2.5 Visual/Aesthetics

2.5.1 Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). To further emphasize this point, the Federal Highway Administration (FHWA), in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (California Public Resources Code Section 21001[b]).

2.5.2 Affected Environment

The information in this section is based on the *Visual Impact Assessment* (VIA) (January 2019). The VIA follows the methodology in the FHWA Guidelines for *Visual Impact Assessment for Highway Projects* (January 2015). Additional details on the methodology are provided in the VIA.

2.5.2.1 Visual Setting

The proposed project's location establishes the context for determining the impact of proposed changes to the existing visual setting. The Build Alternatives are on Interstate 5 (I-5) between Post Mile (PM) 17.9 to PM 19.7, and includes El Toro Road from Rockfield Boulevard to Paseo De Valencia in the cities of Lake Forest, Laguna Woods, and Laguna Hills in Orange County, California. The Build Alternatives are regionally located within the Los Angeles Basin of Southern California. The region is characterized by coastal communities, rolling hills, and canyons. The Study Area is within an alluvial plain that is semi-enclosed by the Santa Ana Mountains to the northeast and east and San Joaquin Hills to the west. The land uses within the corridor are primarily urban, and include residential, commercial, civic, community park/open space, and transportation uses. The project limits are relatively flat, with elevations ranging from 323 to 389 feet above mean sea level. Figure 2.5-1 shows the location of the proposed Build Alternatives along the existing I-5/ El Toro Road Interchange and Key View Points within the Study Area.

According to the State Scenic Highways Mapping System, there are no officially designated State Scenic Highways within the vicinity of the project limits. However, the County of Orange General Plan designates El Toro Road between Santa Margarita Parkway and Live Oak Canyon Road as a county scenic highway (a Landscape Corridor). A Landscape Corridor traverses developed or developing areas and has been designated for special treatment to provide a pleasant driving environment as well as community enhancement. According to the County of Orange General Plan, development within a Landscape Corridor should serve to complement the scenic highway.

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LEGEND

- Key View Location (with ID and Direction)
- Project Area
- City Boundary

Alternative 2

- Roadway Construction
- Temporary Construction Easement (TCE)
- Bridge Structure
- Proposed Road Edge/Curb
- Proposed Lane Striping/Marking
- Proposed Retaining Wall

0 100 200
FEET

SOURCE: Caltrans (10/3/2018); Bing (1/2015)

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FIGURE 2.5-1

Sheet 1 of 2

I-5/El Toro Road Interchange Project

Project Area and Key Views - Alternative 2

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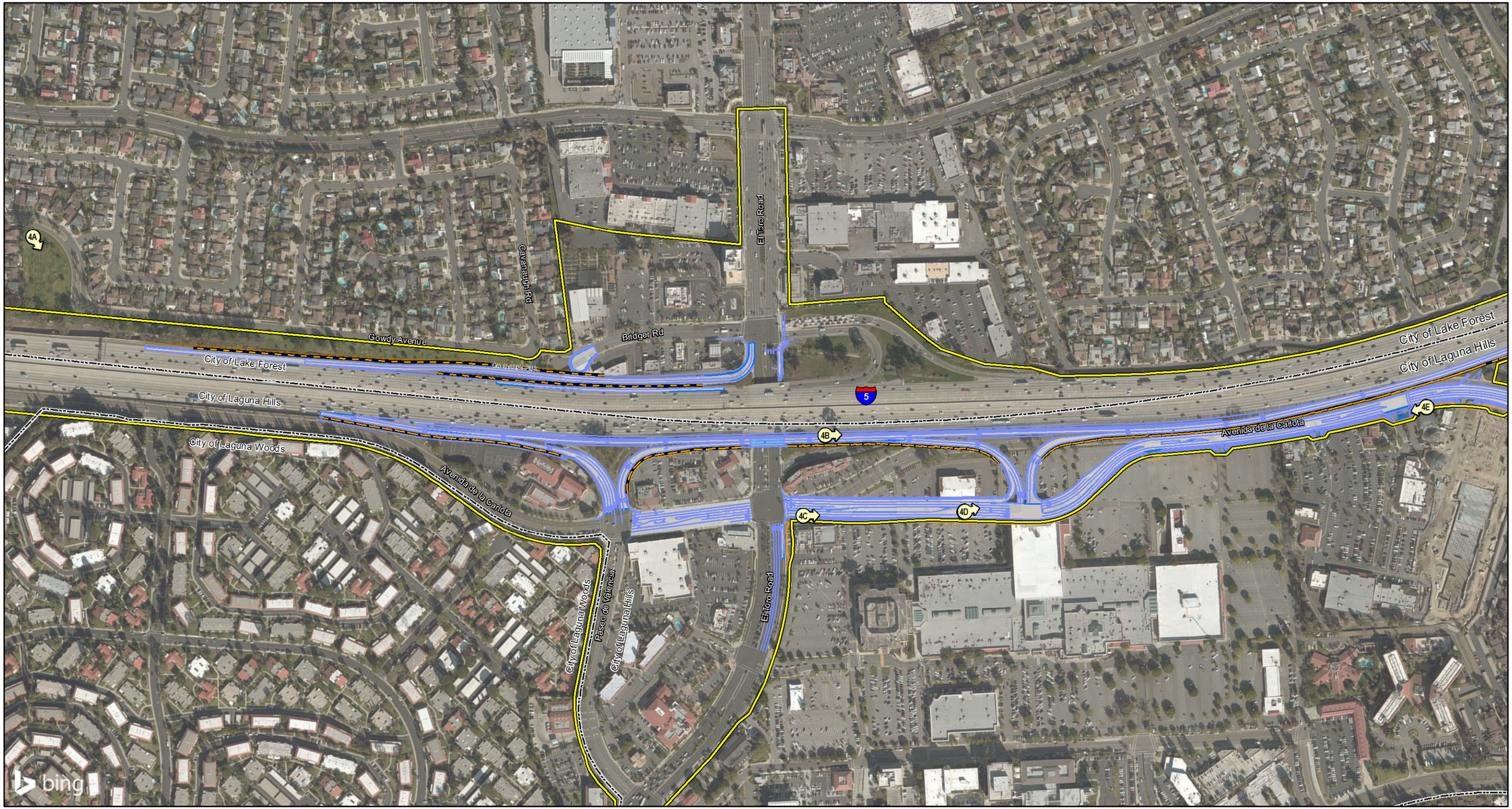

