Road) (Caltrans 2016). SR 116 is

3.1 AESTHETICS

Figure 3.1-1 Landscape Character Units and Scenic Resources in the Project Area



Sources: (County of Sonoma 2011)

3.1 AESTHETICS

Table 3.1-2 County of Sonoma- and Town of Windsor-Designated Scenic Corridors

Roadway	Nearest Project Component	Designated By
US 101	Crosses project alignment northeast of Fulton Substation	County of Sonoma
River Road	Runs adjacent to project alignment for approximately 550 feet at Fulton Substation	County of Sonoma
Faught Road	Crosses project alignment south of Shiloh Ranch Regional Park	County of Sonoma
Pleasant Avenue	Views towards project alignment north of Shiloh Ranch Regional Park	Town of Windsor
Jensen Lane	Views towards project alignment near Albini Family Vineyards	Town of Windsor
Chalk Hill Road	Crosses project alignment north of Shiloh Ranch Regional Park	County of Sonoma Town of Windsor
Arata Lane	Views towards project alignment within Foothill Regional Park	Town of Windsor

Sources: (County of Sonoma 2008, Town of Windsor 1996)

located approximately 6.5 miles southwest of the proposed project. Views of the proposed project from SR 116 would be blocked by intervening topography, buildings, and vegetation.

SR 12 between Danielli Avenue east of Santa Rosa to London Way near Aqua Caliente Road is an eligible state scenic highway. SR 12 is located approximately 6 miles south of the proposed project. Views of the proposed project from SR 12 would be obstructed by infrastructure and topography.

The segments of US 101 located in and near the proposed project area are designated as scenic corridors by Sonoma County and not the State of California.

Landscape Character Units

The proposed project area was divided into representative landscape character units (LCUs) to effectively describe the visual features of the area. Each LCU has landscape conditions that are generally similar and have common basic visual characteristics of line, form, color, and texture. The locations of the proposed project LCUs are shown on Figure 3.1-1. The existing visual conditions and representative photographs of each LCU are presented in Table 3.1-3. The table describes the location, characteristic features, and visually dominant features in each LCU. The table also identifies the intactness, unity, vividness, and visual quality of each LCU. The representative photograph of each LCU shows characteristic features of the LCU.

Scenic Vistas


There are no designated scenic vistas within the proposed project viewshed.

Scenic Landscape Units


The proposed project would cross several areas designated by the County of Sonoma as Scenic Landscape Units. These landscapes have little capacity to absorb development without significant visual change, and preservation of these landscapes is considered important to the scenic quality of local communities (County of Sonoma 2008). The Town of Windsor also recognizes these landscapes as important visual features of the community (Town of Windsor 1996). Scenic Landscape Units are shown on Figure 3.1-1.

3.1 AESTHETICS


Table 3.1-3 Description of Landscape Character Units

Description	Representative Image
<p>US 101 LCU</p> <p>Location. Extends from Fulton Substation to Maddux Regional Park.</p> <p>Characteristic features. US 101 is a multi-lane national, state, and regional transportation corridor. The immediate surroundings are composed of low-profile agricultural lands, sport fields and day use areas of Maddux Regional Park. This LCU contains many contrasting elements, including tall transmission lines, large industrial elements of Fulton Substation, redwood landscaping of the US 101 interchange, sports fields, vineyards and other agricultural lands.</p> <p>Visually dominant features. US 101, Mark West Springs Road/River Road interchange, Fulton Substation, power lines and poles</p> <p>Intactness. Low</p> <p>Unity. Low</p> <p>Vividness. High</p> <p>Visual Quality. Low</p>	

3.1 AESTHETICS

Description	Representative Image
<p>Larkfield-Wikiup LCU</p> <p>Location. The community of Larkfield-Wikiup between Maddux Regional Park and Shiloh Ranch Regional Park.</p> <p>Characteristic features. This LCU consists of the Geysers #12 line, a series of wide streets and sidewalks, planned unit developments, schools, street and area lights, and ornamental plantings. These architectural and landscape elements are contrasted with the native vegetation around Mark West Creek that bisects the area. The scale of the existing Geysers #12 line presents a clear contrast with the surrounding development. While highly vivid, the overall unit features are not intact or unified with the scale of the one- to two-story structures on either side of it.</p> <p>Visually dominant features. Geysers #12 line, Mark West School, San Miguel School</p> <p>Intactness. Low</p> <p>Unity. Low</p> <p>Vividness. High</p> <p>Visual Quality. Moderate</p>	


