

Centennial Corridor Project

City of Bakersfield and Kern County, CA

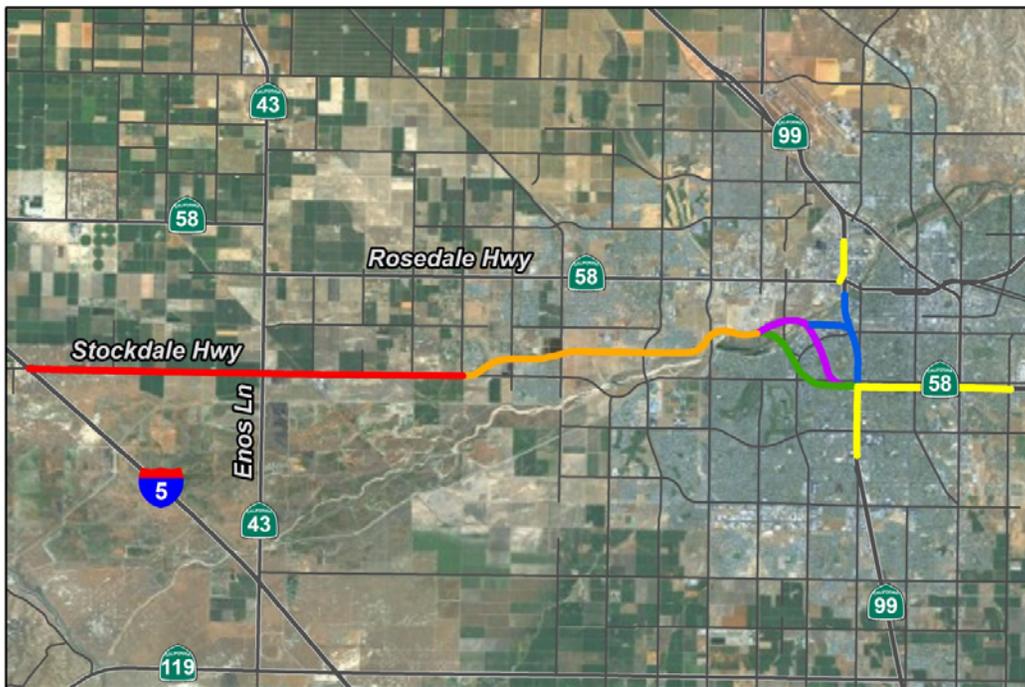
District 06 - KER – 58 - PM T31.7 to PM R55.6

District 06 - KER – 99 - PM 21.2 to PM 26.2

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Visual Impact Assessment



September 2013
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Centennial Corridor Project

Visual Impact Assessment

Centennial Corridor from State Route 99 to Interstate 5
City of Bakersfield and Kern County, CA
District 06 - KERN - 58 - PM T31.7 to PM R55.6
District 06 - KERN - 99 - PM 21.2 to PM 26.2
Project ID No. 06-0000-0484

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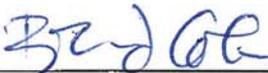
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ACRONYMS AND ABBREVIATIONS

Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
I	Interstate
NEPA	National Environmental Policy Act
PM	Post Mile
SR	State Route

Chapter 1 Project Description

1.1 INTRODUCTION

The California Department of Transportation (Caltrans) proposes to establish a new alignment for State Route (SR) 58, which would provide a continuous route along SR 58 from Cottonwood Road on existing SR 58, east of SR 99 (post mile R55.6), to Interstate 5 (I-5) (post mile T31.7). Improvements to SR 99 (post miles 21.2 to 26.2) and Westside Parkway would also be made to accommodate the connection with SR 58.

The project is located at the southern end of the San Joaquin Valley in the city of Bakersfield in Kern County, California. The study site is bound on the east by Cottonwood Road, on the west by I-5, on the north by Gilmore Avenue, and on the south by Wilson Road. Caltrans is the lead agency for the project pursuant to the California Environmental Quality Act and the National Environmental Policy Act.