LEGEND

- Key View Location (with ID and Direction)
- Project Area
- City Boundary

Alternative 4

- Bridge Structure
- Roadway Construction
- Temporary Construction Easement (TCE)
- Proposed Lane Striping/Marking
- Proposed Road Edge/Curb
- Proposed Sound Wall

0 190 380
FEET

SOURCE: Caltrans (12/6/2018); Bing (1/2015)

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FIGURE 2.5-1

Sheet 2 of 2

I-5/El Toro Road Interchange Project

Project Area and Key Views - Alternative 4

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The Laguna Hills General Plan Conservation and Open Space Element designates hillsides in Laguna Hills as scenic resources. The City of Lake Forest General Plan notes that the Santa Ana Mountains, trees, hillsides, and other open lands provide visual changes in the urban environment that create interest and offer landmarks that communicate a sense of place and location within the community. The Laguna Woods General Plan does not identify scenic vistas or scenic resources within the city's sphere of influence.

2.5.2.2 Key Views

Because it is not feasible to analyze all the views in which the Build Alternatives (including Design Option B) would be seen, it is necessary to select a number of key views associated with the Visual Assessment Unit that would most clearly demonstrate the change in the Build Alternatives' visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the Build Alternatives (including Design Option B), considering visual exposure and visual sensitivity.

One Visual Assessment Unit was determined to be satisfactory for analyzing the Build Alternatives (including Design Option B) because the Study Area is within a highly developed area. Overall, the visible form of I-5 in Study Area is fairly consistent and follows a generally linear form with edges defined by retaining walls and soundwalls. Surrounding uses include residential, community park/open space, civic, and commercial uses, and transportation uses include the freeway mainline (I-5) and surrounding roadways (El Toro Road, Cavanaugh Road, Gowdy Avenue, Bridger Road, Avenida De La Carlota, and Paseo De Valencia). The most prominent visual resources in the Study Area include areas of ornamental landscaping and mature trees. In addition, distant views to the Santa Ana Mountains and San Joaquin Hills are available to the northeast and the west, respectively.

Colors throughout the Study Area are predominately shades of gray associated with the freeway; however, surrounding urban development includes whites, tans, browns, and reds. Varieties of green colors are visible in association with ornamental landscaping and mature trees. The scale of visible features from the Study Area is fairly consistent, with most structures consisting of one to two stories. However, one building (Chase Bank) in the central portion of the Study Area is multiple stories high and is the dominating feature in this portion of the Study Area. Compared to surrounding development, transportation uses (including I-5 and El Toro Road) represent the more dominant features of the Study Area. The Study Area lacks visual diversity in that the views generally include urban development, soundwalls, and associated roadway infrastructure, with scattered trees and ornamental landscaping. Continuity is generally varied throughout the Study Area with form, line, color, and textural patterns being interrupted by vertical infrastructure including freeway signage, soundwalls, streetlights, and overhead powerlines.