3.1 AESTHETICS

Description	Representative Image
<p>Shiloh Ranch Regional Park LCU</p> <p>Location. Shiloh Ranch Regional Park.</p> <p>Characteristic features. Shiloh Ranch Regional Park contains a relatively undeveloped diversity of landscapes from rugged canyons to sweeping vistas. The west-facing leading edge of the park consists of dense mixed oak woodlands crossed by old ranch roads now used as trails. The trails that cross the Fulton-Hopland 60-kV power line are relatively steep with surrounding mature vegetation.</p> <p>Visually dominant features. Fulton-Hopland 60-kV power line</p> <p>Intactness. High</p> <p>Unity. High</p> <p>Vividness. High</p> <p>Visual Quality. High</p>	 A photograph showing a dense forest of green trees. In the foreground on the right, a large, thick, dark tree trunk curves over the foliage. The background shows a clear blue sky with some light, wispy clouds. The overall scene is a lush, natural landscape.


3.1 AESTHETICS

Description	Representative Image
<p>Chalk Hill Road LCU</p> <p>Location. Extends from Shiloh Road to the southern boundary of Foothill Regional Park.</p> <p>Characteristic features. This unit contains a mix of relatively undeveloped and developed properties, rugged canyons with steep slopes, and distinct ridgelines and peaks. Mixed oak woodlands, mixed chaparral, and mixed evergreen forests dominate the hillsides. The unity and intactness of the landscape are somewhat broken up by sparse residential and ranch structures, and agricultural lands (including vineyards).</p> <p>Visually dominant features. Shiloh Ridge Road, Chalk Hill Road, Fulton-Hopland 60-kV power line, scattered residences</p> <p>Intactness. Moderate to High</p> <p>Unity. Moderate to High</p> <p>Vividness. Moderate</p> <p>Visual Quality. Moderate to High</p>	

3.1 AESTHETICS

Description	Representative Image
<p data-bbox="201 272 506 302">Foothill Regional Park LCU</p> <p data-bbox="201 326 506 380">Location. Foothill Regional Park.</p> <p data-bbox="201 391 537 914">Characteristic features. Foothill Regional Park presents a wide diversity of natural characteristics, including open water at three ponds and their dams, wetlands, riparian zones, open meadows, gentle slopes of oak woodlands, and moderate slopes that lead to a ridgeline with sweeping vistas to the west. The Oakwood Trail, a relatively wide, well-maintained shared-use path, crosses the Fulton-Hopland 60-kV power line in two locations.</p> <p data-bbox="201 925 516 1040">Visually dominant features. Open water and dams for Ponds A, B, and C; Fulton-Hopland 60-kV power line</p> <p data-bbox="201 1052 390 1081">Intactness. High</p> <p data-bbox="201 1092 327 1122">Unity. High</p> <p data-bbox="201 1133 380 1162">Vividness. High</p> <p data-bbox="201 1174 432 1203">Visual Quality. High</p>	

3.1 AESTHETICS

Description	Representative Image
<p>Sotoyome Highlands and Rangeland LCU</p> <p>Location. Extends from the northern boundary of Foothill Regional Park to Fitch Mountain Substation.</p> <p>Characteristic features. This unit consists predominantly of private lands, some of which include conservation easements, and rangeland. The landscape presents a generally unified, intact, and distinct mixture of forested slopes and ridgelines that gently slope to rolling vineyards, rangelands, and scattered residential and ranch developments. The rolling upland terrain rises steeply to a prominent knoll in the southern area of the LCU. Along Bailhache Avenue, there is a mixture of rural residential and commercial uses that include a variety of architectural styles with ornamental plantings.</p> <p>Visually dominant features. Fulton-Hopland 60-kV power line</p> <p>Intactness. Moderate to High</p> <p>Unity. Moderate to High</p> <p>Vividness. Moderate to High</p> <p>Visual Quality. Moderate to High</p>	 A photograph showing a rolling landscape with green hills. In the foreground, there is a vineyard with rows of grapevines supported by wooden posts. The hills in the background are covered in green grass and scattered trees. The sky is blue with some light clouds.

