

VISUAL IMPACT ASSESSMENT
North County Corridor
New State Route 108 Project

October 2014

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EA: 10-OS800 & Project ID: 1000000263

Prepared by:

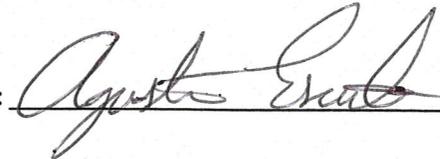


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Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

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VISUAL IMPACT ASSESSMENT

North County Corridor New State Route 108 Project

I. EXECUTIVE SUMMARY

The visual impact assessment (VIA) is a technical report to evaluate the visual aspects of the North County Corridor New State Route 108 Project in Stanislaus County.

The visual assessment follows the Federal Highway Administration (FHWA) guidelines and evaluation method. The assessment includes a visual quality factor, physical quality factor, and sensitive to change tables to evaluate the visual character seen by the viewer groups. Additionally, the assessment includes a summary of findings, conclusions, and avoidance and minimization measures.

The proposed project is a new highway through Stanislaus County to reduce existing and future traffic congestion. The proposed project includes construction of the new roadway, modifications to existing local roads, bridges, interchanges, overhead structures, and a roundabout at the intersection of the new roadway and SR-108/120. This visual study includes two visual assessment units that depict typical conditions within the project corridor:

- Visual Assessment Unit 1: Developed –Rural Built Environment – evaluates the views of both motorists and residents along and adjacent to the existing developed segments of the proposed highway.
- Visual Assessment Unit 2: Agricultural and Undeveloped Environment - evaluates the views of both motorists and residents along and adjacent to the existing agricultural and undeveloped segments of the proposed highway.

The project requires avoidance and minimization measures to reduce the project’s associated negative impacts. The visual impacts are to users of the existing transportation network and the residents in the vicinity of the proposed project. The proposed avoidance and minimization measures included in this VIA are anticipated to reduce the negative visual impacts associated with the proposed project, including the visible overhead structures, removal of trees and vegetation, and conversion of agricultural lands to hardscape.

II. PURPOSE OF STUDY

The purpose of this VIA is to document potential visual impacts caused by the proposed project and propose measures to lessen any detrimental impacts that are identified. Visual impacts are demonstrated by identifying visual resources in the project area, measuring the amount of change that would occur as a result of the project, and predicting how the affected public would respond to or perceive those changes.

III. PROJECT DESCRIPTION

The proposed project is located in Caltrans District 10 within portions of the Oakdale, Riverbank, and Modesto communities, in Stanislaus County, California (see Figures 1 and 2). The North County Corridor New State Route (SR) 108 Project will connect SR 219 near Modesto, CA to SR 120 near Oakdale, CA. The proposed project consists of four Build Alternatives (1A, 1B, 2A, and 2B) and the No-Build Alternative (see Figure 3).

The western terminus of all alternatives is at the SR-219 (Kiernan Avenue)/Tully Road intersection. The alternatives proceed to the vicinity of the Claus Road/Claribel Road intersection, where Segment 2 begins and the alternatives separate into two different alignments (A and B). In Segment 2, Alternatives 1A and 1B veer northeast near the Claus Road/Claribel Road intersection and pass through the southern boundary of Oakdale, and Alternatives 2A and 2B continue easterly along Claribel Road and turn northeastward past the intersection of Claribel Road/Bentley Road. Each of the alternatives then breaks into two possible alignments to their eastern terminus in Segment 3, just past the Oakdale-Waterford Highway. The eastern terminus of Alternatives 1A and 2A end along SR-108/120 just east of the City of Oakdale boundary. Alternatives 1B and 2B end farther east of the Alternatives 1A and 2A terminus, along SR-108/120 in the vicinity of Lancaster Road. The purpose of the project is to reduce existing and future traffic congestion in northern Stanislaus County, enhance traffic safety on existing SR-108, support the efficient movement of goods, and improve interregional travel.

The proposed project improvements include:

- At grade intersections;
- Grade separation structures at major roadway and railway crossings;
- Structures at various waterway crossings, such Modesto Irrigation District (MID) and Oakdale Irrigation District (OID) canals;
- County and City roadway improvements at various locations; and,
- New freeway/expressway controlled access travel lanes.

The four alternatives would consist of two to three 12-foot-wide through lanes with 5-foot to 10-foot-wide left and right shoulders in each direction. The east-bound and west-bound alignments would be separated by a 46 to 70-foot-wide median, including the 5-foot to 19-foot-wide shoulders and 26-foot to 60-foot-wide graded, unpaved median area. Drainage swales would be located along either side of the new roadway.

As the proposed roadway would function as a freeway/expressway with controlled access, new and realigned local access roads are needed to provide continued access to existing properties. This would involve construction of a discontinuous local roadway system which would provide a 12-foot-wide through lane and a 8-foot-wide shoulder, in each direction. Up to a 12-foot-wide area would be provided between the right-of-way limit and the edge of pavement to allow for drainage ditches. Where required, turn lanes would provide connections to cross roads. Each of the four build alternatives includes these proposed local access roads which are delineated on Figure 3.

Elevated roadways, separated grade crossings, single point urban interchanges, signalized intersections, and roundabouts would be needed for each of the four alternatives. A Class 2 bike lane would also be constructed within the road shoulder from Claus Road to the eastern terminus at State-Route 108/120. Various utilities exist throughout the project area that would need to be relocated. These include electric, telephone, water, sewer, and irrigation lines. At the time of this report, the exact locations to which the impacted utilities would be relocated is unknown, but relocation would take place within the currently defined project area.

Permanent right-of-way and temporary construction easements would also be required for the proposed project.

Project Purpose

The purpose of the project is to reduce existing and future traffic congestion in northern Stanislaus County, enhance traffic safety on existing SR-108, and support the efficient movement of goods as follows:

- Reduce traffic congestion and accommodate future traffic on existing SR-108 and the surrounding transportation network in Stanislaus County and the Cities of Modesto, Riverbank, and Oakdale;
- Enhance traffic safety on existing SR-108 through the communities of Riverbank and Oakdale and Modesto by reducing average daily traffic volumes (particularly truck traffic);
- Support efficient movement of goods by providing a new east-west transportation facility that will reduce the number of conflict areas with non-motorized traffic, increase the average operating speeds, and improve travel time reliability; and
- Improve interregional travel by reducing travel times for long distance commuters, recreational traffic, and interregional goods movement.

Project Need

The current action is needed because:

- Traffic congestion on existing SR-108 will continue to worsen due to projected traffic volume increases;
- Existing accident rates on existing SR-108 are well above the statewide averages for similar facilities;
- Traffic congestion on existing truck routes will continue to inhibit the efficient movement of goods; and
- Existing SR-108 is part of the interregional system and interregional circulation will become increasingly constrained as travel times on existing SR-108 increase substantially with planned residential and employment growth.

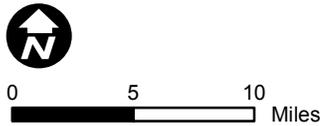


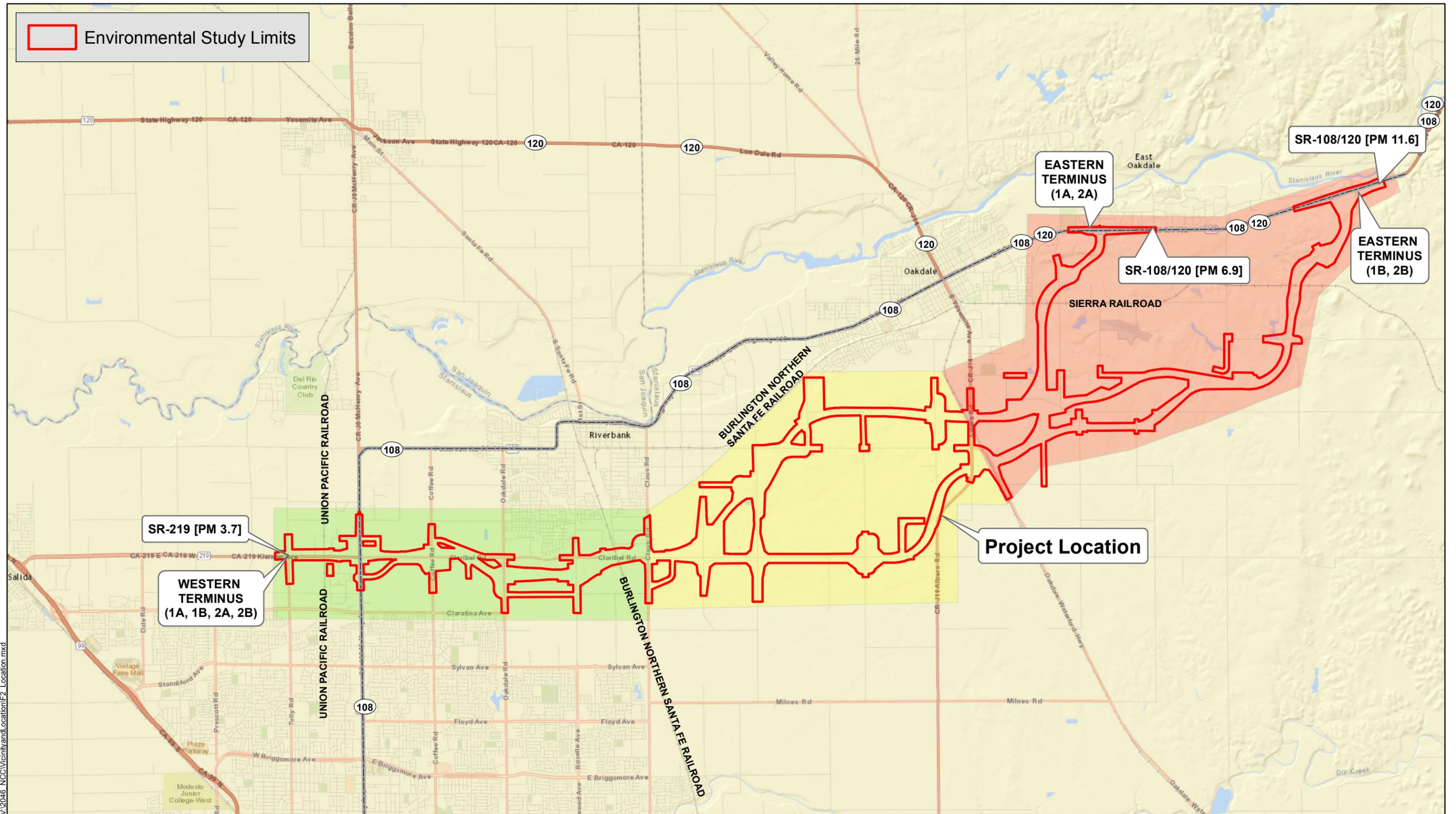
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FIGURE 1
Project Vicinity

EA: 10-OS8000, Project ID # 1000000263
North County Corridor New State Route 108 Project
Stanislaus County, California





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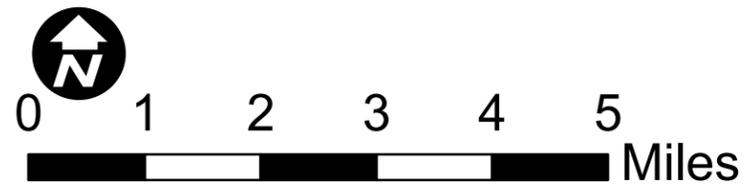
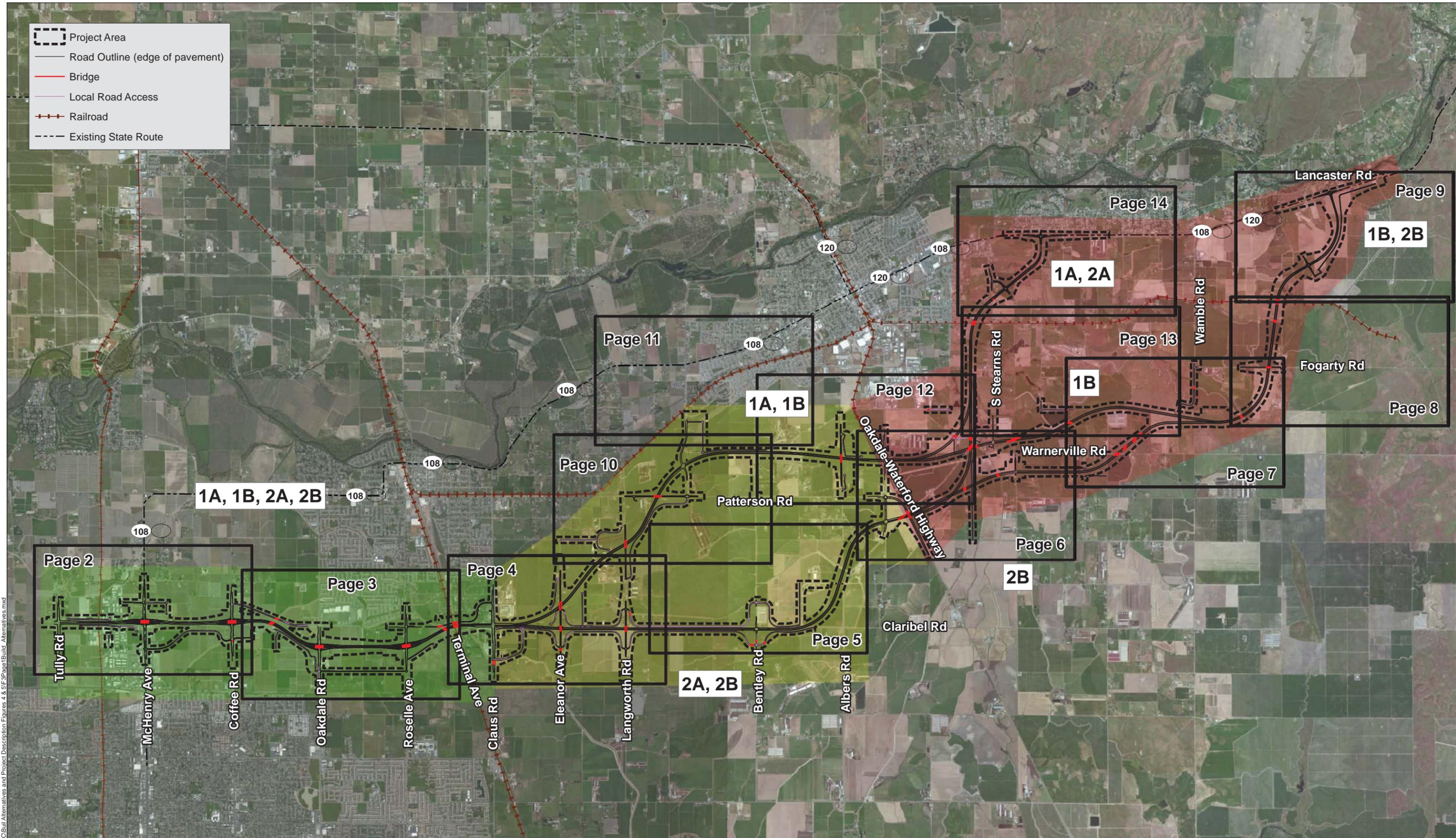