The location and direction of each key view was shown previously on Figure 2.5-1. Descriptions of the existing key views are provided below and on Figures 2.5-2 through 2.5-11.

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Key View 2A - Existing Condition

Key View 2A - Proposed Condition

FIGURE 2.5-2

I-5/El Toro Road Interchange Project

Key View 2A - Existing & Proposed Condition

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SOURCE: Michael Baker

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Key View 2B - Existing Condition

Key View 2B - Proposed Condition

FIGURE 2.5-3

I-5/El Toro Road Interchange Project

Key View 2B - Existing & Proposed Condition

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SOURCE: Michael Baker

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Key View 2C - Existing Condition

Key View 2C - Proposed Condition

FIGURE 2.5-4

I-5/El Toro Road Interchange Project

Key View 2C - Existing & Proposed Condition

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Key View 2D - Existing Condition

Key View 2D - Proposed Condition

FIGURE 2.5-5

I-5/El Toro Road Interchange Project

Key View 2D - Existing & Proposed Condition

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SOURCE: Michael Baker

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Key View 2E - Existing Condition

Key View 2E - Proposed Condition

FIGURE 2.5-6

I-5/El Toro Road Interchange Project

Key View 2E - Existing & Proposed Condition

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SOURCE: Michael Baker

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Key View 4A - Existing Condition

Key View 4A - Proposed Condition

FIGURE 2.5-7

I-5/El Toro Road Interchange Project

Key View 4A - Existing & Proposed Condition

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SOURCE: Michael Baker

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Key View 4B - Existing Condition

Key View 4B - Proposed Condition

FIGURE 2.5-8

I-5/El Toro Road Interchange Project

Key View 4B - Existing & Proposed Condition

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SOURCE: Michael Baker

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Key View 4C - Existing Condition

Key View 4C - Proposed Condition

FIGURE 2.5-9

I-5/El Toro Road Interchange Project

Key View 4C - Existing & Proposed Condition

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SOURCE: Michael Baker

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Key View 4D - Existing Condition

Key View 4D - Proposed Condition

FIGURE 2.5-10

I-5/El Toro Road Interchange Project

Key View 4D - Existing & Proposed Condition

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SOURCE: Michael Baker

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Key View 4E - Existing Condition

Key View 4E - Proposed Condition

FIGURE 2.5-11

I-5/El Toro Road Interchange Project

Key View 4E - Existing & Proposed Condition

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EA 0M9800

SOURCE: Michael Baker

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Alternative 2 Key Views

Key View 2A

Key View 2A is within the City of Lake Forest along Gowdy Avenue, looking southeast towards the Gowdy Avenue/Cavanaugh Road intersection and the existing open space area along Gowdy Avenue.

Key View *2B*

Key View 2B is within the City of Lake Forest along Cavanaugh Road, looking southwest towards the Gowdy Avenue/Cavanaugh Road intersection and Cavanaugh Mini Park.

Key View *2C*

Key View 2C is within the City of Lake Forest along Bridger Road, looking northwest toward the Bridger Road cul-de-sac.

Key View *2D*

Key View 2D is within the City of Laguna Hills along Avenida De La Carlota, looking northwest.

Key View *2E*

Key View 2E is within the City of Laguna Hills along Avenida De La Carlota, looking southeast.

Alternative 4 and Alternative 4 Option B Key Views

Key View *4A*

Key View 4A is at the northeast corner of an existing open space area along Gowdy Avenue, looking southwest towards existing passive recreation uses (turf area).

Key View *4B*

Key View 4B is along the southbound travel lanes of I-5, just south of the El Toro Road undercrossing.

Key View *4C*

Key View 4C is within the City of Laguna Hills along the southbound Avenida De La Carlota sidewalk looking south towards the existing Five Lagunas shopping center (formerly Laguna Hills Mall) parking lot.

Key View *4D*

Key View 4D is in the City of Laguna Hills within the Five Lagunas shopping center parking lot, looking south towards existing commercial uses (JCPenney).

Key View *4E*

Key View 4E is within the City of Laguna Hills along northbound Avenida De La Carlota, adjacent to commercial uses (Oakbrook Village Shopping Center).

2.5.2.3 Visual Character

Visual character includes attributes such as form, line, color, texture. Aspects analyzed for the Build Alternatives (including Design Option B) are included below.