The proposed continuous route, known as the Centennial Corridor, has been divided into three segments, as shown in Figure 1-1.

Segment 1 is the easternmost segment, which would connect the existing SR 58 (East) freeway to the Westside Parkway. Multiple alignment alternatives are being evaluated for this segment and are discussed below.

Segment 2 is composed of the Westside Parkway, which extends westerly from Truxtun Avenue to Heath Road. This roadway is a local facility that is currently under construction and would be transferred into the State Highway System. The analysis evaluates potential impacts associated with incorporating the Westside Parkway as part of the State Highway System, as well as improvements to the Westside Parkway from Truxtun Avenue to the Calloway Drive interchange which would be made to facilitate traffic operations between the Westside Parkway and the Centennial Corridor. The analysis reports the relevant results of the *Westside Parkway Environmental Assessment/Final Environmental Impact Report* and provides updates, as necessary.

Segment 3 would extend from Heath Road to I-5. This segment will need a temporary route adoption for the use of Stockdale Highway between Heath Road and I-5 as an interim alignment for SR 58. A future new alignment (ultimate) as identified in the 2002 *Route 58 Route Adoption Project Tier I Environmental Impact Statement/Environmental Impact Report* (EIS/EIR) will be constructed when there is greater traffic demand and funding is available. Since traffic would use Stockdale Highway between Heath Road and I-5 on an interim basis, the potential impacts will

also be evaluated for the interim use of Stockdale Highway. Improvements to the Stockdale Highway/SR 43 (known locally as Enos Lane) intersection would be made to accommodate the additional traffic.

1.2 PURPOSE AND NEED

The purpose of the Centennial Corridor project is to provide route continuity and associated traffic congestion relief along SR 58 within Metropolitan Bakersfield and Kern County from SR 58 east (at Cottonwood Road) to I-5.

SR 58 is a critical link in the state transportation network that is used by interstate travelers, commuters, and a large number of trucks. Under existing conditions, SR 58 does not meet the capacity needs of the area, and this is expected to get worse as the population grows. SR 58 lacks continuity in central Bakersfield, which results in severe traffic congestion and reduced levels of service on adjoining highways and local streets. This route is offset by about 1 mile at SR 43 and by about 2 miles at SR 99. The merging of two major SRs (58 and 99) into one alignment between the eastern and western legs of SR 58 degrades the traffic level of service on this segment of freeway. In addition, SR 99's close spacing for its two interchanges with SR 58 (East and West), in addition to an interchange at California Avenue, results in vehicles aggressively changing lanes, which adds to the congestion.

1.3 PROJECT DESCRIPTION

The project alternatives include three build alternatives and a No-Build Alternative.

1.3.1 No-Build Alternative

No construction of Segment 1 would occur under the No-Build Alternative. In addition, no improvements to the Westside Parkway from Truxtun Avenue to the Calloway Drive interchange would be required. There would also be no improvements made to the Stockdale Highway/SR 43 intersection. The No-Build Alternative would involve the following actions: (1) the Westside Parkway would be route adopted into the State Highway System; (2) the portion of Mohawk Street from the Westside Parkway to Rosedale Highway would be designated as part of SR 58, which would provide a connection to SR 99; (3) Stockdale Highway between Heath Road and Interstate 5 would serve as an interim alignment for SR 58 until ultimate improvements are constructed; and (4) the portion of SR 58 (West) from Allen Road to Interstate 5 would be relinquished) to the local jurisdictions as a local facility.