FIGURE 2
Project Location
 EA: 10-0S8000, Project ID # 1000000263
 North County Corridor State Route 108 Project
 Stanislaus County, California

-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route



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FIGURE 3
Build Alternatives
Page 1 of 14

EA: 10-058000, Project ID # 1000000263
 North County Corridor New State Route 108 Project
 Stanislaus County, California

-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route



1A, 1B, 2A, 2B

UNION PACIFIC RAILROAD

LATERAL #1

Match Line - See Page 3

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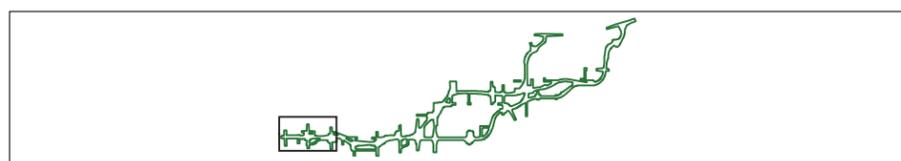
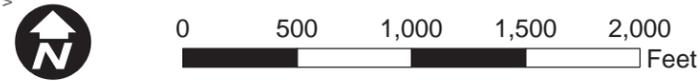


FIGURE 3
Build Alternatives
 Page 2 of 14
 EA: 10-0S8000, Project ID # 100000263
 North County Corridor New State Route 108 Project
 Stanislaus County, California

-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route

Match Line - See Page 2

Match Line - See Page 4

LATERAL #1

MAIN CANAL

**BURLINGTON NORTHERN
SANTA FE**

1A, 1B, 2A, 2B

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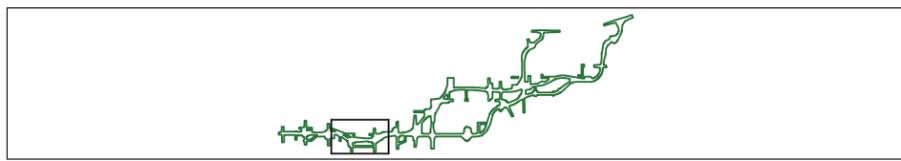


FIGURE 3
Build Alternatives
Page 3 of 14

EA: 10-0S8000, Project ID # 100000263
North County Corridor New State Route 108 Project
Stanislaus County, California

- Project Area
- Road Outline (edge of pavement)
- Bridge
- Local Road Access
- Railroad
- Existing State Route

Match Line - See Page 3

Match Line - See Page 45



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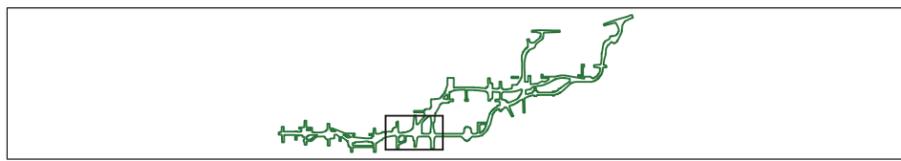


FIGURE 3
Build Alternatives
 Page 4 of 14

EA: 10-0S8000, Project ID # 100000263
 North County Corridor New State Route 108 Project
 Stanislaus County, California

Match Line - See Page 4

Match Line - See Page 6

-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route

2A & 2B

Claribel Rd

Bentley Rd

Bentley Rd

Albers Rd

Valk Rd

Albers Rd

Claribel Rd

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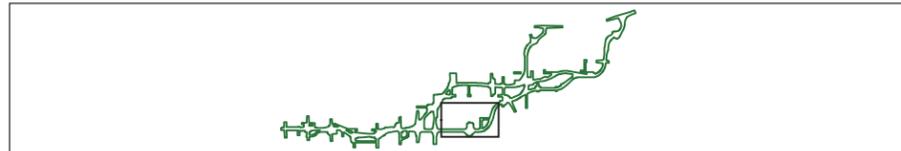
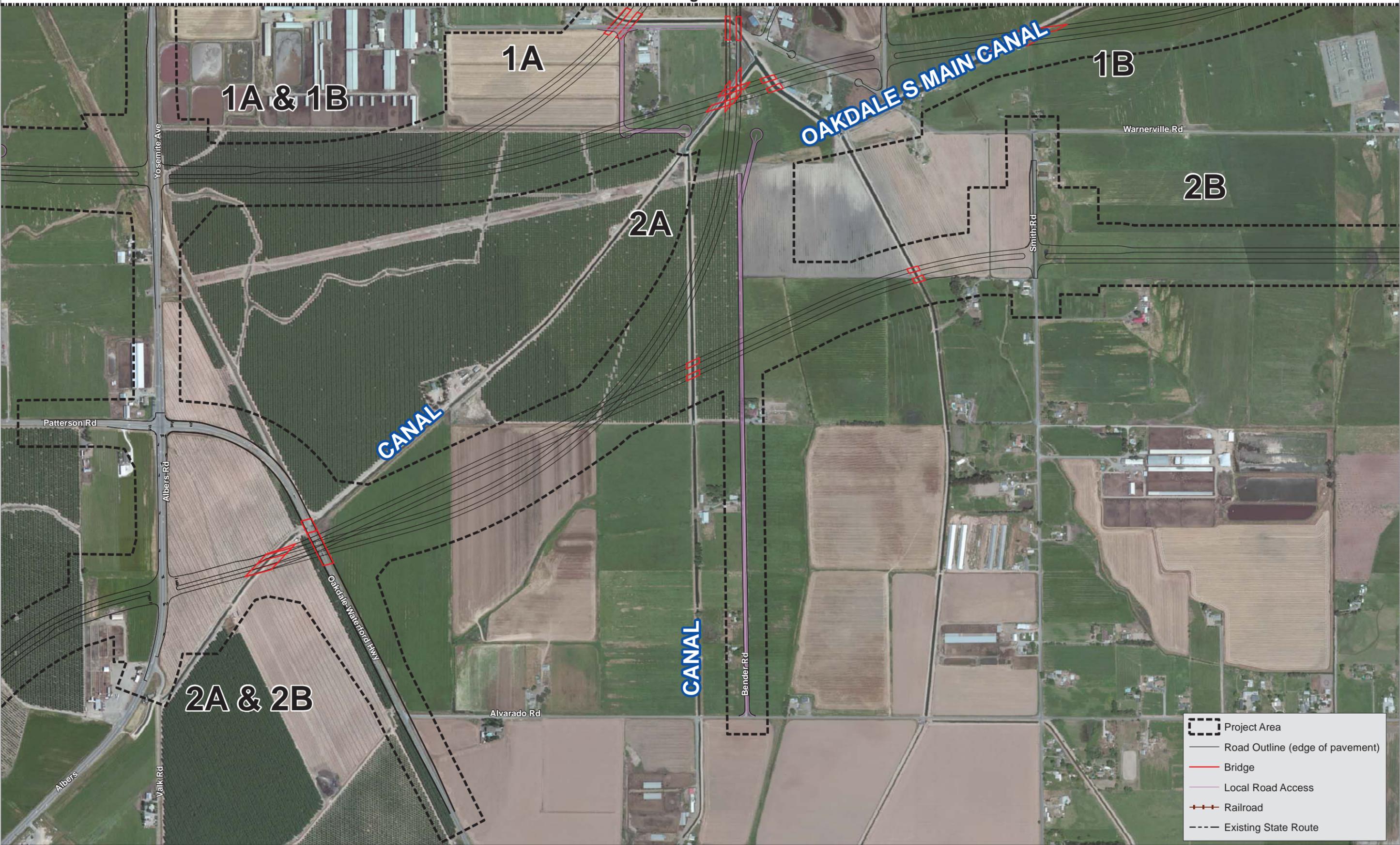


FIGURE 3
Build Alternatives
Page 5 of 14

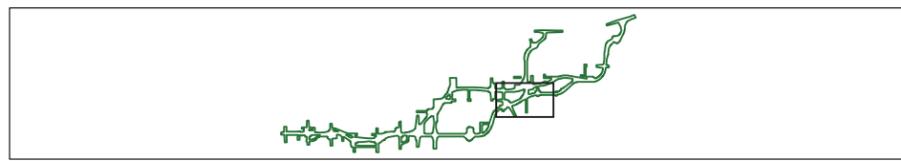
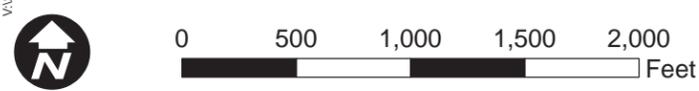
EA: 10-0S8000, Project ID # 100000263
North County Corridor New State Route 108 Project
Stanislaus County, California



	Project Area
	Road Outline (edge of pavement)
	Bridge
	Local Road Access
	Railroad
	Existing State Route

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-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route



Match Line - See Page 6

Match Line - See Page 8

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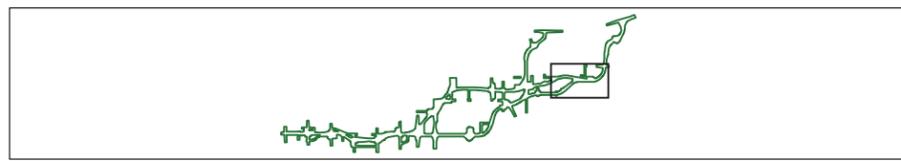


FIGURE 3
Build Alternatives
Page 7 of 14

EA: 10-0S8000, Project ID # 100000263
 North County Corridor New State Route 108 Project
 Stanislaus County, California

SIERRA RAILROAD

1B & 2B

OAKDALE'S MAIN CANAL

Fogarty Rd

Emery Rd

-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route

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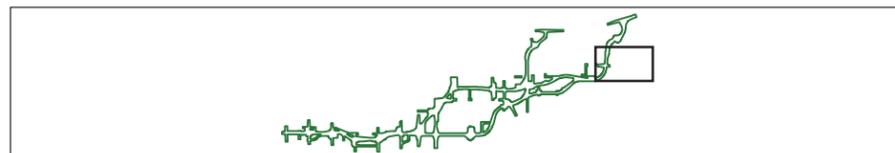


FIGURE 3
Build Alternative
Page 8 of 14

-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route



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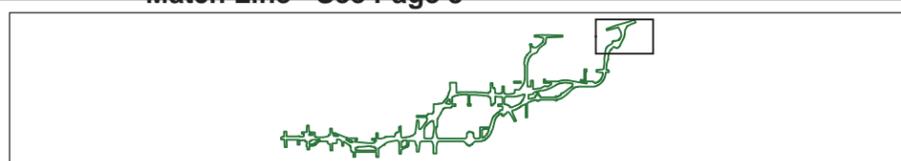


FIGURE 3
Build Alternatives
Page 9 of 14
 EA: 10-0S8000, Project ID # 100000263
 North County Corridor New State Route 108 Project
 Stanislaus County, California

-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route



BURLINGTON NORTHERN SANTA FE

1A & 1B

Match Line - See Page 10

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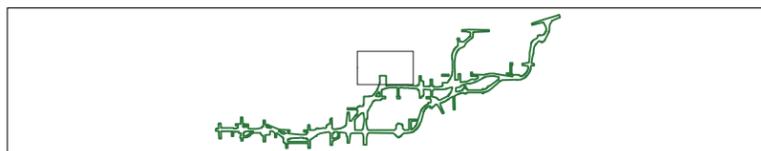


FIGURE 3
Build Alternatives
Page 11 of 14
 EA: 10-0S8000, Project ID # 100000263
 North County Corridor New State Route 108 Project
 Stanislaus County, California

-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route

Match Line - See Page 10

Match Line - See Page 13

1A & 1B

1A

Match Line - See Page 6

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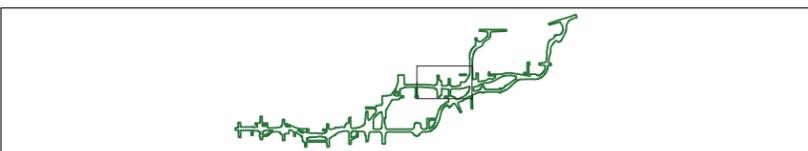


FIGURE 3
Build Alternatives
Page 12 of 14
 EA: 10-OS8000, Project ID # 100000263
 North County Corridor New State Route 108 Project
 Stanislaus County, California

-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route



Match Line - See Page 12

Match Line - See Page 7

Match Line - See Page 6

Match Line - See Page 12

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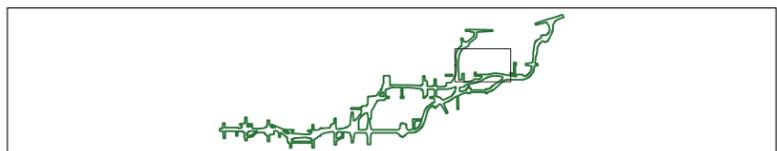


FIGURE 3
Build Alternatives
Page 13 of 14

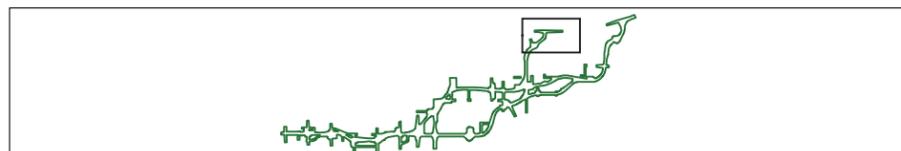
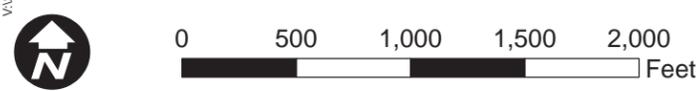
-  Project Area
-  Road Outline (edge of pavement)
-  Bridge
-  Local Road Access
-  Railroad
-  Existing State Route



Match Line - See Page 13

V:\2014\Build Alternatives and Project Description\Figures 4 & 5\Fig4Build Alternatives.mxd

Source: ESRI Maps Online March 2011; Dokken Engineering 6/23/2014; Created By: camerob



SIERRA RAILROAD

FIGURE 3
Build Alternatives
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IV. PROJECT LOCATION AND SETTING

The project location and setting provides the context for determining the type and severity of changes to the existing visual environment. The terms *visual character* and *visual quality* are defined in Section VII. Visual Resources and Resource Change and are used to further describe the visual environment. The project setting is also referred to as the corridor or project corridor which is defined as the area of land that is visible from, adjacent to, and outside the highway right-of-way, and is determined by topography, vegetation, and viewing distance.

The western terminus of all alternatives is at the SR-219 (Kiernan Ave)/Tully Rd intersection. The eastern terminus of Alternatives 1A and 2A end along SR-108/120 just east of the City of Oakdale boundary. Alternatives 1B and 2B end further east of the Alternatives 1A and 2A terminus along SR-120/108 in the vicinity of Lancaster Rd. The proposed project occurs in the Cities of Modesto, Riverbank, and Oakdale in Stanislaus County, California. The project is located in the San Joaquin Valley of Central California. The landscape is characterized by flat land dominated by ranches and agricultural lands. The land use within the corridor is primarily rural agricultural but also includes areas of suburban residences and commercial properties.

The proposed project area contains approximately 4,640 acres. The proposed project area is generally flat and varies in elevation from between 100 to 250 feet above mean sea level. The landform is generally unaltered, with small modifications including canals and drainage features to accommodate agriculture. The landcover is highly altered due to the heavy agricultural use in the area. Views from the road are generally limited, consisting of the directly adjacent agricultural land and residences.