- Form - visual mass or shape
- Line - edges or linear definition
- Color - reflective brightness (light, dark) and hue (red, green)
- Texture - surface coarseness
- Dominance - position, size, or contrast
- Scale - apparent size as it relates to the surroundings
- Diversity - a variety of visual patterns
- Continuity - uninterrupted flow of form, line, color, or textural pattern

2.5.2.4 Visual Quality

Visual Quality is evaluated by identifying the vividness, intactness, and unity present in the project corridor. Public attitudes validate the assessed level of quality and predict how changes within the project limits can affect these attitudes. This process helps identify specific methods for addressing each visual impact that may occur as a result of the Build Alternatives (including Design Option B). These aspects are further explained below.

- Vividness is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.
- Intactness is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions.
- Unity is the extent to which all visual elements combine to form a coherent, harmonious visual pattern.

The Study Area consists of a variety of land uses in a highly developed area with relatively flat to gently rolling topography. Distant views to the Santa Ana Mountains and San Joaquin Hills and the presence of mature trees and ornamental landscaping increase the overall vividness of the Study Area. The soundwalls along northbound and southbound I-5 reduce the intactness and unity within the northerly portion of the Study Area and encroach on public views; however, soundwall encroachment is partially reduced by landscaped wall treatments. Motorists on the northbound and southbound travel lanes of I-5 within the central and southerly portions of the Study Area are exposed to views of surrounding commercial uses which are not unified, as this portion of the project limits lack sufficient ornamental landscaping to screen motorists from these views. Existing freeway signage, soundwalls, streetlights, and overhead powerlines also reduce the overall intactness of the Study Area. Mature trees, landscaped medians and sidewalks, and hardscape treatments (e.g., monumental signage, decorative retaining walls) are present along El Toro Road within the Study Area.

2.5.2.5 Viewer Groups

The population affected by the Build Alternatives (including Design Option B) is composed of viewers. Viewers are people whose views of the landscape may be altered by the Build Alternatives—either because the landscape itself has changed or their perception of the landscape has changed.

The primary viewer groups in the Study Area include motorists traveling along I-5 and/or El Toro Road. Other viewers likely to be affected by visual changes associated with the Build Alternatives (including Design Option B) include local roadway travelers, residential community residents, employees and customers of commercial units, and visitors to the nearby recreational uses.

2.5.2.6 Viewer Response

Viewer response is a measure or prediction of the viewer's reaction to changes in the visual environment and has two dimensions as previously mentioned, viewer exposure and viewer sensitivity.

Viewer Exposure

Viewer exposure is a measure of the viewer's ability to see a particular object. High viewer exposure helps predict that viewers will have a response to a visual change. Viewer exposure has three attributes: location, quality, and duration.

- **Location** relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more exposure.
- **Quantity** refers to how many people see the object. The more people who can see an object or the greater frequency an object is seen, the more the exposure affects the viewer.
- **Duration** refers to how long a viewer is able to keep an object in view. The longer it is kept in view the more the exposure affects the viewer.

Viewer Sensitivity

Viewer sensitivity is a measure of the viewer's recognition of a particular object. High viewer sensitivity helps predict that viewers will have a high concern for any visual change. It has three attributes: activity, awareness, and local values.

- **Activity** relates to the preoccupation of viewers—are they preoccupied, thinking of something else, or are they truly engaged in observing their surroundings. The more they are actually observing their surroundings, the more sensitivity viewers will have of changes to visual resources.
- **Awareness** relates to the focus of view—the focus is wide and the view general or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change.
- **Local values and attitudes** also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, state, or national designation, it is likely that viewers will be more sensitive to visible changes.

Overall Viewer Response

The narrative descriptions of viewer exposure and viewer sensitivity for each viewer group were merged to establish the overall viewer response of each group. Table 2.5.1 summarizes the Overall Viewer Response for each group.