3.1 AESTHETICS

3.1.3 Impact Analysis

Approach to Impact Assessment

The CPUC has not adopted a specific method for assessing visual character and quality under CEQA. Impacts on visual quality were therefore assessed using the Federal Highway Administration’s (FHWA) *Visual Impact Assessment for Highway Projects* (FHWA 1988). This method was selected because, like highways, the proposed project includes a linear feature, and the proposed project would be visible from local streets and roads. The FHWA has published updated guidance for the visual impact assessment of highway projects (FHWA 2015); however, the 1988 guidance utilizes a quantitative approach to evaluate visual impacts, while the 2015 guidance does not. The CPUC selected the 1988 quantitative approach for this project because it is replicable and provides a consistent approach for analysis across KOPs.

The change in visual quality because of the proposed project was determined by comparing the existing visual quality of the landscape with the visual quality after construction of the proposed project. Six KOPs (Figure 3.1-2) were selected to analyze visual impacts from the proposed project. These KOPs depict representative public views of the proposed project and are described in Table 3.1-4. Photographs of existing conditions were taken at each of the KOPs to represent the baseline conditions, and visual simulations were developed for each KOP to represent views of the proposed project.

Table 3.1-4 Description of Key Observation Points and Viewer Sensitivity

KOP	Location of Viewpoint	Project Elements	LCU	Direction of View	Description of Views	Viewer Sensitivity
1	Mark West Elementary School	Southern Segment	B/A	South	Foreground: Mark West Elementary School playground, Southern Segment	Moderate
2	Ridge Trail, Shiloh Ranch Regional Park	Northern Segment	C	West	Foreground: Shiloh Ranch Regional Park, Ridge Trail, Northern Segment	High
3	Chalk Hill Road, near intersection with Leslie Road	Northern Segment	D	South-southeast	Foreground: Private residence Middleground: Shiloh Ranch Regional Park, Northern Segment	Moderate
4	Oakwood Trail, Foothill Regional Park	Northern Segment	E	North-northwest	Foreground: Foothill Regional Park Middleground: Northern Segment	High
5	Brooks Road, near intersection with Mount Weske Drive	Northern Segment	F	Northwest	Foreground: Fence and private landscaping, Northern Segment	Moderate
6	Bailhache Avenue, near intersection with Village Avenue	Northern Segment	F	East	Foreground: Vineyard Middleground: Rolling hills and Northern Segment	Moderate

3.1 AESTHETICS

The photograph of existing conditions and the visual simulation for each KOP were then quantitatively evaluated using a numeric rating system to analyze the proposed project's impact on visual quality in the area. The quantitative evaluation considered (1) the change in visual quality, and (2) viewer response to the change in visual quality to determine the overall visual impact. Visual changes resulting from the proposed project are determined based on how the project blends with and complements the natural setting or the man-made development (unity and intactness), or the degree to which the project contrasts with them (vividness). Viewer response is determined based on the visual experience of different viewers, and their sensitivity and exposure to visual changes. The interrelationship of the visual change and viewer response in determining the significance of adverse aesthetic impacts is shown in Table 3.1-5. Details on the numeric methodology for determining visual impact are provided in Appendix B.

Table 3.1-5 Guidelines for Determining the Significance of Adverse Visual Impact

Overall Viewer Response	Overall Visual Change				
	Low	Low to Moderate	Moderate	Moderate to High	High
Low	Not Significant	Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant
Low to Moderate	Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant
Moderate	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant
Moderate to High	Adverse, but Not Significant	Adverse, but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant
High	Adverse, but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant	Significant

Not Significant impacts may or may not be perceptible but are considered minor in the context of existing landscape characteristics and view opportunity.

Adverse but Not Significant impacts are perceived as negative but do not exceed environmental thresholds.

Adverse and Potentially Significant impacts are perceived as negative and may exceed environmental thresholds depending on project and site-specific circumstances.

Significant impacts with feasible mitigation may be reduced to less than significant levels or avoided all together. Without mitigation or avoidance measures, significant impacts would exceed environmental thresholds.

3.1 AESTHETICS

Summary of Impacts

Table 3.1-6 presents a summary of the CEQA significance criteria and impacts on aesthetics that would occur during construction, operation, and maintenance of the proposed project.