National Scenic Byway Designation

The project site does not have officially designated National Scenic Byways. The nearest National Scenic Byway is Ebbetts Pass National Scenic Byway Post-Mile (PM) 41.6 on SR-4 to PM 14.6 on SR-89, which begins approximately 46 miles (mi) northeast.

State Scenic Highway Designation

The project site does not contain officially designated State Scenic Highways (Caltrans 2013). The nearest officially designated State Scenic Highway is approximately 18 mi southwest on I-5, from Merced County to San Joaquin County.

V. ASSESSMENT METHOD

This VIA generally follows the guidance outlined in the publication *Visual Impact Assessment for Highway Projects* published by the FHWA in March 1981.

The following steps were followed to assess the potential visual impacts of the proposed project:

- A. Define the project location and setting.
- B. Identify visual assessment units and key views.
- C. Analyze existing visual resources, resource change and viewer response.
- D. Depict (*or describe*) the visual appearance of project alternatives.
- E. Assess the visual impacts of project alternatives.
- F. Propose measures to offset visual impacts.

Photo-simulations were prepared using photographs taken at the site, project design files, and Microstation 3D software.

VI. VISUAL ASSESSMENT UNITS AND KEY VIEWS

The project corridor was divided into a series of “outdoor rooms” or *visual assessment units* (VAU). Each VAU has its own visual character and visual quality. A VAU is typically defined by the limits of a particular viewshed; however, for this project, visual assessment units were defined by similar landscape settings. For this project, the following 2 VAUs and their associated 11 key views (see Figure 4) have been identified:

- Visual Assessment Unit 1: Developed –Rural Built Environment

Visual Assessment Unit 1 (VAU1) is located in the developed portions of the project area. VAU1 consists of lands with rural residential developments. The dominant manmade features found in VAU1 are the residential structures and hardscape including the existing roads, fences, irrigation canals, utilities and railroads; however, agricultural and undeveloped areas do exist within the background of VAU1. The following 4 key views are within VAU1:

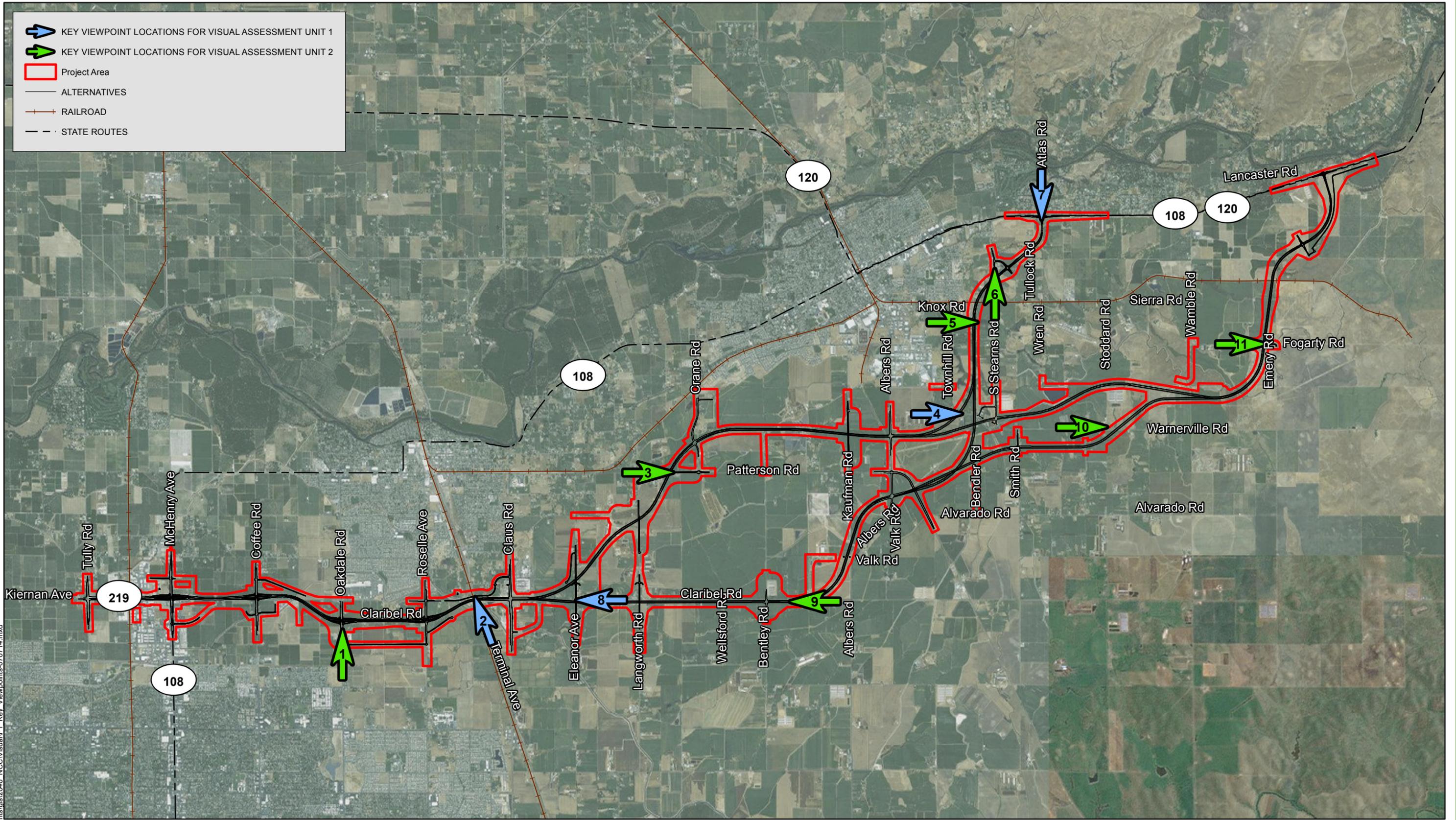
- Key View 2: This key view shows northbound Terminal Ave, approximately 0.1 mi south of Claribel Rd for the proposed 1A, 2A, 1B, and 2B alignments. The area is developed, with landcover in the area consisting of residential development, a canal, and the Burlington Northern Santa Fe railroad. There are no dominant landforms in the key view, as the project area has only minor elevation changes. This view is representative of the views of the elevated NCC structures seen by residents and motorists; the main viewers of the project.
- Key View 4: This key view shows eastbound Warnerville Rd, approximately 0.5 mi west of South Stearns Rd for the proposed 1A and 2A alignments. The view is surrounded by developed lands, including rural residential structures and built canals. There are no dominant landforms in the key view, as the project area has only minor elevation changes. This view is representative of the views of the elevated NCC structures seen by residents and motorists in the area.
- Key View 7: This key view shows southbound Atlas Rd and the intersection with SR-108/120 for the proposed 1A and 2A alignments. The view is surrounded by residential development with agricultural fields in the background. There are no dominant landforms in the key view, as the project area has only minor elevation changes. This view is representative of the view of the roundabout seen by residents and motorists in the area.
- Key View 8: This key view shows westbound Claribel Rd, approximately 0.2 mi east of Eleanor Ave/McGee Ave for the proposed 2A and 2B alignments and is surrounded by rural residential land, with agricultural fields in the background. There are no dominant landforms in the key view, as the project area has only minor elevation changes. This view is representative of the views of the NCC roadway seen by residents and motorists; the main viewers of the project.

- Visual Assessment Unit 2: Agricultural and Undeveloped Environment

Visual Assessment Unit 2 (VAU2) is located in the agricultural and undeveloped portions of the project area. VAU2 consists of lands used for the growing of agricultural crops, raising livestock, and barren/undeveloped lands within the region. The only dominate manmade features found in VAU2 are the existing roads, fences, utilities, and structures used for livestock; however,

residential development does exist within the background of VAU2. The following 7 key views are within VAU2:

- Key View 1: This key view shows northbound Oakdale Rd, approximately 0.1 mi south of Claribel Rd for the proposed 1A, 2A, 1B, and 2B alignments, and is surrounded by orchards, which is the dominant landcover type in the area. There are no dominant landforms in the key view, as the project area has only minor elevation changes. This view is representative of the views of a single point interchange as seen by motorists, the main viewers of the project, and residents along Oakdale Rd.
- Key View 3: This key view shows eastbound Patterson Rd, approximately 0.1 mi east of Langworth Rd for the proposed 1A and 1B alignments. The view is surrounded by agricultural land, which is the dominant landcover type in the area. There are no dominant landforms in the key view, as the project area has only minor elevation changes. This view is representative of the views of a local road over NCC seen by motorists, the main viewers of the project, and residents on the agricultural land.
- Key View 5: This key view faces east and shows the proposed 1A and 2A alignments, approximately 0.2 mi south of Knox Rd, along Townhill Rd. The view is surrounded by agricultural land, which is the dominant landcover type in the area, with residential development in the background. There are no dominant landforms in the key view as the project area has only minor elevation changes. This view is representative of the view of the NCC roadway seen by residents along Townhill Rd.
- Key View 6: This key view shows northbound South Stearns Rd, approximately 0.2 mi north of Sierra Rd for the proposed 1A and 2A alignments. The view is surrounded by agricultural land, which is the dominant landcover type in the area. There are no dominant landforms in the key view, as the project area has only minor elevation changes. This view is representative of the view of the elevated NCC structures seen by motorists and residents along Stearns Rd, the main viewers of the project.
- Key View 9: This key view shows the view from a rural residence on Claribel Rd, 0.5 mi west of Albers Rd, looking west toward the proposed alignment for build alternatives 2A and 2B. The view is surrounded by agricultural and grazing lands, which are the dominant landcover types in the area. There are no dominant landforms in the key view, as the project area has only minor elevation changes. This view is representative of the view of the NCC roadway seen by residents and motorists along Claribel Rd.
- Key View 10: This key view shows eastbound Warnerville Rd, approximately 0.25 mi east of Stoddard Rd for the proposed 2B alignment. The view is surrounded by agricultural land, which is the dominant landcover type in the area. There are no dominant landforms in the key view, as the project area has only minor elevation changes. This view is representative of the views of NCC structures seen by motorists, the main viewers of the project.
- Key View 11: This key view shows eastbound Fogarty Rd, approximately 0.25 mi west of Emery Rd for the proposed 1B and 2B alignments. The view is surrounded by agricultural land, which is the dominant landcover type in the area. There are no dominant landforms in the key view, as the project area has only minor elevation changes. This view is representative of the views of local roads over NCC seen by residents and motorists along Fogarty Rd.



Source: ESRI 2011 Online; Dokken Engineering 5/1/2015; Created By: zachl

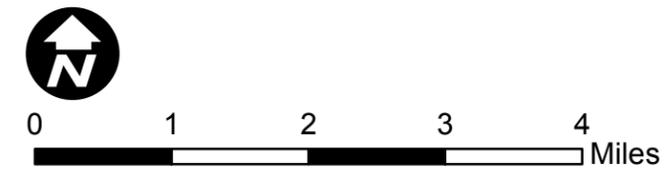


FIGURE 4
Visual Assessment Units and Key Viewpoints
 EA: 10-0S8000, Project ID # 1000000263
 North County Corridor New State Route 108 Project
 Stanislaus County, California

VII. VISUAL RESOURCES AND RESOURCE CHANGE

Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed project. Resource change is one of the two major variables in the equation that determine visual impacts (the other is *viewer response*, discussed in *Section VIII Viewers and Viewer Response*).

The FHWA method of visual resource analysis (guidance derived from the FHWA publication entitled *Visual Impact Assessment for Highway Projects*, dated January 1988) was used to evaluate visible change as a result of project implementation. A formal evaluation team was not convened to determine the visual resource change. Visual resource change will be measured by low, moderate-low, moderate, moderate-high, and high ratings.

First, visual character must be identified. Visual character is descriptive and non-evaluative, which means it is based on defined attributes that are neither good nor bad. A change in visual character cannot be described as having good or bad attributes until it is compared with the viewer response to that change. If there is public preference for the established visual character of a regional landscape and resistance to a project that would contrast that character, then changes in the visual character can be evaluated.

Next, visual quality must be assessed. Visual quality is evaluated by identifying the vividness, intactness, and unity present in the viewshed. FHWA states that this method should correlate with public judgments of visual quality well enough to predict those judgments. This approach is particularly useful in highway planning because it does not presume that a highway project is necessarily an eyesore. This approach to evaluating visual quality can also help identify specific methods for mitigating each adverse impact that may occur as a result of a project.

Visual Resources

Visual resources of the project setting are defined and identified below by assessing visual character and visual quality in the project corridor.

VISUAL CHARACTER

Visual character includes attributes such as form, line, color, texture, and is used to describe, not evaluate; that is these attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer response to that change. Through the use of visual character attributes, visual character can be quantified by identifying how visually compatible a proposed project would be with existing conditions. For this project the following attributes were considered:

Line – edges or linear definition

Color – reflective brightness (light, dark) and hue (red, green)

Dominance – position, size, or contrast

Texture – surface coarseness

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

The visual character of the proposed project would be somewhat compatible with the existing visual character of the corridor. The existing lines in the project area are characterized by the straight lines characteristic of modern agriculture and the grid-like road system. The existing dominant features in the project area are the agricultural fields and rural roads. The color in the project varies by the season and type of agricultural field, from dark greens to light browns. The texture of the project area is dominated by the rough unevenness of crop fields and orchards. Existing SR-108 is of minor scale within the project area. The project area currently has limited visual diversity, as the vast majority of the area is agricultural fields. The continuity of the site is low, as color and texture abruptly change from one agricultural field to the next.

With the build alternatives, the lines within the project area would continue to be characterized by the straight lines of modern agriculture and the grid-like road system. The dominant features would shift to include the new SR-108 alignment, including the elevated structures, roadway, bridges, and elevated segments of the alignment. The color in the site would change slightly to include black from the new asphalt pavement, with the existing colors from agriculture. The scale of SR-108 would increase as the dominant features in the project area would also change to include new SR-108 alignment. The visual diversity within the project area would increase with the new highway. The continuity within the project area would slightly decrease as the new roadway would break up the existing colors and textures.

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 to the project corridor can affect these attitudes. This process helps identify specific methods for addressing each visual impact that may occur as a result of the project. The three criteria for evaluating visual quality are defined 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 visual quality of the existing corridor would be somewhat altered by the four build alternatives of the proposed project. Existing visual quality of the project area is moderate due to the vividness, intactness, and unity throughout the site. The vividness of the project area is moderately-low as the project area consists almost entirely of a flat landform and agricultural landcover, while lacking distinctive or memorable features. Intactness of the project area is moderate as the project area is largely free from visual encroachment on the farmland and rural residences. Unity in the project area is moderately-high due to the integration of the rural residences and agricultural land

Resource Change

The proposed project would have only moderate impacts on visual resources due to the following:

- The build alternatives would not block views of unique visual resources; however, vistas of horizon and some views would be blocked by the elevated segments of each alignment.
- While the project would convert agricultural land to a built environment, a large amount of agricultural land would still remain in the area.