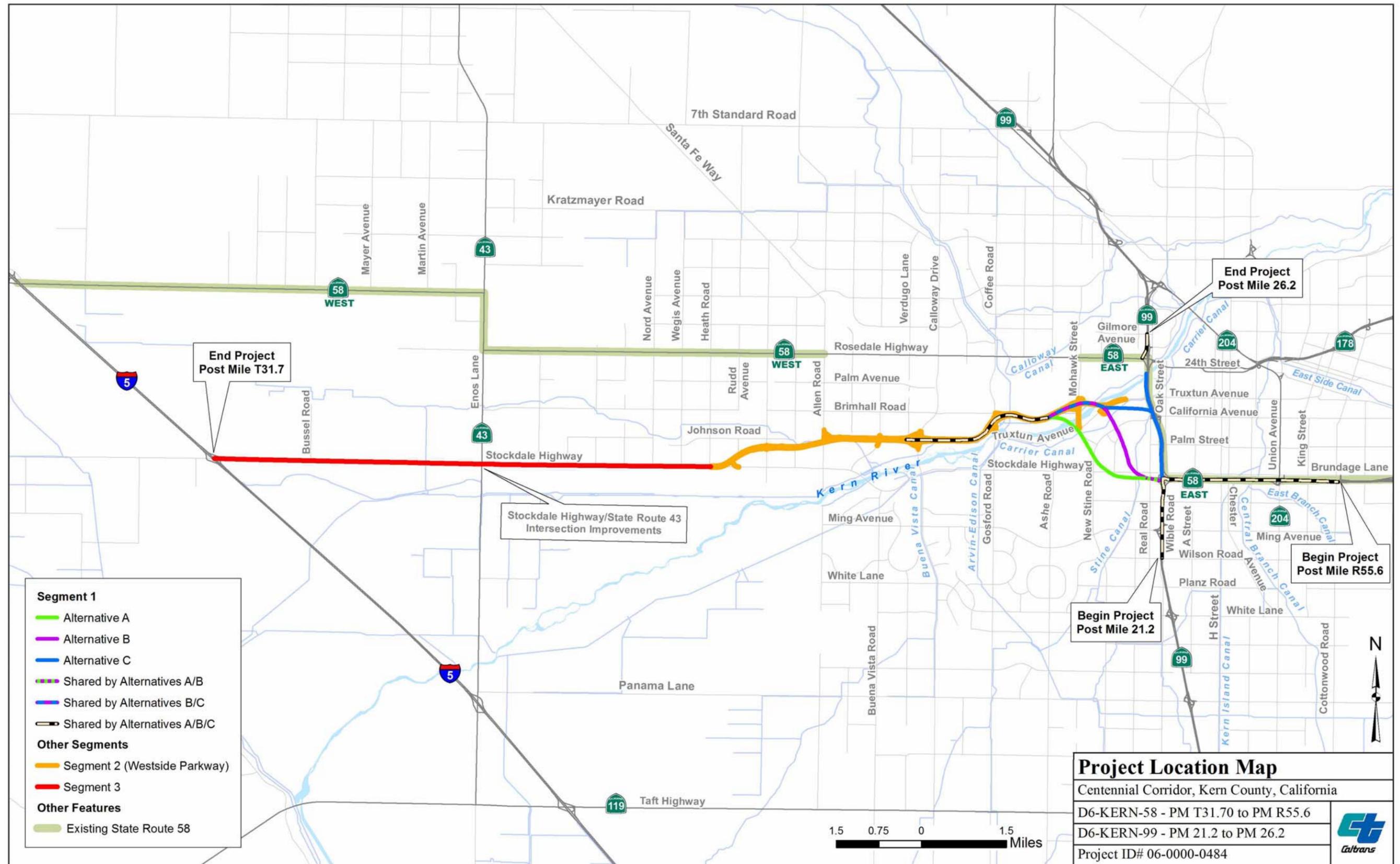


Figure 1-1 Project Location Map

1.3.2 Build Alternatives

As shown in Figure 1-2, the three build alternatives (Alternatives A, B, and C) within Segment 1 propose new alignments that would extend from Cottonwood Road on the existing SR 58 (East) and connect I-5 via the Westside Parkway. Alternatives A and B would be west of SR 99, and Alternative C would parallel SR 99 to the west. Under Alternative A, the eastern end of the Westside Parkway mainline would be realigned to conform to the Alternative A alignment, and ramp connections would be provided to the Mohawk Street interchange. Under Alternatives B and C, the alignments would connect to the Westside Parkway by extending the mainline lanes built as part of the Westside Parkway project. Detailed descriptions of the alternatives are provided on the following subsections.