- **Commercial and Civic Uses.** As discussed above, overall viewer exposure for commercial and civic uses along the project limits is considered moderate-low, while the overall viewer sensitivity for commercial and civic uses along the project limits is considered moderate-low. These include commercial and civic uses. Because the affected cities do not recognize commercial and civic uses as sensitive viewers and most commercial and civic uses are not engaged in the surrounding outdoor environment, the overall viewer response for this group is considered moderate-low.
- **Residential Uses.** The overall viewer exposure and viewer sensitivity for residential uses along the project limits is considered high. Residential viewers, particularly those along northbound I-5, would be highly aware of changes to aesthetics. As such, the overall viewer response for this viewer group is considered high.
- **Recreational Uses** (i.e., Cavanaugh Mini Park and open space uses along Gowdy Avenue). The overall viewer exposure for recreational uses is considered moderate, and viewer sensitivity for recreational uses is considered moderate-high. These viewers can be visually engaged in their surrounding environment during passive recreational activities, but can also have a narrow focus and viewshed during active recreational activities. As such, the overall viewer response for this viewer group is considered moderate-high.
- **I-5 Motorists.** The overall viewer exposure and viewer sensitivity for northbound and southbound I-5 motorists is considered moderate-high. As such, the overall viewer response for this group is considered moderate-high.
- **Local Roadway Travelers.** The overall viewer exposure for local roadway travelers (motorists, bicyclists, and pedestrians) is considered moderate, while overall viewer sensitivity for local roadway travelers is considered moderate-high based on El Toro Road's designation as a Landscape Corridor by the County of Orange General Plan, and because the affected cities enforce tree-preservation policies. Local roadway travelers have views of the distant Santa Ana Mountains and San Joaquin Hills, in addition to mature trees and decorative landscaping elements. As such, the overall viewer response for this group is considered moderate-high.

Table 2.5.1: Viewer Response Summary

Viewer Group	Viewer Sensitivity	Viewer Exposure	Viewer Response
Commercial and Civic Uses	ML	ML	ML
Residential Uses	H	H	H
Recreational Uses	MH	M	MH
I-5 Motorists	MH	MH	MH
Local Roadway Travelers	MH	M	MH

Source: Visual Impact Assessment (February 2019).
H=High M=Moderate L=Low
MH=Moderate–High ML=Moderate–Low

2.5.3 Environmental Consequences

2.5.3.1 Temporary Impacts

Build Alternatives (Alternatives 2 and 4 [including Design Option B])

Construction of the proposed Build Alternatives (including Design Option B) would expose sensitive uses to views of construction-related vehicle access and staging of construction materials within California Department of Transportation (Caltrans) and city rights-of-way and disturbed or developed areas along the length of the project limits. Construction of the Build Alternatives (including Design Option B) would expose surfaces, construction debris, equipment, and truck traffic to nearby sensitive viewers. Construction vehicle access and staging of construction materials would be visible from motorists traveling along the project limits as well as residential, commercial and civic, and recreational uses located in the area around the project limits. These impacts would be short-term and would cease upon completion of construction. Adhering to Caltrans Standard Specifications for Construction would minimize visual impacts using opaque temporary construction fencing that would be situated around construction staging areas.

The Build Alternatives (including Design Option B) would require nighttime construction activities. Nighttime construction lighting could potentially result in impacts to nearby residents and motorists traveling along the project limits. These activities may be required to take place for several months. However, the project limits contain existing sources of light (e.g., vehicle headlights, streetlights, park lighting, residential and non-residential lights). In accordance with Caltrans regulations, nighttime construction will be limited to the hours of 10:00 PM to 6:00 AM In accordance with measure VIS-1, necessary lighting for safety and construction purposes will be directed away from land uses outside the project limits, and contained and directed toward the specific area of construction. With implementation of measure VIS-1, impacts related to light and glare from nighttime construction activities would be reduced to the maximum extent feasible.

No Build Alternative

The No Build Alternative would not include the construction of any of the improvements to the I-5/ El Toro Road Interchange and, therefore, would not result in changes in views to/from the project limits of the I-5/ El Toro Road Interchange. Therefore, the No Build Alternative would not result in short-term visual impacts on and in the vicinity of the project limits of the I-5/ El Toro Road Interchange.

2.5.3.2 Permanent Impacts

Build Alternatives (Alternatives 2 and 4 [including Design Option B])

Visual elements of the Build Alternatives (including Design Option B) would include modification of the intersection of Avenida De La Carlota and Paseo De Valencia and construction of a flyover structure that would directly connect southbound I-5 traffic to eastbound El Toro Road. Modifications to various local roadways, intersections, ramps, and the I-5/El Toro Road Overcrossing would also occur. The Build Alternatives (including Design Option B) would require the partial or permanent acquisition and demolition of surrounding land uses (i.e., commercial and recreational uses). Soundwalls would be considered at various locations throughout the project limits. Despite the highly built-out nature of the area surrounding the

project limits, implementation of the Build Alternatives (including Design Option B) would result in an increase in hardscape in the project limits visible to: commercial and civic uses, residential uses, recreational uses (i.e., Cavanaugh Mini Park and the existing open space area along Gowdy Avenue), I-5 motorists, and local roadway travelers.