Table 3.1-6 Summary of Proposed Project Impacts on Aesthetics

Would the proposed project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Discussion

a) Would the proposed project have a substantial adverse effect on a scenic vista?	Significance Determination
	No impact

There are no designated or eligible scenic vistas in the proposed project area, and the proposed project would not be visible from any designated or eligible federal, state, county, or city scenic vistas. No impact on designated scenic vistas would occur from construction or operation and maintenance of the proposed project.

Required APMs and MMs: None

b) Would the proposed project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Significance Determination
	Less than significant

Construction

There are no scenic trees, rock outcroppings, or historic buildings that would be affected by the proposed project. As described in Section 3.5: Cultural and Tribal Cultural Resources, there are no eligible historic resources (pursuant to CEQA Guidelines Section 15064.5) in the proposed project area; therefore, no historic resources would be visually impacted by construction of the proposed project.

3.1 AESTHETICS

The closest designated scenic highway is SR 116, which extends from SR 1 to the Sebastopol city boundary (Caltrans 2016). At its closest point, SR 116 is located approximately 6.5 miles from the proposed project. The proposed project would not be visible from SR 116 due to intervening topography (rolling hills), built structures, and vegetation. No impact would occur on scenic resources within a state scenic highway from the proposed project.

Construction activities, including pole replacement, reconductoring, and helicopter operations associated with these activities, would be visible from scenic corridors designated by the County of Sonoma and the Town of Windsor (refer to Figure 3.1-1). Pole replacement and reconductoring activities would be visible in foreground views from Chalk Hill Road and Faught Road, and reconductoring activities would be visible from US 101 and River Road. Pole replacement activities would not occur for more than 6 days at each pole location, and reconductoring would occur for no more than 2 days. Travelers along these roads would not be visually exposed to construction activities for long periods of time, e.g., travelers along Chalk Hill Road would be exposed to views of construction activities for approximately 16 seconds traveling at 45 miles per hour. Because of the short exposure time and temporary nature of construction activities, impacts on scenic resources within a scenic corridor would be less than significant.

Operation and Maintenance

Conductor Replacement

The proposed project would replace conductor in both the Northern and Southern Segments of the alignment. In the Southern Segment, one 230-kV transmission line would transition from a bundled to a vertical configuration, resulting in fewer conductors strung on existing poles and structures. In the Northern Segment, the existing 60-kV conductor would be replaced with conductor of the same size. No adverse visual change would result from the replacement and removal of conductors. There would be no impact on scenic resources along County of Sonoma and Town of Windsor scenic corridors from conductor replacement.

Pole Replacement

One existing wooden pole, Pole 6, would be replaced in the Southern Segment. Pole 6 would be visible from the portion of US 101 that is a Sonoma County-designated scenic corridor. The replacement of Pole 6 with a steel pole would not affect the visual quality of the US 101 scenic corridor because the pole would be located directly adjacent to Fulton Substation and would match the form, line, and color of the adjacent substation facilities and electrical infrastructure. Impacts on scenic resources along the Southern Segment would be less than significant.

In the Northern Segment, new steel poles would replace existing wood poles in areas visible from County of Sonoma and Town of Windsor scenic corridors. The new poles would be 3 to 30 feet taller (15 feet on average) than existing poles and located approximately 12 to 35 feet from existing pole locations. The replacement poles would be approximately 0.35 mile from the nearest scenic corridor; at this viewing distance, the poles would occupy a very small portion of the view and would appear in the background. Most or all of the poles would be screened from view by trees and hill slopes around the pole and along the scenic corridors. The change in pole

3.1 AESTHETICS

height and change in pole type from wood poles to steel poles with a dark brown matte surface would either not be visible or would be nearly imperceptible to motorists and passengers traveling along area roads. The transition from the existing wood poles to new steel poles with a dark brown finish would not result in a significant visual change to motorists traveling along scenic corridors; impacts on scenic resources would be less than significant.

Required APMs and MMs: None

c) Would the proposed project substantially degrade the existing visual character or quality of the site and its surroundings?	Significance Determination
	Less than significant with mitigation

Construction

Overview

Project construction would temporarily introduce construction equipment to the visual landscape and result in landscape alterations through vegetation removal and erection of new poles. Construction activities including site preparation (vegetation removal and grading/blading), pole replacement, and conductor removal and stringing would be visible from surrounding areas. The proposed project would result in short-term views of construction vehicles and equipment and long-term changes to the visual quality of the site through the erection of permanent structures.