Common Design Features of the Build Alternatives

The build alternatives would connect SR 58 (East) to the east end of the Westside Parkway by means of a six-lane freeway. All the build alternatives would involve a route adoption to include the selected Segment 1 alignment and the Westside Parkway into the State Highway System as SR 58. In Segment 3, there would be a temporary route adoption of Stockdale Highway as the interim SR 58 connection to Interstate 5 until the ultimate alignment (the Cross Valley Canal alignment addressed in the 2001 EIS/EIR) is constructed, which would occur at a later date. Though the alignment and design characteristics vary by alternative, the three build alternatives have the following common design features:

Segment 1

All the alternatives would provide the following connections between SR 58 and SR 99 using high speed connection ramps:

- Northbound SR 99 to westbound Centennial Corridor
- Northbound SR 99 to eastbound SR 58 (East)
- Southbound SR 99 to eastbound SR 58 (East)
- Eastbound Centennial Corridor to southbound SR 99
- Westbound SR 58 (East) to southbound and northbound SR 99

Direct connector ramps from southbound SR 99 to westbound SR 58 are not being provided as part of this project. However, to accommodate this movement, the southbound SR 99/Rosedale Highway off-ramp would have two lanes off the freeway and be widened to four lanes at the intersection with Rosedale Highway. Additionally, an auxiliary lane would be provided on SR 99 from south of Gilmore Avenue to the SR 58 (Rosedale Highway) off-ramp. Direct connector ramps from eastbound SR 58 to northbound SR 99 are not being provided as part of this project.

The project would require the widening of the South P Street Undercrossing and the westbound SR 58 Grade Separation over SR 99. In addition, the Stockdale Highway off-ramp from southbound SR 99 and the Wible Road on- and off-ramps on SR 99, located just south of the existing SR 58/SR 99 interchange, would be removed.

Segment 2

The Westside Parkway would be incorporated into the State Highway System with each of the Build Alternatives. Improvements to connect Centennial Corridor to the Westside Parkway would extend from where each build alternative connects at the eastern end of the Westside Parkway towards the west, ending at the Calloway Drive interchange. The proposed improvements would widen the Westside Parkway by constructing one additional lane in the median to provide auxiliary lanes. In the westbound direction, the median widening would extend from east of the Friant-Kern Canal through the Calloway Drive interchange. The limits of the added lane in the eastbound direction would differ between each alternative, as described in the Unique Design Features of the Build Alternatives section below. With each build alternative, modifications to the westbound diamond off-ramp to Calloway Drive and the eastbound loop on-ramp from Coffee Drive would be required.

Though the improvements described above are physically located in Segment 2, construction would be undertaken as part of Segment 1 construction to facilitate traffic operations between the Westside Parkway and the Centennial Corridor.

Segment 3

With each build alternative, the Stockdale Highway/SR 43 intersection would be widened and traffic signals would be added to control the traffic movements. SR 43 would be widened to add a dedicated left-turn lane in both directions. Stockdale Highway would be widened to add a dedicated left-turn lane and a shared through/right-turn lane in both directions. Though physically located in Segment 3, these improvements would be built as part of Segment 1 to ensure adequate traffic operations at this intersection.

Unique Design Features of the Build Alternatives

Alternative A

Alternative A would travel westerly from the existing SR 58/SR 99 interchange for about 1 mile, south of Stockdale Highway, where it would turn northwesterly and go over Stockdale Highway/Montclair Street, California Avenue/Lennox Avenue, Truxtun Avenue, and the Kern River before joining the eastern end of the Westside Parkway near the Mohawk Street interchange.