The Build Alternatives (including Design Option B) would implement measures VIS-2 through VIS-4 to avoid and/or minimize visual effects within the existing corridor potentially caused by the widening of the freeway, construction of new soundwalls, replacement and widening of existing bridges, and reduction of the landscaping area.

Visual impacts associated with a Build Alternatives (including Design Option B) are determined by a measurement of the resource change and viewer response. The overall viewer response for the Build Alternatives (including Design Option B) is considered moderate. The landscaping measures recommended as part of measures VIS-2, VIS-3, and VIS-4 would reduce adverse impacts as a result of the change in character and quality of the project limits. The overall visual impact is considered moderate in this regard.

Alternative 2

Key View 2A

Figure 2.5-2 depicts the visual simulation for Key View 2A for Alternative 2. This represents a typical view looking southeast towards the Gowdy Avenue/ Cavanaugh Road intersection. At Key View 2A, resource change is considered high due to removal of the turf area and several mature trees associated with existing open space along Gowdy Avenue and relocation of the existing sound barrier along northbound I-5. Viewer response would be high based on expected residential viewers being the most sensitive viewing group. Although change is noticeable within this Key View, Alternative 2 would not involve a change in use that would substantially alter existing views because surrounding residential uses, motorists, and pedestrians along Gowdy Avenue heading towards Cavanaugh Road would continue to have views of an open space area and the sound barrier along I-5. Based on viewer response and the overall resource change, the visual impact for Key View 2A would be high. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 2 at Key View 2A would not be adverse.

Key View 2B

Figure 2.5-3 depicts the visual simulation for Key View 2B for Alternative 2. This represents a typical view looking southwest towards Cavanaugh Mini Park from single-family residential development and motorists and pedestrians traveling along Cavanaugh Road towards Gowdy Avenue. At Key View 2B, resource changes would include removal of the children's play area and several mature trees and ornamental landscaping at Cavanaugh Mini Park as well as relocation of the existing landscaped soundwall. Viewer response would be high based on expected residential viewers being the most sensitive viewing group. Based on viewer response and the overall resource change, the visual impact for and Key View 2B would be high. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 2 at Key View 2B would not be adverse.

Key View 2C

Figure 2.5-4 depicts the visual simulation for Key View 2C for Alternative 2. This represents a typical view looking northwest toward the Bridger Road cul-de-sac for motorists and pedestrians traveling along Bridger Road. The resource changes at Key View 2C would be moderate-high. These changes would include the proposed southbound I-5 flyover off-ramp and northbound I-5 on-ramp, new retaining wall and flyover off-ramp, relocated sound barrier, relocation of Cavanaugh Mini Park, and removal of existing commercial uses along Bridger Road. However, motorists using the new northbound I-5 on-ramp would have a narrow focus and specific viewshed, and thus would be less visually aware of the proposed changes to Key View 2C. In addition, commercial uses along Bridger Road would be removed under the proposed condition; thus, these viewers would not be included in the viewer response for the proposed condition. Viewer response would be moderate-low based on these changes in viewers in this area. Based on viewer response and the overall resource change, the visual impact for Key View 2C would be moderate. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 2 at Key View 2C would not be adverse.

Key View 2D

Figure 2.5-5 depicts the visual simulation for Key View 2D for Alternative 2. This represents a typical view looking northwest for motorists and pedestrians traveling along Avenida De La Carlota. Resource changes at Key View 2D would be moderate. The changes include reconstruction of Avenida De La Carlota and the resultant removal of existing mature trees and ornamental landscaping along Avenida De La Carlota. Viewer response would be moderate-high based on expected motorists and pedestrian viewers being the most sensitive viewing group. Based on viewer response and the overall resource change, the visual impact measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 2 at Key View 2D would not be adverse.

Key View 2E

Figure 2.5-6 depicts the visual simulation for Key View 2E for Alternative 2. This represents a typical view looking southeast for motorists and pedestrians traveling along Avenida De La Carlota. Resource changes at Key View 2E would be moderate-high. Visible changes at Key View 2E would include reconstruction of Avenida De La Carlota and the resultant removal of existing mature trees and ornamental landscaping along Avenida De La Carlota. The new southbound off-ramp to Avenida De La Carlota would also be visible at Key View 2E. Viewer response would be moderate-high based on expected motorists and pedestrian viewers being the most sensitive viewing group. Based on viewer response and the overall resource change, the visual impact for Key View 2E would be moderate-high. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 2 at Key View 2E would not be adverse.