Site Preparation

Vegetation clearing and grading of temporary pole work areas would temporarily introduce large earth-moving and construction equipment. Erection of new poles would require clearing and grading of approximately 0.2 to 0.4 acre at each new pole. Site preparation activities would last 1 to 2 days on average (up to 5 days) at each work area. Most temporary pole work areas would be screened by surrounding topography and vegetation (i.e., trees or large bushes); however, pole work areas proposed within the Sotoyome Highlands and Rangeland LCU would be visible from surrounding areas because work areas would be located on a grassy hillside with sparse tree cover. Views of the graded and cleared work areas would persist after construction because it would take time for vegetation to reestablish in areas that are temporarily disturbed by construction. The resulting impact on visual quality within the Sotoyome Highlands and Rangeland LCU from vegetation removal and grading would be significant. The denuded land surface could be visible throughout the surrounding area due to the absence of large vegetation. The exposure of the hill slope and the graded pad would contrast with the surrounding grassland vegetation. MM Biology-7 requires restoration of temporarily disturbed areas with native vegetation and specifies methods to achieve successful revegetation. Impacts on visual quality from vegetation removal and grading during construction would be less than significant with implementation of mitigation.

3.1 AESTHETICS

Pole Replacement

A total of 69 existing wood poles, LDSPs, three-pole structures, and A-frame structures would be removed along the project alignment (one in the Southern Segment, 68 in the Northern Segment) and replaced with 68 new TSPs and LDSPs (one in the Southern Segment, 67 in the Northern Segment). Large construction equipment such as hydraulic jacks, UTV or line trucks, truck- or crawler-mounted augers, concrete trucks, and cranes would be used to remove and install poles and foundations. Pole removal activities would last for 1 to 2 days at each pole location, and pole installation would last for an additional 1 to 2 days. The construction equipment used during structure removal and installation would contrast with the visual setting of the surrounding open space and rural communities. The level of visual change would be high in locations where the work areas and equipment are visible to the public; however, viewer response to the temporary visual impact would be low due to the very short exposure to views of construction at each pole location (i.e., up to 2 days per phase). The resulting impact on visual quality would be less than significant.

Helicopter Use

Helicopters may be used during construction for removal of existing conductor, stringing of new conductor, installing or removing structures, and transporting equipment and personnel. Helicopters would be used periodically for approximately 48 months or less during project construction, and up to three helicopters (two small and one large) may operate simultaneously at any given time. Simultaneous helicopter activities could be focused at one location or dispersed across multiple locations along the power line. Helicopters would generally travel along the project alignment during construction and may hover in a location for several minutes during conductor installation on a pole or to deliver materials. Views of helicopters would contrast with the natural sky line and result in a high level of visual change; however, viewer response to the visual change would be low due to the very short exposure to helicopter views in any area (minutes) and the perception of helicopters as temporary elements. The resulting impact on visual quality would be less than significant.

Fitch Mountain Substation

All construction work at Fitch Mountain Substation would occur within the existing fenced and graveled pads. Construction would be visible from very few vantage points outside of the substation because vegetation surrounding the substation would screen views. Construction would be short-term and compatible with the surrounding low visual quality of the industrial facilities at the substation. Construction impacts would be less than significant.

Staging Areas

Material and construction equipment storage, staging, and helicopter take-off and landing would take place at the staging areas described in Section 2: Project Description, Table 2.6-3. Staging areas would be primarily located in disturbed areas; however, some staging areas would require mowing and installation of geotextile fabric and gravel. All the staging areas would be visible to the public from adjacent roadways and trails throughout the ~~1812~~-month construction period. The increased activity level and presence of materials and equipment during staging would contrast with the existing landscape, resulting in a moderate to high

3.1 AESTHETICS

visual change, particularly in or adjacent to woodlands. The viewer response to this impact would be low due to the temporary nature of the activity. The resulting impact on visual quality would be less than significant.

Operation and Maintenance

The proposed project would involve the installation of replacement power poles and new conductor within the Northern Segment and replacement of one pole and installation of new conductor in the Southern Segment. Photos of baseline/existing conditions and visual simulations provide representative views of the visual change that would result from the proposed project (Figure 3.1-3 through Figure 3.1-14). Table 3.1-7 provides the numeric rating and level of visual impact resulting from the long-term presence of the proposed project at each KOP. Rating sheets that provide the numeric evaluation of all baseline photos and visual simulations are provided in Appendix B.