A link would be provided from northbound SR 99 to westbound SR 58 and from eastbound SR 58 to southbound SR 99 via high-speed connectors. No direct connector ramps would be built from southbound SR 99 to westbound SR 58 or from eastbound SR 58 to northbound SR 99. Southbound SR 99 would be widened to accommodate the additional traffic from eastbound SR 58 to the southbound SR 99 connector. The existing westbound SR 58 to southbound SR 99 loop-ramp connector would be realigned and would connect to the proposed eastbound SR 58 to southbound SR 99 connector before merging onto southbound SR 99. The existing southbound SR 99 to eastbound SR 58 connector and northbound SR 99 to eastbound SR 58 would be preserved with some changes.

The limits of widening on SR 99 would extend to the Wilson Road overcrossing. On northbound SR 99, a three-lane exit would be provided just north of Wilson Road to carry the northbound SR 99 to westbound SR 58 traffic on two lanes and the Ming Avenue on- and off-ramp traffic on the third lane. All ramps in this area would have to be realigned to provide for the additional lanes. The Wible Road on- and off-ramps just south of the existing SR 58/SR 99 interchange, which is in conflict with the Caltrans standards of interchange spacing, would have to be removed to accommodate this design. The Stockdale Highway off-ramp on the southbound SR 99 to eastbound SR 58 connector would be removed as well. Under this concept, SR 58 would also lose its link with Real Road. Also, Alternative A would provide an auxiliary lane on southbound SR 99 from south of Gilmore Avenue to the Rosedale Highway off-ramp.

The median widening to provide an auxiliary lane along the Westside Parkway would extend westerly from the connection point with Centennial Corridor between Coffee Road and Mohawk Street to the Coffee Road off-ramp.

Other features with this alternative include 1) the construction of 19 soundwalls; 2) the construction of a park and ride facility off Mohawk Street, between California Avenue and Truxtun Avenue, to replace the facility that would be displaced by the project; 3) 7 infiltration basins would be placed throughout the study area to retain stormwater runoff for water quality improvement purposes; and 4) 48 retaining walls of varying sizes located throughout the study area.

Alternative B

Alternative B would run westerly from the existing SR 58/SR 99 interchange for about 1,000 feet, south of Stockdale Highway, where it would turn northwesterly and span Stockdale Highway/Stine Road, California Avenue, Commerce Drive, Truxtun Avenue, and the Kern River before joining the east end of Westside Parkway between the Mohawk Street and Coffee Road

interchanges. This alignment would depress SR 58 between California Avenue and Ford Avenue. Overcrossings are proposed at Marella Way and La Mirada Drive to ease traffic circulation.

Alternative B proposes the same connections to SR 99 that Alternative A does and would require similar improvements on SR 99 and existing SR 58.

The median widening to provide an auxiliary lane along the Westside Parkway would extend westerly from the connection point with Centennial Corridor between Coffee Road and Mohawk Street to the Coffee Road off-ramp. Modifications would be required to the eastbound Mohawk Street off-ramp, westbound Truxtun Avenue on-ramp, and the eastbound Mohawk Street loop on-ramp. In addition, construction of the proposed westbound Mohawk Street off-ramp and realignment of the Cross Valley Canal maintenance access road from Mohawk Street would be required.

Other features with this alternative include 1) the construction of 24 soundwalls; 2) the construction of a park and ride facility north of California Avenue, next to the Centennial Corridor, to replace the facility that would be displaced by the project; 3) 8 infiltration basins that would be placed throughout the study area to retain stormwater runoff for water quality improvement purposes; and 4) 42 retaining walls of varying sizes located throughout the study area.

Alternative C

Near the existing SR 58/SR 99 interchange, Alternative C would turn north and run parallel to the west of SR 99 for about 1 mile. The freeway would turn west and span the BNSF Railway rail yard, Truxtun Avenue, and the Kern River. This alternative proposes undercrossings at Brundage Lane, Oak Street, SR 99, Palm Avenue, and California Avenue.