The results of the key views analyzed above are summarized below in Table 2.5.2. The overall visual impacts of Alternative 2 would be moderate-high in this regard. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 2 would not be adverse.

Table 2.5.2: Summary of Key View Ratings (Alternative 2)

Visual Assessment Unit	Key View	Alternative 2		
		Resource Change	Viewer Response	Visual Impact
1	2A	H	H	H
	2B	H	H	H
	2C	MH	ML	M
	2D	M	MH	MH
	2E	MH	MH	MH

Source: Visual Impact Assessment (February 2019).
H=High
MH=Moderate-High
M=Moderate
ML=Moderate–Low

Alternative 4 and Alternative 4 with Design Option B

Key View 4A

Figure 2.5-7 depicts the visual simulations for Key View 4A for Alternative 4. This represents a typical southeast view for recreational users of Cavanaugh Mini Park. Resource changes at Key View 4A would be moderate-low. Visible changes associated with Alternative 4 at Key View 4A would include additional hardscapes associated with the relocated Cavanaugh Mini Park. Although Alternative 4 would introduce additional hardscapes associated with the relocated Cavanaugh Mini Park, it would not change the existing use visible within Key View 4A (i.e., recreational uses) and would not require removal of existing mature trees. Viewer response would be moderate-high based on residential uses and recreational use viewers being the most sensitive viewing groups. Based on viewer response and the overall resource change, the visual impact for Key View 4A would be moderate. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 4 at Key View 4A would not be adverse.

Key View 4B

Figure 2.5-8 depicts the visual simulations for Key View 4B for Alternative 4. This represents a typical view looking for motorists along southbound I-5, south of the El Toro Road undercrossing. At Key View 4B, the resource change would be moderate-low. Visible changes would include the proposed southbound Collector-Distributor system and new hook-style interchange with new southbound I-5 ramps to Avenida De La Carlota. Viewer response would be moderate-high based on expected motorist viewers being the most sensitive viewing group. Based on viewer response and the overall resource change, the visual impact for Key View 4B would be moderate. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 4 at Key View 4B would not be adverse.

Key View 4C

Figure 2.5-9 depicts the visual simulations for Key View 4C for Alternative 4. This represents a typical view looking south towards the existing Five Lagunas shopping center (formerly Laguna Hills Mall) parking lot for motorists and pedestrians traveling along Avenida De La Carlota. Key View 4C also represents

a typical view for commercial and civic uses along Avenida De La Carlota. At Key View 4C, the resource change would be moderate-high. Visible changes at Key View 4C would include realignment of Avenida De La Carlota to the west to accommodate the proposed Collector-Distributor road and resultant acquisition of existing commercial uses along northbound Avenida De La Carlota and partial acquisition of commercial uses (King's Fish House) along southbound Avenida De La Carlota. Implementation of Alternative 4 would remove existing commercial uses and realign a heavily landscaped potion of Avenida De La Carlota. Viewer response would be moderate based on expected motorist and pedestrian viewers and commercial uses being the most sensitive viewing groups. Based on viewer response and the overall resource change, the visual impact for Key View 4C would be moderate-high. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 4 at Key View 4C would not be adverse.

Key View 4D

Figure 2.5-10 depicts the visual simulations for Key View 4D for Alternative 4. This represents a typical view looking south towards existing commercial uses (JCPenney) for commercial uses associated with the Five Lagunas shopping center. At Key View 4D, the resource change would be moderate-high. Visible changes would include the construction of new southbound I-5 hook on- and off-ramps and a signalized intersection with Avenida De La Carlota within the Five Lagunas shopping center parking area, realignment of Avenida De La Carlota south of El Toro Road to the west within the Five Lagunas shopping center, and removal and replacement of a portion of the JCPenney building with a pedestrian sidewalk and landscaping. Viewer response would be moderate-low based on expected commercial uses being the most sensitive viewing group. Based on viewer response and the overall resource change, the visual impact for Key View 4D would be moderate. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 4 at Key View 4D would not be adverse.

Key View 4E

Figure 2.5-11 depicts the visual simulations for Key View 4E for Alternative 4. At Key View 4E, the resource change would be moderate-low. Visible changes at Key View 4E would include installation of a new retaining wall along southbound I-5 and the realignment of Avenida De La Carlota to the west. In addition, the relocation of monument signage for Oakbrook Village and tree removal along Avenida De La Carlota would occur. Viewer response would be moderate-high based on expected motorist and pedestrian viewers being the most sensitive viewing group. Based on viewer response and the overall resource change, the visual impact for Key View 4E would be moderate. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 4 at Key View 4E would not be adverse.