Table 3.1-7 Summary of Visual Impacts for Key Observation Points

KOP	Visual Change	Viewer Response	Visual Impact from Proposed Project
1	None (0.0)	Moderately High (3.0)	None (0.0)
2	Low (-0.5)	High (4.0)	Low (-2.0)
3	Moderately Low (-1.5)	Moderate (2.0)	Low (-3.0)
4	Moderately Low (-2.0)	High (4.0)	Moderate (-8.0)
5	None (0.0)	Moderately Low (1.5)	None (0.0)
6	Moderately Low (-1.5)	Moderately High (3.0)	Moderate (-4.5)

Southern Segment

The proposed project would involve replacement of existing conductor and reconfiguration of one of the 230-kV transmission lines from a bundled to a vertical configuration, effectively removing three conductors from the alignment. Existing support structures (steel TSPs and dead-end structures) would remain in place except for Pole 6, which would be replaced with a LDSP. Pole 6 is located adjacent to Fulton Substation and would match the form, line, and color of the adjacent electrical equipment within the substation. KOP #1 (Figure 3.1-3 and Figure 3.1-4) provides a representative view of the Southern Segment near Mark West Elementary School. The replacement and removal of conductor would be nearly imperceptible to viewers as conductor would generally look the same before and after the reconductoring and no changes to the poles would be made. The conductor replacement would not adversely affect the visual quality of the area. No impact on visual quality would occur in the Southern Segment of the proposed project.

3.1 AESTHETICS

This page is intentionally left blank.

3.1 AESTHETICS

Figure 3.1-3 KOP #1 Existing Conditions



3.1 AESTHETICS

Figure 3.1-4 KOP #1 Visual Simulation



3.1 AESTHETICS

Figure 3.1-5 KOP #2 Existing Conditions



Source: PG&E 2015

3.1 AESTHETICS

Figure 3.1-6 KOP #2 Visual Simulation



Source: PG&E 2015

3.1 AESTHETICS

Figure 3.1-7 KOP #3 Existing Conditions



Source: PG&E 2015

3.1 AESTHETICS

Figure 3.1-8 KOP #3 Visual Simulation



Source: PG&E 2015

3.1 AESTHETICS

Figure 3.1-9 KOP #4 Existing Conditions



3.1 AESTHETICS

Figure 3.1-10 KOP #4 Visual Simulation



3.1 AESTHETICS

Figure 3.1-11 KOP #5 Existing Conditions



Source: PG&E 2015

3.1 AESTHETICS

Figure 3.1-12 KOP #5 Visual Simulation



Source: PG&E 2015

3.1 AESTHETICS

Figure 3.1-13 KOP #6 Existing Conditions



3.1 AESTHETICS

Figure 3.1-14 KOP #6 Visual Simulation



3.1 AESTHETICS

This page is intentionally left blank.

3.1 AESTHETICS

Northern Segment

Sixty-seven TSPs and LDSPs would be installed along the Northern Segment of the proposed project alignment. The wood poles visible in the baseline photos for KOPs #2 through #6 would be replaced with taller steel TSPs and LDSPs, and new conductor would be installed on the new poles (Figure 3.1-5 through Figure 3.1-14). While the poles would be, on average, 15 feet taller than the existing wood poles, they would have a dark brown matte finish, similar in appearance to the existing poles, and would be comparable in both form and line. The proposed pole replacements would result in a low to moderately low visual change in areas with moderate to moderately high viewer response (see Appendix B for detailed evaluation of the impact on visual quality). The resulting impact on visual quality would be low to moderate and less than significant.

Fitch Mountain Substation

The new control building at Fitch Mountain Substation would have a footprint approximately 575 square feet (10 times) larger and would be approximately 3 feet taller than the existing control building. The walls and roof would be made of ribbed steel panels finished in a light stone color, which would be similar in appearance to the existing control building. While the new control building would be larger, it would be located within the fenced substation and consistent with the low visual quality of the surrounding industrial facilities of the substation. Impacts on visual quality would be less than significant.