Connections would be provided from eastbound SR 58 to southbound SR 99 and from northbound SR 99 to westbound SR 58. The existing westbound SR 58 to southbound SR 99 loop-ramp connector would connect to the proposed eastbound SR 58 to southbound SR 99 connector before merging onto southbound SR 99. The southbound SR 99 Ming Avenue off-ramp would be relocated north of the eastbound SR 58 to southbound SR 99 connector to facilitate weaving between the Ming Avenue off-ramp and the eastbound SR 58 to southbound SR 99 connector traffic. A connector would be provided east of northbound SR 99 from Brundage Lane to south of California Avenue to facilitate weaving between westbound SR 58 to northbound SR 99 traffic with northbound SR 99 to westbound SR 58 traffic.

Improvements on SR 99 would extend from the Wilson Road overcrossing (south of the SR 58/SR 99 interchange) to the Gilmore Avenue overcrossing (north of the SR 58/SR 99

interchange). A collector-distributor (C-D) road system would provide access from westbound SR 58 to northbound SR 99, as well as from northbound SR 99 to westbound SR 58. The Wible Road on- and off-ramps just south of the existing SR 58/SR 99 interchange would have to be removed to accommodate the northbound SR 99 auxiliary lane. The Stockdale Highway off-ramp on the southbound SR 99 to eastbound SR 58 connector would be removed as well. Under this concept, southbound SR 99 would also lose its link with Real Road.

The median widening to provide an auxiliary lane along Westside Parkway would extend westerly from the connection point with Centennial Corridor between Coffee Road and Mohawk Street to the Coffee Road off-ramp. Modifications would be required to the eastbound Mohawk Street off-ramp, westbound Truxtun Avenue on-ramp, the eastbound Mohawk Street loop on-ramp. In addition, construction of the proposed westbound Mohawk Street off-ramp and realignment of the Cross Valley Canal maintenance access road from Mohawk Street would be required.

Other features with this alternative include (1) the construction of 17 soundwalls; (2) the construction of a park and ride facility at Real Road and Chester Lane to replace the facility that would be displaced by the project; (3) 11 infiltration basins that would be placed throughout the study area to retain stormwater runoff for water quality improvement purposes; and (4) 42 retaining walls of varying sizes located throughout the study area.

Chapter 2 Methodology

This Visual Impact Assessment addresses potential visual and aesthetic impacts associated with the proposed Centennial Corridor Project within Bakersfield. Impacts associated with the proposed project are identified and compared among the No-Build Alternative and the build alternatives. In addition, this report proposes measures to mitigate adverse impacts associated with project implementation.

This chapter presents the methodology and criteria used in describing the existing visual conditions and assessing the potential visual impacts of the proposed alternatives for the project.

The study methodology was developed using guidelines provided in the Federal Highway Administration’s Visual Impact Assessment for Highway Projects (Federal Highway Administration, 1981). The existing visual conditions in the study area consist of actual visual resources, described in terms of visual character and quality; the characteristics of viewers, namely viewer exposure (i.e., the ability to see the study area); and viewer sensitivity. The visual resources were analyzed in terms of landscape types and distinct visual features within the region. The evaluation of viewer characteristics took into account the study area’s visual influence zone or viewshed (i.e., the overall area from which the route alignment options would be potentially visible), the important views and viewing conditions, and viewer numbers, types, and activities. These components define the existing conditions. The visual changes that would be introduced into the study area and the anticipated viewer response to that change were then assessed. Based on these evaluations, the degree of visual impact was determined.

2.1 VISUAL RESOURCES INVENTORY METHODS

2.1.1 Regional Landscape Character

The first step in identifying visual character is to define the regional landscape where the study area is located. This establishes a frame of reference for comparing the visual effects of the route alignment options and determining their significance. Regional landscapes constitute broad areas defined by physical and ecological factors, and are characterized by landform (or topography) and landcover, including water, vegetation, and human-made development.