The proposed build alternatives would have only moderate impacts on visual resources due to the following:

Alternative 1A

Project changes within Alternative 1A include the extension of Kiernan Ave/SR-219 at the Tully Rd intersection to the terminus of the NCC at the intersection of SR-108/SR-120 and Atlas Rd, which will predominantly require new roadway construction through the region. Alternative 1A will include four single point urban interchanges, four overcrossing structures for existing roads over the NCC, two undercrossing structures over existing local roads, and two undercrossing/overhead structure combinations over existing local roads. Alternative 1A will also include thirteen at-grade canal crossings, five elevated canal crossing, one grade separation over the BNSF Railroad, two elevated railroad crossings with overhead structures, and two at-grade four-way roundabouts, one at a new intersection and one at an existing intersection.

Visual Assessment Unit 1 Resource Change:

The overall visual resource change in Visual Assessment Unit 1 as a result of Alternative 1A is expected to be moderate-low, as visual character and quality would change minimally from the current existing conditions. The change in visual character would be somewhat compatible, as all of the attributes which make up the visual character would slightly change as a result of the proposed alternative. The built-environment would still dominate the visual character and new roadways and overcrossings would contribute to this visual character attribute. The texture of the area would still be asphalt and the continuity of the area would increase for VAU1. Further the change in visual quality from Alternative 1A would be moderate as the vividness of VAU1 would decrease with the reduced number of distinctive, contrasting, and diverse elements, including the reduced number of rural residences and structures in the area. Still, the intactness and unity of the area will increase due to the currently developed lands adjacent to Alternative 1A becoming more developed, and developed in a more intact and uniform manner. The new built environment will be a typical visual intrusion into the existing built environment, and will combine with existing elements to create a more coherent, harmonious visual pattern.

Visual Assessment Unit 2 Resource Change:

The overall visual resource change in Visual Assessment Unit 2 as a result of Alternative 1A is expected to be moderate-low, as visual character and quality would change from the current existing conditions. The change in visual character would be somewhat incompatible, as the attributes which make up the visual character would change as a result of the proposed alternative. The new roadway would dominate the visual character of the region, and would change the texture of the area from agricultural land to asphalt. Further the change in visual quality from the proposed Alternative 1A would be moderate-high as the intactness and unity of the area decrease. The intactness and unity of the area would decrease due to the lands adjacent to Alternative 1A being converted from primarily undisturbed agricultural lands to a heavily disturbed predominately built environment to accommodate the new highway. The new built environment will be a non-typical visual intrusion into the otherwise undeveloped rural

agricultural setting of the landscape, and will not combine with existing elements to create a coherent, harmonious visual pattern.

Alternative 2A

Project changes within Alternative 2A include the extension of Kiernan Ave/SR-219 at the Tully Rd intersection to the terminus of the NCC at the intersection of SR-108/SR-120 and Atlas Rd, which will require new roadway construction through the region, although less so when compared to Alternative 1A due to its continuation along Claribel Rd for an additional 3.5 miles. Alternative 2A will include four single point urban interchanges, two overcrossing structures for existing roads over NCC, two undercrossing structures over existing local roads, and two undercrossing/overhead structure combinations over existing local roads. Alternative 2A will also include twenty-four canal crossings, twenty-one at-grade and six elevated, one grade separation over the BNSF Railroad, two elevated railroad crossings with overhead structures, and two at-grade four-way roundabouts, one at a new intersection and one at an existing intersection.

Visual Assessment Unit 1 Resource Change:

The overall visual resource change in Visual Assessment Unit 1 as a result of Alternative 2A is expected to be moderate-low, as visual character and quality would change minimally from the current existing conditions. The change in visual character would be somewhat compatible, as all of the attributes which make up the visual character would slightly change as a result of the proposed alternative. The built-environment would still dominate the visual character and new roadways and overcrossings would contribute to this visual character attribute. The texture of the area would still be asphalt and the continuity of the area would increase for VAU1. Further the change in visual quality from Alternative 2A would be moderate as the vividness of VAU1 would decrease with the reduced number of distinctive, contrasting, and diverse elements, including the reduced number of rural residences and structures in the area. Still, the intactness and unity of the area will increase due to the currently developed lands adjacent to Alternative 2A becoming more developed, and developed in a more intact and uniform manner. The new built environment will be a typical visual intrusion into the built environment, and will combine with existing elements to create a more coherent, harmonious visual pattern.

Visual Assessment Unit 2 Resource Change:

The overall visual resource change in Visual Assessment Unit 2 as a result of Alternative 2A is expected to be moderate-low, as visual character and quality would change from the current existing conditions. The change in visual character would be somewhat incompatible, as the attributes which make up the visual character would change as a result of the proposed alternative. The new roadway would dominate the visual character of the region, and would change the texture of the area from agricultural land to asphalt. Further the change in visual quality from the proposed Alternative 2A would be moderate as the intactness and unity of the area decrease. The intactness and unity of the area would decrease due to the lands adjacent to Alternative 2A being converted from primarily undisturbed agricultural lands to a heavily disturbed predominately built environment to accommodate the new highway. The new built environment will be a non-typical visual intrusion into the otherwise undeveloped rural agricultural setting of the landscape, and will not combine with existing elements to create a coherent, harmonious visual pattern.

Alternative 1B

Project changes within Alternative 1B include the extension of Kiernan Ave/SR-219 at the Tully Rd intersection to the terminus of the NCC at the intersection of SR-108/SR-120, approximately 0.5 mi southwest of Lancaster Rd, which will require new roadway construction through the region. Alternative 1B will include four single point urban interchanges, five overcrossing structures for existing roads over the NCC, nineteen at-grade canal crossings, four elevated canal crossings, one grade separation over the BNSF Railroad, two elevated railroad crossings with overhead structures, one at-grade four-way roundabout, and one at-grade three-way roundabout.

Visual Assessment Unit 1 Resource Change:

The overall visual resource change in Visual Assessment Unit 1 as a result of Alternative 1B is expected to be moderate-low, as visual character and quality would change minimally from the current existing conditions. The change in visual character would be somewhat compatible, as all of the attributes which make up the visual character would slightly change as a result of the proposed alternative. The built-environment would still dominate the visual character and new roadways and overcrossings would contribute to this visual character attribute. The texture of the area would still be asphalt and the continuity of the area would increase for VAU1. Further the change in visual quality from Alternative 1B would be moderate as the vividness of VAU1 would decrease with the reduced number of distinctive, contrasting, and diverse elements, including the reduced number of rural residences and structures in the area. Still, the intactness and unity of the area will increase due to the currently developed lands adjacent to Alternative 1B becoming more developed, and developed in a more intact and uniform manner. The new built environment will be a typical visual intrusion into the existing built environment, and will combine with existing elements to create a more coherent, harmonious visual pattern.

Visual Assessment Unit 2 Resource Change:

The overall visual resource change in Visual Assessment Unit 2 as a result of Alternative 1B is expected to be moderate-low, as visual character and quality would change from the current existing conditions. The change in visual character would be somewhat incompatible, as the attributes which make up the visual character would change as a result of the proposed alternative. The new roadway would dominate the visual character of the region, and would change the texture of the area from agricultural land to asphalt. Further the change in visual quality from the proposed Alternative 1B would be moderate-high as the intactness and unity of the area decrease. The intactness and unity of the area would decrease due to the lands adjacent to Alternative 1B being converted from primarily undisturbed agricultural lands to a heavily disturbed predominately built environment to accommodate the new highway. The new built environment will be a non-typical visual intrusion into the otherwise undeveloped rural agricultural setting of the landscape, and will not combine with existing elements to create a coherent, harmonious visual pattern.

Alternative 2B

Project changes within Alternative 2B include the extension of Kiernan Ave/SR-219 at the Tully Rd intersection to the terminus of the NCC at the intersection of SR-108/SR-120, approximately 0.5 mi southwest of Lancaster Rd, which will require new roadway construction through the region, although less so when compared to Alternative 1B due to its continuation along Claribel Rd for an additional 3.5 miles. Alternative 2B will include four single point urban interchanges, five overcrossing structures for existing roads over the NCC, one undercrossing structure over existing local roads, twenty-five at-grade and seven elevated canal crossings, one grade separation over the BNSF Railroad, two elevated railroad

crossings with overhead structures, one at-grade four-way roundabout, and one at-grade three-way roundabout.

Visual Assessment Unit 1 Resource Change:

The overall visual resource change in Visual Assessment Unit 1 as a result of Alternative 2B is expected to be moderate-low, as visual character and quality would change minimally from the current existing conditions. The change in visual character would be somewhat compatible, as all of the attributes which make up the visual character would slightly change as a result of the proposed alternative. The built-environment would still dominate the visual character and new roadways and overcrossings would contribute to this visual character attribute. The texture of the area would still be asphalt and the continuity of the area would increase for VAU1. Further the change in visual quality from Alternative 2B would be moderate as the vividness of VAU1 would decrease with the reduced number of distinctive, contrasting, and diverse elements, including the reduced number of rural residences and structures in the area. Still, the intactness and unity of the area will increase due to the currently developed lands adjacent to Alternative 2B becoming more developed, and developed in a more intact and uniform manner. The new built environment will be a typical visual intrusion into the built environment, and will combine with existing elements to create a more coherent, harmonious visual pattern.

Visual Assessment Unit 2 Resource Change:

The overall visual resource change in Visual Assessment Unit 2 as a result of Alternative 2B is expected to be moderate, as visual character and quality would change noticeably from the current existing conditions. The change in visual character would be somewhat incompatible, as the attributes which make up the visual character would change as a result of the proposed alternative. The new roadway would dominate the visual character of the region, and would change the texture of the area from agricultural land to asphalt. Further the change in visual quality from the proposed Alternative 2B would be moderate as the intactness and unity of the area decrease. The intactness and unity of the area would decrease due to the lands adjacent to Alternative 2B being converted from primarily undisturbed agricultural lands to a heavily disturbed predominately built environment to accommodate the new highway. The new built environment will be a non-typical visual intrusion into the otherwise undeveloped rural agricultural setting of the landscape, and will not combine with existing elements to create a coherent, harmonious visual pattern.

VIII. VIEWERS AND VIEWER RESPONSE

The population affected by the project is composed of *viewers*. Viewers are people whose views of the landscape may be altered by the proposed project—either because the landscape itself has changed or their perception of the landscape has changed.

Viewers, or more specifically the response viewers have to changes in their visual environment, are one of two variables that determine the extent of visual impacts that will be caused by the construction and operation of the proposed project. The other variable is the change to visual resources discussed earlier in *Section VII Visual Resources and Resource Change*.

Types of Viewers

There are two major types of viewer groups for highway projects: highway neighbors and highway users. Each viewer group has their own particular level of *viewer exposure* and *viewer sensitivity*, resulting in

distinct and predictable visual concerns for each group which help to predict their responses to visual changes.

HIGHWAY NEIGHBORS (Views to the Road)

Highway neighbors are people who have views *to* the road. They can be subdivided into different viewer groups by land use. For example, residential, commercial, industrial, retail, institutional, civic, educational, recreational, and agricultural land uses may generate highway neighbors or viewer groups with distinct reasons for being in the corridor and therefore having distinct responses to changes in visual resources. For this project the following highway neighbors were considered:

- Residents

HIGHWAY USERS (Views from the Road)

Highway users are people who have views *from* the road. They can be subdivided into different viewer groups in two different ways—by mode of travel or by reason for travel. For example, subdividing highway users by mode of travel may yield pedestrians, bicyclists, transit riders, car drivers and passengers, and truck drivers. Dividing highway users or viewer groups by reason for travel creates categories like tourists, commuters, and haulers. It is also possible to use both mode and reason for travel simultaneously, creating a category like *bicycling tourists*, for example. For this project the following highway users were considered:

- Motorists

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. Viewer exposure has three attributes: location, quantity, 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 exposure the object has to viewers. *Duration* refers to how long a viewer is able to keep an object in view. The longer an object can be kept in view, the more exposure. High viewer exposure helps predict that viewers will have a response to a visual change.

For the residential viewer exposure is moderately-high. The location of residents was rated moderate as many of the residences are located physically close to the proposed project area. However, the quantity of the viewers is low due to the relatively small number of homes in the project area. The duration of these viewers is high, due to their long term and constant presence in the area.

For the motorist viewer exposure is moderately-high. The location of the motorists was rated high, as the motorists would travel along the new roadway. The quantity of motorists that would travel this section of the road would be moderately-high as the corridor is heavily used by commuters and tourists proceeding to Yosemite. The duration of these viewers would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context.

VIEWER SENSITIVITY

Viewer sensitivity is a measure of the viewer's recognition of a particular object. 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. High viewer sensitivity helps predict that viewers will have a high concern for any visual change.

The residents within the project area are a viewer group; their sensitivity is high due to the large amount of time spent in the area and potential changes to their views from their homes. The awareness of this group is moderately-high as the residents focus is not on the road. The value of aesthetics to residents is likely to be high in the project area considering the rural surroundings.

Motorists are a viewer group; their sensitivity is moderately-low due to the relatively short time span spent along the proposed project. The motorists' activity level within the project area is high as they are traveling at a moderate rate of speed and not able to be engaged in observing their surroundings. The awareness of motorists is high as it is focused on the roadway. While some of the motorists would be residents, a large number of motorists are likely to be commuters and tourists proceeding to Yosemite and are less likely to value aesthetics within the project area.

GROUP VIEWER RESPONSE

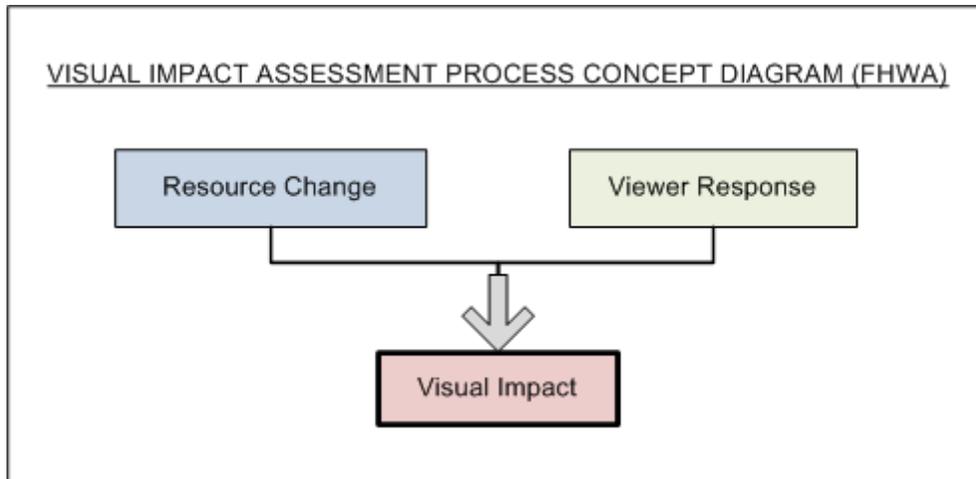
The narrative descriptions of viewer exposure and viewer sensitivity for each viewer group were merged to establish the overall viewer response of each group.

The resident viewer group has a moderately-high viewer response due to moderately-high viewer exposure and moderately-high viewer sensitivity.

The motorist viewer group has a moderate viewer response due to moderately-high viewer exposure and moderately-low viewer sensitivity.

IX. VISUAL IMPACT

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. These impacts can be beneficial or detrimental. Cumulative impacts and temporary impacts due to the contractor's operations are also considered. A generalized visual impact assessment process is illustrated in the following diagram:



The table below provides a reference for determining levels of visual impact by combining resource change and viewer response.