Required APMs and MMs: MM Biology-7 (refer to Section 3.4: Biological Resources)

d) Would the proposed project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Significance Determination Less than significant
--	--

Lighting

Poles and Conductor

Lighting would be used to the extent required to meet safety and operational needs. Construction activities that may occur outside of standard daytime work hours (between 7:00 am and 7:00 pm every day) include installation and removal of guard structures and netting across US 101, and stringing the new conductor across US 101. Nighttime construction activities may also occur during conductor stringing in the Southern Segment. Street lights and lights from cars are currently present at night along US 101 and along the Southern Segment; nighttime lighting during conductor stringing would not significantly affect nighttime views because light pollution is prevalent in these areas. Nighttime lighting would be directed upon construction activities rather than adjacent residences, and if required, nighttime lighting for construction activities would be short-term and intermittent during nighttime activities. Impacts from nighttime lighting would be less than significant.

Fitch Mountain Substation

Construction activities at Fitch Mountain Substation would not occur during the nighttime and would have no impacts associated with lighting. Permanent new light sources at the Fitch

3.1 AESTHETICS

Mountain Substation would include small lights installed on and around the new equipment, including on structures near operating handles for switches and breakers and potentially near the entrances to the control building. The new lights would all be located within the limits of the substation, which currently has lights on equipment and the control building. Lights on new substation equipment and control building would be consistent with existing lighting at the substations, and would not create a substantial new source of light; impacts would be less than significant.

Staging Areas

Nighttime activities and limited lighting may be required at staging areas in the Southern Segment during the nighttime activities at US 101 and during reconductoring as described for the power line alignment above. Nighttime lighting would be used at staging yards when nighttime construction is occurring for the project. If required, nighttime lighting would be directed towards construction activities rather than adjacent residences, and nighttime lighting for construction activities would be short-term and intermittent. Impacts from nighttime lighting would be less than significant.

Glare

Poles and Conductor

The power and transmission lines would include two potential sources of glare: the poles and the conductors. PG&E would use self-weathering steel poles with a dark brown matte finish, which would not create glare. Specular conductor could reflect sunlight and produce glare that could be seen from roadways and trails; however, glare may be produced from the existing conductor, and glare produced from the new conductor would not differ substantially from existing conditions. Many views of the proposed project would be obscured by topography, vegetation, and buildings, further limiting exposure to glare from the conductor. Impacts would be less than significant.

Fitch Mountain Substation

New equipment and a new control building would be installed at the Fitch Mountain Substation. The walls and roof of the control building would be constructed of ribbed steel panels painted with a light stone color; glare would not be produced from these components. The new equipment could produce glare; however, existing equipment at the substation likely produces glare, and glare from the new equipment would not be substantial relative to glare produced from existing equipment. Impacts would be less than significant.

Staging Areas

Staging areas would temporarily house construction materials. Materials staging would be temporary and limited to the duration of construction. Glare from staged materials would not be distracting. Impacts would be less than significant.

Required APMs and MMs: None

3.1 AESTHETICS

3.1.4 References

- Caltrans (California Department of Transportation). 2016. *California Scenic Highway Mapping System, Route 116 - Scenic Highway*. Accessed July 27, 2016.
http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.
- County of Sonoma. 2008. "Sonoma County General Plan 2020." September 23.
- . 2010. "PRMD Geographical Information Systems (GIS), General Plan 2020 Open Space Existing Parks GIS Data." *Permit and Resource Management Department*.
<http://www.sonoma-county.org/prmd/gisdata/index.htm>.
- . 2011. "PRMD Geographical Information Systems (GIS), Scenic Landscape Units and Scenic Corridors GIS Data." *Permit and Resource Management Department*. <http://www.sonoma-county.org/prmd/gisdata/index.htm>.
- FHWA (Federal Highway Administration). 1988. "Visual Impact Assessment for Highway Projects." *U.S. Department of Transportation*. Accessed July 19, 2016.
<http://www.dot.ca.gov/ser/downloads/visual/FHWAVisualImpactAssmt.pdf>.
- . 2015. "Guidelines for the Visual Impact Assessment of Highway Projects." *US Department of Transportation*. Accessed July 19, 2016.
http://www.environment.fhwa.dot.gov/guidebook/documents/VIA_Guidelines_for_Highway_Projects.pdf.
- PG&E. 2015. "Proponent's Environmental Assessment, Fulton-Fitch Mountain Reconductoring Project." *Visual simulations prepared by Environmental Vision*. December.
- Town of Windsor. 1996. "Town of Windsor General Plan - 2015." March 13.

3.1 AESTHETICS

This page is intentionally left blank.