Option B

Option B would replace the Alternative 4 ramp structure with a ramp structure that extends the length of Bridger Road and converts its use into an on-ramp. Impacts to views from Option B would remain similar to Alternative 4, as views traveling along Gowdy Avenue would experience a moderate-high resource

change. Changes would include the removal of recreation resources and removal and replacement of an existing sound barrier along northbound I-5. Viewer response would be high based on expected motorist and pedestrian viewers. Based on viewer response and the overall resource change, the visual impact for Key View 4E would be high. This additional change would result in higher viewshed impacts than Alternative 4; however, with implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 4 would not be adverse.

The results of the key views analyzed above are summarized below in Table 2.5.3. The overall visual impact of Alternative 4 and Alternative 4 - Design Option B would be moderate and moderate-high, respectively, in this regard. With implementation of measures VIS-2 through VIS-4, the permanent visual impacts of Alternative 4 and Alternative 4 – Option B would not be adverse.

Table 2.5.3: Summary of Key View Narrative Ratings (Alternative 4)

Visual Assessment Unit	Key View	Alternative 4		
		Resource Change	Viewer Response	Visual Impact
1	4A	**ML**	**MH**	**M**
	4B	**ML**	**MH**	**M**
	4C	**MH**	**M**	**MH**
	4D	**MH**	**ML**	**M**
	4E	**ML**	**MH**	**M**
	Option B	**MH**	**H**	**H**

Source: Visual Impact Assessment (February 2019).
H=High MH=Moderate-High M=Moderate ML=Moderate

No Build Alternative

The No Build Alternative would not include the construction of any of the improvements to the I-5/El Toro Road Interchange and, therefore, would not result in changes in views to/from the project limits of the I-5/ El Toro Road Interchange. Therefore, the No Build Alternative would not result in long-term visual impacts on and in the vicinity of the project limits of the I-5/ El Toro Road Interchange.

2.5.4 Avoidance, Minimization, and/or Mitigation Measures

With implementation of the following measures, impacts to visual and aesthetics resources would not be adverse.

VIS-1 **Construction Lighting.** At a minimum, the construction contractor shall minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights shall be used. Portable lights shall be operated at the lowest allowable wattage and height and shall be raised to a height no greater than 20 feet. All lights shall be screened and directed downward toward work activities and away from the night sky and nearby residents to the maximum extent possible. The number of nighttime lights used shall be minimized to the greatest extent possible

VIS-2 **Replacement Landscape and Irrigation in Areas Impacted by Construction.** To maintain the context of the project area (color, form, and texture) landscaping shall be installed that is compatible with the existing landscape along I-5 in the project vicinity and the surrounding area. Where feasible, landscaping shall include specimen-sized trees and/or shrub/groundcover mass planting, and landscape treatment along walls to soften the hardscape features and to reduce glare and radiant heat from the walls. In areas where soundwalls are visible from adjacent residential land uses, vines and landscaping shall be used to screen views to the wall where feasible. The landscape concept, plan, and plant palette shall be determined in consultation with, and approved by, the District Landscape Architect in consultation with the cities of Lake Forest, Laguna Hills, and Laguna Woods during the Plans, Specifications, and Estimate (PS&E) phase. All vine and landscape proposed shall conform with the planting policy requirements of Caltrans and the applicable goals and policies of the City of Lake Forest General Plan, Laguna Hills General Plan, and Laguna Woods General Plan, as well as the tree preservation policies identified in the Lake Forest Municipal Code, Laguna Hills Municipal Code, and Laguna Woods Municipal Code. The planting plan shall be reviewed and approved by the Caltrans Biologist to be in accordance with Executive Orders 13751, Safeguarding the Nation from the Impacts of Invasive Species (2016), and 13112, Invasive Species (1999).

VIS-3 **Preservation of Existing Landscape.** Damage to existing vegetation, especially mature, established trees, within the project limits or in close proximity to the project limits shall be minimized as much as possible.

VIS-4 **Aesthetic Treatments for New Noise Barriers, Retaining Walls, and Elevated Features.** To reduce the visual impact of new noise barriers and other elevated structures, the use of aesthetic treatments consisting of color, textures, and/or artistic designs compatible with existing walls/structures shall be determined. If the only option is to match existing in-kind, new noise barriers shall be supplemented with self-attaching vines to soften their appearance and applied with anti-graffiti coating (if allowable) to discourage graffiti.

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