TABLE 1. Visual Impact Ratings Using Viewer Response and Resource Change

		Viewer Response				
		Low (L)	Moderate-Low (ML)	Moderate (M)	Moderate-High (MH)	High (H)
Resource Change	Low (L)	L	ML	ML	M	M
	Moderate-Low (ML)	ML	ML	M	M	MH
	Moderate (M)	ML	M	M	MH	MH
	Moderate-High (MH)	M	M	MH	MH	H
	High (H)	M	MH	MH	H	H

Visual Impacts by Visual Assessment Unit and Alternative

Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a number of key views associated with visual assessment units that would most clearly demonstrate the change in the project’s visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the project considering exposure and sensitivity. In addition, these key views will be analyzed for each proposed alternative.

This VIA also considers the potential impacts of a No-Build Alternative. The No-Build Alternative would result in no change to the project corridor. Therefore, the visual character and quality of the project site and vicinity would remain similar to that described in Section VI, *Visual Resources and Resource Change*. The No-Build Alternative would allow for all of the existing mature trees and vegetation along the project site to remain, as well as all of the existing agricultural lands. However, the No-Build Alternative would also result in more traffic congestion as population growth and the associated amount of freeway travelers continue to increase, which reduces the visual character and quality of the area.

The following section describes and illustrates visual impacts by visual assessment unit, compares existing conditions to the proposed alternatives, and includes the predicted viewer response.

VISUAL ASSESSMENT UNIT 1: DEVELOPED –RURAL BUILT ENVIRONMENT

KEY VIEW (KV)-2 – From Terminal Ave approximately 0.1 mi south of Claribel Rd looking north.

Existing Condition

KV-2 represents the view experienced by motorists driving northbound on Terminal Ave approximately 0.1 south of Claribel Rd (see Figure 5). KV-2 is comprised of a two-lane road over a canal, a rural residence, utility lines, the railroad, and the intersection with Claribel Rd. This view has diverse textures and colors, but the view lacks continuity. This view has moderate-low vividness due to the barren landcover, flat landform, and lack of memorable features. Intactness in this view is moderate as the features in this view are appropriate for the area. Unity in this view is low as the features in this view are not well integrated. Overall, the visual quality in this view is moderate-low.

Viewer Response

KV-2 represents a typical view from a motorist along Terminal Ave, which will pass under the proposed NCC structures. The motorists in KV-2 would be directly exposed to the changes along Terminal Ave from the NCC in VAU1. The motorists will view the vehicles anticipated to travel this portion of the NCC each day. The viewer exposure duration is low, as the views will be brief and fleeting, although these viewers would notice change in this portion of the project site. Overall viewer response in KV-2 would be moderate. Residents were not considered in the viewer response of KV-2 as all views from residents along Terminal Ave, south of Claribel Rd, are obscured by existing rows of trees.

Proposed Condition – Alternatives 1A, 2A, 1B, and 2B

Proposed changes under Alternatives 1A, 2A, 1B, and 2B visible in KV-2 include the new elevated NCC structure and associated earthen fill. The rural residence to the east of Terminal Ave will be replaced with a view of the earthen fill, and the electrical poles in the background would be very distant. Residential structures in the distance would also no longer be visible as a result of the proposed project. Caltrans fencing would be visible adjacent to the NCC and running up the earthen fill. The duration of these views would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context. The following analyses apply to Alternative 1A, 2A, 1B, and 2B, as these alternatives would result in the same visual impacts.

Resource Change

Based on evaluation of the project photo-simulation shown in Figure 6, visual resource change would be low with the build alternatives. Visual character change would be compatible as the proposed project creates a new overpass over Terminal Ave. The existing built environment including residential structures is the dominate feature in the landscape, in which the new NCC structure will replace and become the new dominate feature. Visual quality would be slightly lower as a result of the build alternatives, and would be rated low, with the addition of the elevated alignment combined with the continued barren landcover, flat landform, and the lack of memorable features. Intactness of the view would remain moderate, as visual encroachment in the view is the new NCC structure, which is similarly appropriate for the area. Unity would remain moderate-low as the new man-made interchange and NCC will combine with the surrounding environment to continue to create a uniform pattern.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 5: KV-2 Existing Condition – Terminal Ave looking North



Figure 6: KV-2 Proposed Condition – Terminal Ave looking North – Alternatives 1A, 2A, 1B and 2B



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 2. Visual Character Numerical Evaluation for KV-2, Alternatives 1A, 2A, 1B and 2B	
Visual Character (Compatibility) Change =	0.0

Visual Character = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 3. Visual Quality Numerical Evaluation for KV-2, Alternatives 1A, 2A, 1B and 2B				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	2	4	2	2.67
Alternative Rating	1	4	2	2.33
Visual Quality Change =				-0.34

Existing and Alternative Ratings = a range from 0.0 to 7.0 where 0.0 represents lower visual quality and 7.0 higher visual quality

Visual Quality Change = numerical difference of the average Existing Rating and average Alternative Rating (If the average for “Alternative Rating” (V+I+U/3) is less than the average for “Existing Rating” (V+I+U/3), the Visual Quality Resource Change will be a negative change. If the average for “Alternative Rating” is greater than the average for “Existing Rating”, the Visual Quality Resource Change will be a positive change.)

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 4. Visual Resource Change Numerical Rating for KV-2, Alternatives 1A, 2A, 1B and 2B	
Visual Character Change Rating (from table above)	0.0
Visual Quality Change Rating (from table above)	-0.34
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	-0.17

The table below provides a reference for comparing numerical ratings of visual resource change to the equivalent narrative ratings previously discussed in *Section VII Visual Resources and Resource Change*.

TABLE 5. Comparing Numerical and Narrative Ratings of Visual Resource Change															
	Negative Visual Resource Change								Positive Visual Resource Change						
Rating	-7.0	-6.0	-5.0	-4.0	-3.0	-2.0	-1.0	0	1.0	2.0	3.0	4.0	5.0	6.0	7.0
Equivalent Narrative Rating	High	High	Moderately High	Moderate	Moderate	Moderately Low	Low	No Change	Low	Moderately Low	Moderate	Moderate	Moderately High	High	High

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 6. Viewer Response Numerical Rating for KV-2, Alternatives 1A, 2A, 1B and 2B	
Viewer Exposure Rating	4
Viewer Sensitivity Rating	2
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	3

The table below provides a reference for comparing numerical ratings of visual resource change to the equivalent narrative ratings previously discussed in *Section VIII Viewers and Viewer Response*.

TABLE 7. Comparing Numerical and Narrative Ratings of Viewer Response								
Viewer Response Numerical Rating	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0
Equivalent Viewer Response Narrative Rating	Low	Low	Moderate-Low	Moderate	Moderate	Moderate-High	High	High

KV-4 – From Warnerville Rd approximately 0.5 mi west of South Stearns Rd looking east.

Existing Condition

KV-4 represents the view experience by motorists driving eastbound on Warnerville Rd approximately 0.5 mi west of South Stearns Rd (see Figure 7). The view is composed of the two-lane road, gravel shoulders, agricultural land, and a rural residence. The landform in this view is flat, and the landcover is dominated by the manmade road and agricultural features. Vividness in this view is moderate due to the open agricultural fields and unobstructed view of the open sky but still contains limited views and lack of memorable features. Intactness in the view is moderate as visual eyesores are present in the view such as utilities; however, these are suitable for the area. Unity in this view is moderate as the manmade and agricultural features combine in a structured pattern but the view still lacks natural elements. Overall, visual quality in this view is moderate.

Viewer Response

KV-4 represents a typical view from a motorist along Warnerville Rd, which will pass under the proposed NCC structures. The motorists in KV-4 would be directly exposed to the changes along Warnerville Rd from the NCC in VAU1. The motorists will view the vehicles anticipated to travel this portion of the NCC each day. The viewer exposure duration is low, as the views will be brief and fleeting, although these viewers would notice change in this portion of the project site. Overall viewer response in KV-4 would be moderate. Residents were not considered in the viewer response of KV-4 as views from residents along Warnerville Rd are obscured by existing structures and trees.

Proposed Condition – Alternatives 1A and 2A

Proposed changes under Alternatives 1A and 2A visible in Key View 2 include the new elevated NCC structure and associated earthen fill. The rural residence to the south of Warnerville Rd will be replaced with a view of the earthen fill, and the open fields and utilities along the side of the road would no longer be visible. Views of the trees to the north of Warnerville Rd will also be disrupted by the proposed NCC structures, although the rural residential house in the distance will still be visible. The fences in the view would be removed and Caltrans fencing would be visible running up the earthen fill. The duration of these views would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context. The following analyses apply to Alternative 1A and 2A, as these alternatives would result in the same visual impacts.

Resource Change

Based on evaluation of the project photo-simulation shown in Figure 8, visual resource change would be low with the build alternatives. Visual character change would be somewhat incompatible as the proposed project creates a new elevated overpass over Warnerville Rd. The existing built environment including residential structures, power lines, walls, and fences is the dominate feature in the landscape, in which the new elevated NCC structure will replace and become the new dominate feature. The views of open agricultural fields will also be obscured. The visual quality would decrease from moderate to moderate-low due to vividness being rated low as a result of the addition of the elevated alignment combined with the barren landcover, flat landform, and lack of memorable features. Intactness of the view would be slightly lower, but would still be rated moderate, as visual encroachment in the view is the new NCC structure, which will be viewed as a non-typical intrusion. Unity would be slightly lower, but still rated moderate as a result of the build alternatives, as the new man-made interchange and NCC will combine with the surrounding built environment to create a more uniform pattern.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 7: KV-4 Existing Condition - From Warnerville Rd looking East



Figure 8: KV-4 Proposed Condition - From Warnerville Rd looking East – Alternatives 1A and 2A



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 8. Visual Character Numerical Evaluation for KV-4, Alternatives 1A and 2A	
Visual Character (Compatibility) Change =	-1.0

Visual Character = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 9. Visual Quality Numerical Evaluation for KV-4, Alternatives 1A and 2A				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	3	4	4	3.67
Alternative Rating	1	3	3	2.33
Visual Quality Change =				-1.34

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 10. Visual Resource Change Numerical Rating for KV-4, Alternatives 1A and 2A	
Visual Character Change Rating (from table above)	-1.0
Visual Quality Change Rating (from table above)	-1.34
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	-1.17

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 11. Viewer Response Numerical Rating for KV-4, Alternatives 1A and 2A	
Viewer Exposure Rating	4
Viewer Sensitivity Rating	2
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	3

KV-7– From Atlas Rd and SR-108/SR-120 looking south.

Existing Condition

KV-7 represents the view experienced by motorists driving southbound on Atlas Rd approaching SR-108/SR-120 (see Figure 9). The view is composed of the two-lane street, sidewalks, the two-lane highway, and an orchard. This view is visually dominated by manmade features with straight lines and a smooth texture contrasted with the irregular lines and rough textures of the orchard in the background. Vividness in this view is low due to the lack of distinctive or memorable visual features. Intactness in this view is moderately-high as the visual elements in the view are appropriate for the landscape, and the only visual eyesores in this view include the utility lines. Unity in the view is moderate-low as the visual elements combine to form an organized visual pattern. Overall, visual quality in this scene is moderate.

Viewer Response

KV-7 represents a typical view from a motorist along Atlas Rd, which will intersect the terminus of NCC at SR-108/SR-120, at the proposed roundabout. The motorists in KV-7 would be directly exposed to the changes along Atlas Rd from the NCC in VAU1. The motorists will view the vehicles anticipated to travel this portion of the NCC each day. The viewer exposure duration is low, as the views will be brief and fleeting, although these viewers would notice change in this portion of the project site. Overall viewer response in KV-7 would be moderate. Residents were not considered in the viewer response of KV-7 as views from residents along Atlas Rd are obscured by existing fences and trees.

Proposed Condition – Alternatives 1A and 2A

Proposed changes under Alternatives 1A and 2A visible in Key View 7 include the new roundabout at the terminus of NCC at the intersection of SR-108/SR-120 and the new NCC roadway extending into the distance. The orchard south of SR-108 will lose a few rows of trees to accommodate the new roadway, and the fence line and associated vegetation will be reduced to accommodate the new roadway. Some utilities will remain, and new streetlights will be added to the intersection. The duration of these views would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context. The following analyses apply to Alternative 1A and 2A, as these alternatives would result in the same visual impacts.

Resource Change

Based on evaluation of the project photo-simulation shown in Figure 10, visual resource change would be low with the build alternatives. Visual character change would be somewhat incompatible as the proposed project creates a roundabout at the terminus of the NCC. The existing built environment including residential fences is the dominate feature in the landscape, in which the new roundabout will replace and become the new dominate feature. Visual quality would remain moderate, as vividness would be the same with the build alternatives and would remain low due to continued barren landcover, flat landform, and lack of memorable features. Intactness of the view would be slightly higher, and would be rated as high as a result of the build alternative, as the new roundabout will be viewed as a more typical feature in the environment. Unity would be higher, and would be rated as moderate, as the new roundabout and associated NCC roadway will combine with the surrounding environment to create a more uniform pattern.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 9: KV-7 Existing Condition - From Atlas Rd and SR-108/SR-120 looking South



Figure 10: KV-7 Proposed Condition – From Atlas Rd and SR-108/SR-120 looking South - Alternatives 1A and 2A



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 12. Visual Character Numerical Evaluation for KV-7, Alternatives 1A and 2A	
Visual Character (Compatibility) Change =	-1.0

Visual Character = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 13. Visual Quality Numerical Evaluation for KV-7, Alternatives 1A and 2A				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	1	5	2	2.67
Alternative Rating	1	6	3	3.33
Visual Quality Change =				+0.66

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 14. Visual Resource Change Numerical Rating for KV-7, Alternatives 1A and 2A	
Visual Character Change Rating (from table above)	-1.0
Visual Quality Change Rating (from table above)	+0.66
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	-0.17

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 15. Viewer Response Numerical Rating for KV-7, Alternatives 1A and 2A	
Viewer Exposure Rating	4
Viewer Sensitivity Rating	2
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	3

KV-8 – From Claribel Rd approximately 0.2 mi east of Eleanor Ave/McGee Ave looking west.

Existing Condition

KV-8 represents the view experienced by motorists driving westbound on Claribel Rd approximately 0.2 mi east of Eleanor Ave/McGee Ave (see Figure 11). The view is composed of the two-lane road, rural residence, utilities, and grazing land. The straight and smooth road surface is contrasted by the irregular lines and rough textures of the grazing land and trees. This view has moderate-low vividness due to the contrasting nature of the built and natural environment. Intactness in this view is moderate-low as the large electrical towers and utilities encroach on this rural view. Unity in this view is moderate as the manmade and natural elements in the view do not form a cohesive visual pattern. Overall, the visual quality is moderate.

Viewer Response

KV-8 represents a typical view from a motorist along Claribel Rd, which will become the westbound lane of the NCC, in which the local road will be moved north and south adjacent to the NCC. The motorists in KV-8 would be directly exposed to the changes along Claribel Rd from the NCC in VAU1. The motorists will view the vehicles anticipated to travel this portion of the NCC each day. The viewer exposure duration is low, as the views will be brief and fleeting, although these viewers would notice change in this portion of the project site. Overall viewer response in KV-8 would be moderate. Residents were not considered in the viewer response of KV-8 as views from residents along Claribel Rd are obscured by existing structures and trees.

Proposed Condition – Alternatives 2A and 2B

Proposed changes under Alternatives 2A and 2B visible in KV-8 include the addition of the east and westbound NCC lanes, and widened local access road to the north and south. The overcrossing structure and associated earthen fill for Eleanor Ave over the NCC is also visible in the background. The residential structures to the north of the existing Claribel Rd would no longer be in the viewshed, nor would the fences. The large electrical towers would no longer be visible from this view as they will be relocated south of the local access roadway. The utilities would shift from their current position along Claribel Rd north, adjacent to the proposed local access roadway. The existing fences would be removed and replaced with Caltrans fencing adjacent to the NCC. The duration of these views would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context. The following analyses apply to Alternative 2A and 2B, as these two alternatives would result in the same visual impacts.

Resource Change

There would be no visual resource change as a result of the proposed project. Visual character change would be somewhat incompatible as the proposed NCC replaces the existing local access road and rural residential development in the vicinity, as shown in Figure 12. The existing rural residential development is the dominate feature in the landscape, in which the NCC will replace and become the new dominate feature. Visual quality would be moderate with the built alternatives, as the rural residential development will be replaced with contrasting visual elements, increasing the vividness from moderate-low to moderate. Intactness of the view would be slightly higher as well, and would be rated as moderate, as the new roadway and elevated structure in the distance will be viewed as a more typical feature in the built environment. Unity would also be higher, and would be rated as moderately-high, as the new man-made NCC and elevated structure in the distance will further combine with the surrounding environment to create a more uniform pattern.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 11: KV-8 Existing Condition - From Claribel Rd looking West



Figure 12: KV-8 Proposed Condition – From Claribel Rd looking West - Alternatives 2A and 2B



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 16. Visual Character Numerical Evaluation for KV-8, Alternatives 2A and 2B	
Visual Character (Compatibility) Change =	-1.0

Visual Character = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 17. Visual Quality Numerical Evaluation for KV-8, Alternatives 2A and 2B				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	2	2	4	2.67
Alternative Rating	3	3	5	3.67
Visual Quality Change =				+1.0

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 18. Visual Resource Change Numerical Rating for KV-8, Alternatives 2A and 2B	
Visual Character Change Rating (from table above)	-1.0
Visual Quality Change Rating (from table above)	+1.0
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	0.0

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 19. Viewer Response Numerical Rating for KV-8, Alternatives 2A and 2B	
Viewer Exposure Rating	4
Viewer Sensitivity Rating	2
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	3

VISUAL ASSESSMENT UNIT 2: AGRICULTURAL AND UNDEVELOPED ENVIRONMENT

KV-1 – From Oakdale Rd approximately 0.1 mi south of Claribel Rd looking north

Existing Condition

KV-1 represents the view experienced by motorists driving northbound on Oakdale Rd from Claratina Ave (see Figure 13). KV-1 is comprised of the two-lane road, dirt shoulders, and orchards. The view is visually dominated by the straight lines of the roadway, orchards, and utilities. This view has moderate-low vividness due to the lack of distinctive visual features and the flat landform only allows the adjacent orchard to be visible. Intactness is moderate-high as the agricultural nature of this view is only disrupted by the utilities and roadway. Unity is moderate as the orchards and rural road integrate with each other in a structured, but not harmonious, visual pattern. Overall, the visual quality in this view is moderate.

Viewer Response

KV-1 represents a typical view from a motorist along a local access road. The motorists in KV-1 would be directly exposed to the changes along the Oakdale Rd from the NCC in VAU2. Vehicles are anticipated to travel this portion of Oakdale Rd each day. The viewer exposure duration is ultimately dependent on the distance of the project site the motorists drives and the density of traffic, especially during peak travel period, these viewers would likely notice change in this portion of the project site. Overall viewer response in KV-1 would be moderate. Residents were not considered in the viewer response of KV-1 as views from residents along Oakdale Rd are obscured by existing structures and trees.

Proposed Condition – Alternatives 1A, 2A, 1B, and 2B

Proposed changes under Alternatives 1A, 2A, 1B, and 2B visible in KV-1 include the widening of Oakdale Rd from two lanes to seven lanes to accommodate the new single point interchange at the intersection of NCC and Oakdale Rd. Additional changes include the elevated undercrossing of NCC over Oakdale Rd and the associated earthen fill and walls. The Hetch-Hetchy electrical towers will still be visible in the distance; however, the utilities currently present will be relocated along Oakdale Rd and will no longer be visible from this view. The duration of these views would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context. The following analyses apply to all alternatives, as all alternatives would result in the same visual impacts.

Resource Change

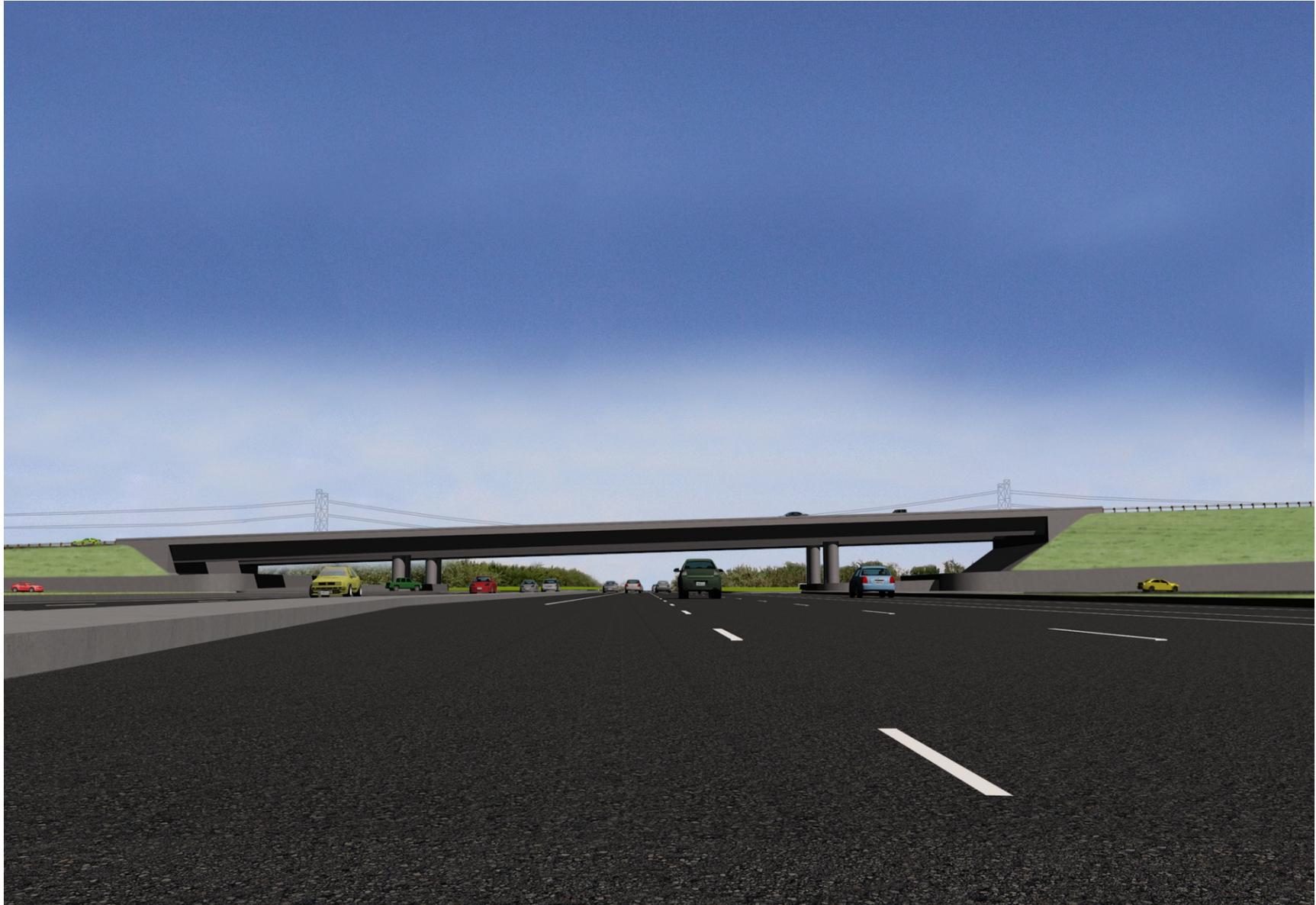
Based on evaluation of the project photo-simulation shown in Figure 14, visual resource change would be moderate-low with the build alternatives. Visual character change would be moderately incompatible as the new SR-108 is elevated in this view and would become the dominate feature in the landscape in place of the agricultural fields. The change from predominate rural to predominate developed environment will block many of the views of the agricultural fields and minimize views of the sky. Due to these changes with the build alternatives, visual quality was found to be reduced from moderate to moderate-low due to the vividness being rated as low as the orchard has been replaced by asphalt and embankments. Intactness of the view is also reduced from moderate-high to moderate due to the significant loss of orchards from the view. Unity is also reduced from moderate to moderate-low as the new SR-108 undercrossing does not form a harmonious visual pattern with the surrounding orchards.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 13: KV 1-Existing Condition – From Oakdale Rd looking North



Figure 14: KV-1 Proposed Condition – From Oakdale Rd looking North - Alternatives 1A, 1B, 2A, and 2B



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 20. Visual Character Numerical Evaluation for KV-1, Alternatives 1A, 2A, 1B, and 2B	
Visual Character (Compatibility) Change =	-2.0

VC = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 21. Visual Quality Numerical Evaluation for KV-1, Alternatives 1A, 2A, 1B, and 2B				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	2	5	4	3.66
Alternative Rating	1	3	2	2
Visual Quality Change =				-1.66

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 22. Visual Resource Change Numerical Rating for KV-1, Alternatives 1A, 2A, 1B, and 2B	
Visual Character Change Rating (from table above)	-2.0
Visual Quality Change Rating (from table above)	-1.66
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	-1.83

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 23. Viewer Response Numerical Rating for KV-1, Alternatives 1A, 2A, 1B, and 2B	
Viewer Exposure Rating	6
Viewer Sensitivity Rating	2
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	4

VR = a range from 0.0 to 7.0 where 0.0 represents lower viewer response and 7.0 a higher viewer response

KV-3 – From eastbound Patterson Rd, approximately 0.1 mi east of Langworth Rd

Existing Condition

KV-3 represents the view experience by motorists driving eastbound on Patterson Rd, approximately 0.1 mi east of Langworth Rd (see Figure 15). The view is composed of the two-lane road, gravel shoulders, and an orchard. The most prominent pattern in the view is the straight lines of the roadway, orchard, and utilities. The landform in this view is flat, and the landcover is dominated by the manmade road and agricultural features. Vividness in this view is low due to the limited views and lack of memorable features. Intactness is moderate as the only visual encroachment in the view is from the utilities. Unity in this view is moderately-low as the manmade features combine in a structured but disjointed pattern. Overall, the visual quality in this view is moderately-low.

Viewer Response

KV-3 represents a typical view from a motorist along a local access road. The motorists in KV-3 would be directly exposed to the changes along Patterson Rd from the NCC in VAU2. Vehicles are anticipated to travel this portion of Patterson Rd each day. The viewer exposure duration is ultimately dependent on the distance of the project site the motorists drives and the density of traffic, especially during peak travel period, these viewers would likely notice change in this portion of the project site. Overall viewer response in KV-3 would be moderate. Residents were not considered in the viewer response of KV-3 as views from residents along Patterson Rd are obscured by existing structures and trees.

Proposed Condition – Alternatives 1A and 1B

Proposed changes under Alternatives 1A and 1B visible in KV-3 include the widening of Patterson Rd to add paved shoulders and a two way left turn lane. Additional changes include the elevated overcrossing of Patterson Rd over NCC and the associated Caltrans fencing along the adjacent orchards. Utilities will now be located further away from Patterson Rd. The duration of these views would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context. The following analyses apply to Alternative 1A and 1B, as these two alternatives would result in the same visual impacts.

Resource Change

Based on evaluation of the project photo-simulation shown in Figure 16, visual resource change would be low with the build alternatives. Visual character change would be moderately incompatible as the new Patterson Rd looks similar in nature to the existing roadway, although it is wider and is elevated in this view. The existing roadway is the dominate feature in the landscape, and will continue to be the dominate feature as a result of the proposed project. Visual quality would remain moderately-low as the vividness would remain low, the intactness would remain moderate, and unity would remain moderate-low for the motorists in the area. The proposed project does not provide better views or memorable features, nor does the intactness or unity of the area improve as a result of the new roadway.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 15: KV-3 Existing Condition – From Patterson Rd looking East



Figure 16: KV-3 Proposed Condition – From Patterson Rd looking East - Alternatives 1A and 1B



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 24. Visual Character Numerical Evaluation for KV-3, Alternatives 1A and 1B	
Visual Character (Compatibility) Change =	-2.0

Visual Character = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 25. Visual Quality Numerical Evaluation for KV-3, Alternatives 1A and 1B				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	1	3	2	2
Alternative Rating	1	3	2	2
Visual Quality Change =				0

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 26. Visual Resource Change Numerical Rating for KV-3, Alternatives 1A and 1B	
Visual Character Change Rating (from table above)	-2.0
Visual Quality Change Rating (from table above)	0
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	-1

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 27. Viewer Response Numerical Rating for KV-3, Alternatives 1A and 1B	
Viewer Exposure Rating	4
Viewer Sensitivity Rating	2
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	3

KV-5 – From Townhill Rd, approximately 0.2 mi south of Knox Rd, looking east.

Existing Condition

KV-5 represents the view experience by residents along Townhill Rd (see Figure 17). The view is composed of a horse pasture, open agricultural fields, an orchard, and residential homes in the distance. The most prominent pattern in the view is straight lines of the orchard and agricultural fields. The landform in this view is flat, and the landcover is dominated by agricultural features. The colors and textures in this view provide a high degree of diversity. Vividness in this view is high as it allows for relatively distant views over seasonally green grazing land. Intactness is high due to the agricultural nature of most features in the view, but is limited by the large electrical tower in the view. Unity in this view is moderately-low as the visual patterns in the grazing land, orchard, electrical tower, and structures are not well integrated with each other. Overall, the visual quality in this view is moderate-high.

Viewer Response

KV-5 represents a typical view from residents along local roads adjacent to the proposed NCC. The residents in KV-5 would be directly exposed to the changes from the NCC in VAU2. Vehicles are anticipated to travel this portion of the NCC each day. The viewer exposure duration is considered to be fairly long and residents are highly aware of the surrounding visual environment. Overall viewer response in KV-5 would be moderate-high. Motorists were not considered in the viewer response of KV-5 as views from motorists along Townhill Rd would be too brief, too distant, and would be obscured by existing structures and trees.

Proposed Condition – Alternatives 1A and 2A

Proposed changes under Alternatives 1A and 2A visible in KV-5 include the addition of a new six lane roadway and unpaved median where some residential homes in the distance currently exist. These homes would be removed in order to accommodate the new NCC roadway. The duration of these views would be high; however, the extended period of exposure would be to similar unit context. The following analyses apply to Alternative 1A and 2A, as these two alternatives would result in the same visual impacts.

Resource Change

Based on evaluation of the project photo-simulation shown in Figure 18, visual resource change would be low with the build alternatives. Visual character change would be somewhat incompatible as the new NCC replaces existing residential development, both man-made features. The existing residential homes are the dominate feature in the distant landscape, in which the NCC will replace and become the new dominate feature in the distance. Visual quality would decrease slightly from moderate-high to moderate as the vividness would be slightly lower and rated moderate-high, intactness would remain high, and unity would remain moderate-low for the residents in the area. The proposed project does not provide better views or memorable features, nor does the intactness or unity of the area improve as a result of the new roadway in the distance.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 17: KV-5 Existing Condition - From Townhill Rd looking East



Figure 18: KV-5 Proposed Condition – From Townhill Rd looking East - Alternatives 1A and 2A



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 28. Visual Character Numerical Evaluation for KV-5, Alternatives 1A and 2A	
Visual Character (Compatibility) Change =	-1.0

Visual Character = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 29. Visual Quality Numerical Evaluation for KV-5, Alternatives 1A and 2A				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	6	6	2	4.66
Alternative Rating	5	6	2	4.33
Visual Quality Change =				-0.33

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 30. Visual Resource Change Numerical Rating for KV-5, Alternatives 1A and 2A	
Visual Character Change Rating (from table above)	-1.0
Visual Quality Change Rating (from table above)	-0.33
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	-0.67

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 31. Viewer Response Numerical Rating for KV-5, Alternatives 1A and 2A	
Viewer Exposure Rating	6
Viewer Sensitivity Rating	5
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	5.5

KV-6 – From S. Stearns Rd approximately 0.2 mi north of Sierra Rd looking north.

Existing Condition

KV-6 represents the view experience by motorists driving northbound on S. Stearns Rd, approximately 0.2 mi north of Sierra Rd (see Figure 19). The view is composed of the two-lane road, dirt shoulders, and fencing surrounding residential development to the west and an orchard to the east. The most prominent pattern in the view is the straight lines of the roadway, fencing, orchard, and utilities. The landform in this view is flat, and the landcover is dominated by the manmade road and agricultural features. Vividness in this view is moderate due to the views of open sky and agricultural fields, but lack of memorable features. Intactness is moderate as the only visual encroachment in the view is by the residential fencing and utilities. Unity in this view is moderately-low as the manmade features combine in a structured but disjointed pattern. Overall, the visual quality in this view is moderate.

Viewer Response

KV-6 represents a typical view from a motorist along a local access road. The motorists in KV-6 would be directly exposed to the changes along S. Stearns Rd from the NCC in VAU2. Vehicles are anticipated to travel this portion of S. Stearns Rd each day. The viewer exposure duration is ultimately dependent on the distance of the project site the motorists drives and the density of traffic, especially during peak travel period, these viewers would notice change in this portion of the project site. Overall viewer response in Key View 6 would be moderate. Residents were not considered in the viewer response of KV-6 as views from residents along S. Stearns Rd are obscured by existing structures and trees.

Proposed Condition – Alternatives 1A and 2A

Proposed changes under Alternatives 1A and 2A visible in KV-6 include the addition of the two NCC structures over S. Stearns Rd, associated earthen fill, and Caltrans fencing along the fill. The residential development including fences, agricultural fields would no longer exist within this view as a result of the proposed project. Some utilities would continue to exist in the distance of this view. The duration of these views would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context. The following analyses apply to Alternative 1A and 2A, as these two alternatives would result in the same visual impacts.

Resource Change

Based on evaluation of the project photo-simulation shown in Figure 20, visual resource change would be moderate-low with the build alternatives. Visual character change would be moderately incompatible as the proposed NCC structures remove the existing residential development and agricultural fields in the vicinity. The existing residential homes and agricultural fields are the dominate feature in the landscape, in which the NCC will replace and become the new dominate feature. The change from predominate rural to predominate developed environment will block many of the views of the agricultural fields and minimize views of the sky. Due to these changes with the build alternatives, visual quality would be moderate-low instead of moderate due to the vividness decreasing from moderate to low, as the agricultural lands will be replaced with earthen fill, and views of the orchards would be obscured by the new NCC structures. Intactness of the view would be moderate-low as a result of the project, as visual encroachment in the view is the new NCC structures, which are more visible then the residential fencing and utilities. Unity would remain moderate-low as the new man-made NCC structures continue to combine in structured and disjointed pattern.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 19: KV-6 Existing Condition - From S. Stearns Rd looking North



Figure 20: KV-6 Proposed Condition – From S. Stearns Rd looking North - Alternatives 1A and 2A



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 32. Visual Character Numerical Evaluation for KV-6, Alternatives 1A and 2A	
Visual Character (Compatibility) Change =	-2.0

Visual Character = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 33. Visual Quality Numerical Evaluation for KV-6, Alternatives 1A and 2A				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	3	3	2	2.67
Alternative Rating	1	2	2	1.67
Visual Quality Change =				-1.00

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 34. Visual Resource Change Numerical Rating for KV-6, Alternatives 1A and 2A	
Visual Character Change Rating (from table above)	-2.0
Visual Quality Change Rating (from table above)	-1.0
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	-1.5

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 35. Viewer Response Numerical Rating for KV-6, Alternatives 1A and 2A	
Viewer Exposure Rating	4
Viewer Sensitivity Rating	2
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	3

KV-9 – From Claribel Rd approximately 0.5 mi west of Albers Rd looking, west.

Existing Condition

KV-9 represents the view experience by motorists driving westbound on Claribel Rd, approximately 0.5 mi east of Albers Rd (see Figure 21). The view is composed of the two-lane road, utilities, ruderaly vegetated shoulders, agricultural fields on either side of the road, and a line of trees in front of a residential house in the distance. The most prominent pattern in the view is the straight lines of the roadway, agricultural fields, and utilities. The landform in this view is flat, and the landcover is dominated by the manmade road and agricultural features. Vividness in this view is moderate-low due to the limited views and lack of memorable features. Intactness is moderate as the only visual encroachment in the view is from the utilities. Unity in this view is moderately-low as the manmade features combine in a structured but disjointed pattern. Overall, the visual quality in this view is moderately-low.

Viewer Response

KV-9 represents a typical view from a motorist along a local access road, which will become the proposed NCC. The motorists in KV-9 would be directly exposed to the changes along Claribel Rd from the NCC in VAU2. Vehicles are anticipated to travel this portion of the NCC each day. The viewer exposure duration is ultimately dependent on the distance of the project site the motorists drives and the density of traffic, especially during peak travel period, these viewers would notice change in this portion of the project site. Overall viewer response in KV-9 would be moderate-high. Residents were not considered in the viewer response of KV-9 as views from residents along Claribel Rd are obscured by existing trees.

Proposed Condition – Alternatives 2A and 2B

Proposed changes under Alternatives 2A and 2B visible in KV-9 include the addition of the east and westbound NCC lanes, and widened local access roads to the north and south. The line of trees in front of the residential house in the distance will remain in the view, although the agricultural fields would no longer exist within this view as a result of the proposed project. The fences alongside the agricultural fields would be removed and replaced with Caltrans fencing between the NCC and local access roads. The large electrical towers would be located south of the southern local access road, in the distance of this view, and the utilities would be relocated to north of the northern local access road, in the periphery of this view. The duration of these views would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context. The following analyses apply to Alternative 2A and 2B, as these two alternatives would result in the same visual impacts.

Resource Change

Based on evaluation of the project photo-simulation shown in Figure 22, visual resource change would be moderate-low with the build alternatives. Visual character change would be moderately incompatible as the proposed NCC replaces the existing Claribel Rd and agricultural fields in the vicinity. The existing agricultural fields are the dominate feature in the landscape, in which the NCC will replace and become the new dominate feature. Visual quality would be low with the build alternatives due to a low vividness as the agricultural lands will be replaced with pavement. Intactness of the view would be moderate-low, as visual encroachment in the view is the new lanes for the proposed NCC, which are more visible then the existing features. Unity would be low as the new man-made NCC will further combine with the surrounding environment to create a more disjointed pattern.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 21: KV-9 Existing Condition - From Claribel Rd looking West



Figure 22: KV-9 Proposed Condition – From Claribel Rd looking West - Alternatives 2A and 2B



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 36. Visual Character Numerical Evaluation for KV-9, Alternatives 2A and 2B	
Visual Character (Compatibility) Change =	-2.0

Visual Character = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 37. Visual Quality Numerical Evaluation for KV-9, Alternatives 2A and 2B				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	2	4	2	2.33
Alternative Rating	1	2	1	1.33
Visual Quality Change =				-1.0

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 38. Visual Resource Change Numerical Rating for KV-9, Alternatives 2A and 2B	
Visual Character Change Rating (from table above)	-2.0
Visual Quality Change Rating (from table above)	-1.0
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	-1.5

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 39. Viewer Response Numerical Rating for KV-9, Alternatives 2A and 2B	
Viewer Exposure Rating	4
Viewer Sensitivity Rating	2
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	3

KV-10 – From Warnerville Rd approximately 0.25 mi east of Stoddard Rd looking east.

Existing Condition

KV-10 represents the view experienced by motorists driving eastbound on Warnerville Rd approximately 0.25 mi east of Stoddard Rd (see Figure 23). The view is composed of a two-lane road, unpaved shoulders, grazing land to the north, an orchard to the south, and a rural residential complex in the distance containing a house, barn, and farm associated structures. The view is visually dominated by the straight lines of the roadway, orchards, and utilities. The vividness in this view is moderate due to the view of open agricultural fields and sky but lacks of memorable visual elements. Intactness in this view is moderate as the agricultural nature of the view only slightly disrupted by the utilities. Unity in the view is moderate-low as the features do not come together to form a cohesive pattern. Overall, the visual quality of this view is moderate.

Viewer Response

KV-10 represents a typical view from a motorist along a local access road, which will pass under the proposed NCC. The motorists in KV-10 would be directly exposed to the changes along Warnerville Rd from the NCC in VAU2. The viewer exposure duration is anticipated to be brief, as traffic levels along Warnerville Rd are anticipated to continue to operate at a high level of service, although these viewers would notice change in this portion of the project site. Overall viewer response in Key View 10 would be moderate. Residents were not considered in the viewer response of KV-10 as views from residents along Warnerville Rd are obscured by existing structures and trees.

Proposed Condition – Alternative 2B

Proposed changes under Alternative 2B visible in KV-10 include the addition of the NCC structures over Warnerville Rd and associated earthen fill. The grazing land to the north and the orchard to the south are interrupted by the earthen fill for the structures, and the utilities would be modified within this view as a result of the proposed project. The fences alongside the agricultural fields would be removed and replaced with Caltrans fencing alongside Warnerville Rd and up the earthen fill. The duration of these views would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context. The following analyses apply to Alternative 2B, as this is the only alternative resulting in visual impact.

Resource Change

Based on evaluation of the project photo-simulation shown in Figure 24, visual resource change would be low with the implementation of Build Alternative 2B. Visual character change would be somewhat incompatible as the proposed NCC becomes a new dominant feature in the view along with the existing roadway. The change from predominant rural to predominant developed environment will block many of the views of the agricultural fields and minimize views of the sky. Due to these changes with the build alternatives, visual quality would be lower and rated moderate-low due to the NCC replacing views of the built environment in the distance, which will result in moderate-low vividness. Intactness of the view would also be moderate-low, as visual encroachment in the view is the new NCC structures, which are more visible than the existing features. Unity would be rated as low as the new man-made NCC will further combine with the surrounding rural environment to create a more disjointed pattern.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 23: KV-10 Existing Condition - From Warnerville Rd looking East



Figure 24: KV-10 Proposed Condition – From Warnerville Rd looking East - Alternatives 2B



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 40. Visual Character Numerical Evaluation for KV-10, Alternative 2B	
Visual Character (Compatibility) Change =	-1.0

Visual Character = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 41. Visual Quality Numerical Evaluation for KV-10, Alternative 2B				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	3	3	2	2.67
Alternative Rating	2	2	1	1.67
Visual Quality Change =				-1.00

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 42. Visual Resource Change Numerical Rating for KV-10, Alternative 2B	
Visual Character Change Rating (from table above)	-1.0
Visual Quality Change Rating (from table above)	-1.0
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	-1.0

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 43. Viewer Response Numerical Rating for KV-10, Alternative 2B	
Viewer Exposure Rating	4
Viewer Sensitivity Rating	2
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	3

KV-11– From Fogarty Rd, approximately 0.25 mi west of Emery Rd, looking east.

Existing Condition

KV-11 represents the view experience by motorists driving eastbound on Fogarty Rd, approximately 0.25 mi west of Emery Rd (see Figure 25). The view is composed of the two-lane road, ruderal vegetated shoulders, orchards to the north, and agricultural fields to the south of the road. The most prominent pattern in the view is the straight lines of the roadway, fences, agricultural fields, and utilities. The landform in this view involves moderate elevation changes, and the landcover is dominated by the manmade road and agricultural features. Vividness in this view is moderate-low due to the limited views and lack of memorable features. Intactness is moderate as the only visual encroachment in the view is from the utilities. Unity in this view is moderately-low as the manmade features combine in a structured but disjointed pattern. Overall, the visual quality in this view is moderately-low.

Viewer Response

KV-11 represents a typical view from a motorist along a local access road, which will cross over the proposed NCC. The motorists in KV-11 would be directly exposed to the changes along Fogarty Rd from the NCC in VAU2. The motorists will view the vehicles anticipated to travel this portion of the NCC each day. The viewer exposure duration is low, as the views will be brief and fleeting, although these viewers would notice change in this portion of the project site. Overall viewer response in KV-11 would be moderate. Residents were not considered in the viewer response of KV-11 as views from residents along Fogarty Rd are obscured by existing structures and trees.

Proposed Condition – Alternatives 1B and 2B

Proposed changes under Alternatives 1B and 2B visible in KV-11 include the new widened Fogarty Rd and the new NCC running perpendicular under the overcrossing structure. Fogarty Rd will be widened to add paved shoulders and a two-way left turn lane. The orchard to the north and agricultural fields to the south will remain in the view, and utilities would exist within the distance of this view as a result of the proposed project. The fences alongside the agricultural fields would be removed and replaced with Caltrans fencing alongside Fogarty Rd. The fields in the distance would be obscured by the new widened Fogarty Rd and earthen fill under NCC. The duration of these views would be low, due to the rate of speed that the new road would operate at and the extended period of exposure to similar unit context. The following analyses apply to Alternative 1B and 2B, as these two alternatives would result in the same visual impacts.

Resource Change

Based on evaluation of the project photo-simulation shown in Figure 26, visual resource change would be moderate-low with the build alternatives. Visual character change would be moderately incompatible as the proposed roadway improvements widen the existing local access road convert the agricultural fields in the vicinity to a built environment. The existing orchards and agricultural fields are the dominate feature in the landscape, in which the new roadway and NCC in the distance will replace and become the new dominate feature. Visual quality would be low with the build alternatives due to a vividness rated as low due to the replacement of agricultural lands with pavement. Intactness of the view would be rated as moderate-low, as visual encroachment in the view is the new lanes for the local road improvements, which are more visible then the existing features. Unity's rating would move from moderate-low to low as the new man-made NCC will further combine with the surrounding environment to create a more disjointed pattern.

The following figures show the existing condition and the proposed condition as a result of the project.

Figure 25: KV-11 Existing Condition - From Fogarty Rd looking East



Figure 26: KV-11 Proposed Condition – From Fogarty Rd looking East - Alternatives 1B and 2B



The following tables support the narrative presented previously in Section VII Visual Resources and Resource Change, and Section VIII Viewers and Viewer Response.

The table below provides the average resource change (i.e., compatibility between the existing condition and alternative) for visual character for all attributes previously identified (e.g., form, line, color, texture, etc.) for the KV noted.

TABLE 44. Visual Character Numerical Evaluation for KV-11, Alternatives 2A and 2B	
Visual Character (Compatibility) Change =	-2.0

Visual Character = a range from -3.0 to +3.0 where -3.0 represents poor compatibility and +3.0 good compatibility

The table below provides individual and average ratings for vividness, intactness, and unity, and summarizes the resource change for visual quality between the existing condition and alternative for the KV noted.

TABLE 45. Visual Quality Numerical Evaluation for KV-11, Alternatives 2A and 2B				
	Vividness	Intactness	Unity	(=V+I+U/3)
Existing Rating	2	4	2	2.33
Alternative Rating	1	2	1	1.33
Visual Quality Change =				-1.0

The table below summarizes visual character and visual quality changes and averages these resources changes for the KV noted.

TABLE 46. Visual Resource Change Numerical Rating for KV-11, Alternatives 2A and 2B	
Visual Character Change Rating (from table above)	-2.0
Visual Quality Change Rating (from table above)	-1.0
Visual Resource Change = (Visual Character Change + Visual Quality Change)/2	-1.5

The table below summarizes viewer exposure and viewer sensitivity ratings and averages these viewer response ratings for the KV noted.

TABLE 47. Viewer Response Numerical Rating for KV-11, Alternatives 2A and 2B	
Viewer Exposure Rating	4
Viewer Sensitivity Rating	2
Viewer Response Rating = (Viewer Exposure Rating + Viewer Sensitivity Rating)/2	3

SUMMARY OF VISUAL IMPACTS BY VISUAL ASSESSMENT UNIT

Visual Assessment Unit 1: Developed –Rural Built Environment

The table below summarizes and compares the narrative ratings for visual resource change, viewer response and visual impacts between alternatives for each KV.

TABLE 48. Summary of KV Narrative Ratings Visual Assessment Unit 1				
KV	ALTERNATIVES	RESOURCE CHANGE	VIEWER RESPONSE	VISUAL IMPACT
2	1A, 2A, 1B, 2B	L	M	ML
4	1A, 2A	L	M	ML
7	1A, 2A	L	M	ML
8	2A, 2B	L	M	ML

Although implementation of the proposed alternatives would result in additional hardscape surfaces within VAU1, the visual character and quality would be somewhat compatible and appear similar to existing conditions. The changes to the existing visual landscape are largely compatible with the existing build environment. No important viewsheds will be lost as a result of the proposed project, and the resource change for each KV in VAU1 is low. The viewer response is moderate for each KV due to the number of vehicles using the proposed facilities. Overall, the resource change and viewer response under each alternative in VAU1 combine for a visual impact considered to be moderate-low.

Visual Assessment Unit 2: Agricultural and Undeveloped Environment

The table below summarizes and compares the narrative ratings for visual resource change, viewer response and visual impacts between alternatives for each KV.

TABLE 49. Summary of KV Narrative Ratings Visual Assessment Unit 2				
KV	ALTERNATIVES	RESOURCE CHANGE	VIEWER RESPONSE	VISUAL IMPACT
1	1A, 2A, 1B, 2B	ML	M	M
3	1A, 1B	L	M	ML
5	1A, 2A	L	H	M
6	1A, 2A	ML	M	M
9	2A, 2B	ML	M	M
10	2B	L	M	ML
11	1B, 2B	ML	M	M

Although implementation of the proposed alternatives would result in additional hardscape surfaces within VAU2, the visual character and quality would be somewhat compatible and appear fairly similar to existing conditions. The changes to the existing visual landscape introduce a built environment into a largely undeveloped area; however, no important viewsheds will be lost as a result of the proposed

project. The resource change for each KV in VAU1 is either moderate-low or low, while the viewer response is moderate for each KV, except for KV-5, due to the number of vehicles using the proposed facilities. KV-5 is the view from a residence, which increases the viewer exposure, resulting in a high viewer response. Overall, the resource change and viewer response under each alternative in VAU1 combine for a visual impact considered to be between moderate and moderate-low.

SUMMARY OF VISUAL IMPACTS BY ALTERNATIVE

The proposed project would create a new highway with thousands of vehicles traveling along it and its associated local roads daily through a largely rural and undeveloped area. The existing local roads in the area combine with the rural setting to create a disjointed visual setting of both the natural and built environment. The visual impacts by alternative are nearly identical due to the similar nature of each proposed alignment. The following discussion reflects that the four proposed alternatives result in a moderate to moderate-low visual impact.

Alternative 1A

The proposed project will have low to moderate-low resource change for alternative 1A, as the NCC will further combine with the local roads to create a disjointed visual setting. Further, due to the lack of sensitive highway neighbors, with the majority of viewers being highway users, the viewer response to the proposed project for alternative 1A is typically moderate, with the exception of KV-5, which is high. Although visual impacts differ among viewer groups and VAUs, the overall visual impact of alternative 1A is considered to be moderate to moderate-low as the project would not substantially alter the visual character or quality of the project corridor. Visual impacts requiring avoidance and minimization include the transition from agricultural landscape to transportation usage including additional and wider pavement areas as well as the implementation of large structures, exposed slopes associated with the large overhead structures, the potential loss of vegetation and trees, and the potential for additional lighting which could affect sensitive receptors.

Alternative 2A

The proposed project will have low to moderate-low resource change for alternative 2A, as the NCC will further combine with the local roads to create a disjointed visual setting. Further, due to the lack of sensitive highway neighbors, with the majority of viewers being highway users, the viewer response to the proposed project for alternative 2A is typically moderate, with the exception of KV-5, which is high. Although visual impacts differ among viewer groups and VAUs, the overall visual impact of alternative 2A is considered to be moderate to moderate-low as the project would not substantially alter the visual character or quality of the project corridor. Visual impacts requiring avoidance and minimization include the transition from agricultural landscape to transportation usage including additional and wider pavement areas as well as the implementation of large structures, exposed slopes associated with the large overhead structures, the potential loss of vegetation and trees, and the potential for additional lighting which could affect sensitive receptors.

Alternative 1B

The proposed project will have low to moderate-low resource change for alternative 1B, as the NCC will further combine with the local roads to create a disjointed visual setting. Further, due to the lack of sensitive highway neighbors, with the majority of viewers being highway users, the viewer response to the proposed project for alternative 1B is typically moderate. Although visual impacts differ among viewer groups and VAUs, the overall visual impact of alternative 1B is considered to be moderate to moderate-low as the project would not substantially alter the visual character or quality of the project corridor. Visual impacts requiring avoidance and minimization include the transition from agricultural landscape to transportation usage including additional and wider pavement areas as well as the

implementation of large structures, exposed slopes associated with the large overhead structures, the potential loss of vegetation and trees, and the potential for additional lighting which could affect sensitive receptors.

Alternative 2B

The proposed project will have low to moderate-low resource change for alternative 2B, as the NCC will further combine with the local roads to create a disjointed visual setting. Further, due to the lack of sensitive highway neighbors, with the majority of viewers being highway users, the viewer response to the proposed project for alternative 2A is typically moderate. Although visual impacts differ among viewer groups and VAUs, the overall visual impact of alternative 2B is considered to be moderate to moderate-low as the project would not substantially alter the visual character or quality of the project corridor. Visual impacts requiring avoidance and minimization include the transition from agricultural landscape to transportation usage including additional and wider pavement areas as well as the implementation of large structures, exposed slopes associated with the large overhead structures, the potential loss of vegetation and trees, and the potential for additional lighting which could affect sensitive receptors.

X. PROJECT VISUAL IMPACT SUMMARY

Based on Table 48 and Table 49, the overall visual impact of the proposed project (Alternatives 1A, 2A, 1B, and 2B) is considered to be moderate to moderate-low as the project would not substantially alter the visual character or quality of the project corridor. The avoidance, minimization, and/or mitigation measures found in Section XII will lessen the potential loss in visual quality as a result of the proposed project.

Temporary Construction Visual Impacts

Implementation of the proposed project would expose residents and motorists to views of the project site. Construction-related vehicle access and staging of construction materials would occur within disturbed or developed areas along the length of the project site. The project area does not currently experience lighting typical of highways. Primary sources of light and glare in the area include motor vehicle headlights, streetlights, parking lot and exterior security lighting, and interior building lighting. Currently, light and glare exist throughout VAU1; however, little light and glare exist throughout VAU2. Signage and security lighting during the evening/nighttime hours is anticipated to be present throughout all VAUs.

Project construction would expose surfaces, construction debris, equipment, and truck traffic to nearby viewers. Construction vehicle access and staging of construction materials would be visible from motorists traveling along the project site as well as residents located in the project vicinity. Project construction (Alternatives 1A, 2A, 1B, and 2B) would commence in 2020 and be completed by 2022. These impacts would be short-term and would cease upon project completion. Exposed surfaces including the slopes of the newly constructed NCC overhead structures would be considered a visual impact if left exposed. These new exposed surfaces would negatively contribute to the visual quality of the area and if left exposed, could erode away resulting in further degradation of the area's visual quality. These exposed slopes would be revegetated per Avoidance/Minimization Measure 2 in order to minimize impact to the residents and motorists. Visible short-term fugitive dust associated with construction would be reduced through the implementation of dust suppression measures outlined within San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 8021, as well as implementation of Caltrans Standard Specifications for Construction, such as Section 17 and 18 (Dust Control). Adhering to Caltrans Standard Specifications for Construction would also minimize visual impacts through the use of opaque temporary construction fencing that would be situated around construction staging areas. Additionally, lighting during construction could potentially affect sensitive receptors due to potentially excessive brightness

and additional light pollution. The potential for temporary impacts due to construction lighting will be avoided and minimized with implementation of Avoidance/Minimization Measure 4 (Construction Lighting), which would require the review of construction lighting types, plans, and placement to minimize light and glare impacts to surrounding sensitive uses.

XI. CUMULATIVE VISUAL IMPACT

Cumulative impacts are those resulting from past, present and reasonably foreseeable future actions, combined with the potential visual impacts of this project. A total of seven future individual projects, including three road improvements, including the Lake Road Safety Improvements – Widening approximately 17 miles east of the City of Modesto, Pirrone Road and Sisk Road Salida Sidewalk Project Phase I-Safety at the intersection of Pirrone Road and Sisk Road, and Cornucopia Way Extension to Hackett Road in Ceres, one recreational facility, including the Woodland Reservoir- T-Island and Muir Point Campsites in North County, and three social services facility projects, including the Video Visitation Facility in Modesto, Re-entry Alternatives to Custody and Transition (REACT) (SB 1022) at the Stanislaus County Public Safety Center located south of Modesto, and Stanislaus County Veterans Center at Modesto/Ceres, are located within the vicinity of the project. None of these proposed future projects in the study area are anticipated to identify significant visual impacts within the CEQA analyses of these projects. Therefore, impacts associated with these projects are not cumulatively considerable when viewed in connection with the NCC project, and no cumulative visual impacts are anticipated to occur. Additionally, identified projects would be evaluated on a project-by-project basis, and would be subject to similar stipulations as those analyzed in this VIA. Lighting is not a component of the proposed project, no cumulative impacts to lighting in area are anticipated, and while the project will convert some parcels land uses from residential and agricultural to roadway, the area will still be largely open fields and no cumulative impacts to land uses are anticipated. Therefore, the extent of the impacts arising from the cumulative projects is considered to be minor. As previously determined, the project would result in a moderate to moderate-low visual impact. With implementation of recommended Avoidance/Minimization Measures, impacts pertaining to cumulative projects will be reduced.

XII. AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Caltrans and the FHWA mandate that a qualitative/aesthetic approach should be taken to address visual quality loss in the project area. This approach fulfills the letter and the spirit of FHWA requirements because it addresses the actual cumulative loss of visual quality due to a project. This approach also results in avoidance, minimization, and/or mitigation measures that can lessen or compensate for a loss in visual quality. This section describes additional avoidance, minimization, and/or mitigation measures to address specific visual impacts. These will be designed and implemented with concurrence of the District Landscape Architect.

The following measures to avoid or minimize visual impacts will be incorporated into the project:

To address impacts associated with the transition from agricultural landscape to transportation usage including additional and wider pavement areas as well as the implementation of large structures, the following measure will be implemented:

VIS-1: Where feasible, build alternatives will utilize the existing highway right of way corridor.

To address impacts associated with exposed slopes associated with the large overhead structures, the following measure will be implemented:

VIS-2: Per Caltrans standards regarding erosion control, exposed slopes will be re-vegetated.

To address impacts associated with the potential loss of vegetation and trees, the following measure will be implemented:

VIS-3: Vegetation clearing will only occur within the delineated project boundaries in an effort to minimize the impacts. Trees located in areas along the edge of the construction zone will be trimmed whenever possible and only those trees that lie within the active construction areas will be removed.

To address impacts associated with the potential for additional lighting which could affect sensitive receptors, the following measure will be implemented:

VIS-4: Construction lighting types, plans, and placement shall comply with Caltrans and local standards in order to minimize light and glare impacts on surrounding sensitive uses.

Summary of Avoidance, Minimization, and/or Mitigation Measures by Alternative

The table below summarizes the numbered avoidance, minimization, and/or mitigation measures from above for each alternative.

TABLE 50. Summary of Avoidance, Minimization, and/or Mitigation Measures by Alternative		
ALTERNATIVE	AVOIDANCE AND MINIMIZATION	MITIGATION
Alternative 1A	VIS-1, VIS-2, VIS-3, VIS-4	N/A
Alternative 1B	VIS-1, VIS-2, VIS-3, VIS-4	N/A
Alternative 2A	VIS-1, VIS-2, VIS-3, VIS-4	N/A
Alternative 2B	VIS-1, VIS-2, VIS-3, VIS-4	N/A
No-build	N/A	N/A

XIII. CONCLUSIONS

As stated above, the proposed project would result in a moderate to moderate-low visual impact due to the proposed additional hardscape (i.e., additional highway lanes, new overhead structures, and new roundabouts), ornamental tree and landscaping removal, and structure demolition. The following conclusion discusses the anticipated level of visual impacts.

Although visual change may be noticeable to viewers under each alternative, the recommended Avoidance/Minimization Measures 1 through 4 would allow the proposed project to blend into the existing landscape and reduce any potential visual impacts to motorists and residents. The overall visual impact of the alternatives is considered to be moderate-low as the project would not substantially alter the visual character or quality of the project corridor with the recommended avoidance/minimization measures.

XIV. REFERENCES

California Department of Transportation, *Standard Environmental Reference, Chapter Visual & Aesthetics Review*.

U.S.D.O.T, Federal Highway Administration, Office of Environmental Policy, *Visual Impact Assessment for Highway Projects*, March 1988.