2.1.2 Landscape Units

Landscape types and forms within the study area combine to define visually bounded “landscape units” or “outdoor rooms” that have a distinct visual character. The spatial enclosure and visual interrelationships among the individual landscape types determine the visual character of the landscape unit. The boundaries between landscape units are often marked by distinct changes in visual character or spatial experience, such as a valley entrance, a river crossing, or a change in

land use pattern. The visual character of some units is strongly influenced by specific landscape features, such as a large structure, individual landform, or a distinctive body of water.

2.1.3 Visual Image Types

Image types are areas that exhibit a fairly homogeneous visual quality. In combination, several image types influence the character of the larger landscape unit. Image types describe variations within landscape units that have implications for visual quality and viewer exposure; they provide a more detailed framework for comparing the visual effects of a project and developing appropriate mitigation strategies. Image types can vary and may be found within any landscape unit area. A visual image type of an area is based on landscape and development features which, when taken together, can give the area a certain character or “look” within the regional context. Key features that determine a visual image type include landscape components, land-use patterns, and level of landscaping and visual design.

2.1.4 Viewshed

A viewshed is the area normally visible from an observer’s viewpoint of location and is limited by the screening/obstruction effects of any vegetation or structures. A viewshed can include views from within the project outward or from outside of the area into the project corridor. While viewpoints represent specific locations within the project area, a viewshed describes what is seen from that viewpoint, including the limits of what can be seen. When these individual points are strung together, the viewsheds create an overall project viewshed that can be used to describe the project area. The viewshed includes the locations of viewers within the project area that are likely to be affected by visual changes brought about by the project features.

2.1.5 Visual Quality Evaluation

Because it is not feasible to provide an in-depth analysis for each specific view in the corridor, key viewpoints were identified to represent the visual character of the landscape units and used to define the existing visual quality. The existing visual quality for each of the landscape units identified within the study area was evaluated and rated. The evaluation was based on indicators of the level of visual relationships, rather than judgments of physical landscape components. This approach provides a set of three evaluative criteria: vividness, intactness, and unity. These criteria are defined as follows:

- **Vividness** is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns.
- **Intactness** is the visual integrity of the natural and human-made landscape of the immediate environs and its freedom from encroaching elements.

- **Unity** is the visual coherence and compositional harmony of the viewshed. The viewshed entails all natural and human-made features found within the normal view range. In human-altered landscapes, unity frequently attests to the careful design or fit of individual components in the landscape.

Seven evaluation ratings were applied to measure or value existing visual quality: very low, low, moderately low, average, moderately high, high, and very high (Federal Highway Administration, 1981).

2.2 VIEWER CHARACTERISTICS INVENTORY METHODS

Evaluation of viewer characteristics and sensitivity incorporates the visual preferences of viewers, viewer activities, viewer awareness of visual character and issues, and local values and goals. This methodology is used to further define the existing visual conditions and provides the user context within which to judge changes that would occur to those conditions due to the project.

2.2.1 Viewer Groups and Viewer Exposure

“Viewer groups” are groups of people who regularly travel through the study area (such as motorists) or who have a certain degree of sensitivity (such as residents) to changes in the visual environment due to their proximity to the project area. Viewer groups may be present in some landscape units and not in others, as land use and travel patterns may vary between landscape units within the study area.

Viewer exposure is typically assessed by considering the number of viewers exposed to the view, the type of viewer activity associated with the view, the duration of their view (how much of their time they spend looking at the view), the speed at which the viewer moves through the environment, and the position of the viewer. In general, people are active receptors of visual information and seek understanding from experiencing their surroundings; therefore, high viewer exposure heightens the importance of early consideration of urban design, public art, and architecture, and their roles in managing the visual resource effects of a project.

The visibility of the existing conditions was documented by field photography. Within the study area, viewpoints for analysis were chosen to represent visual resource issues and the major viewer groups. Representative viewing areas were mapped from field analysis and map interpretation.

2.3 VISUAL IMPACT ASSESSMENT

2.3.1 Visual Impact Assessment Methods

The methodology used to assess visual impacts is also derived from the Federal Highway Administration guidelines. The impact assessment process incorporates and combines the two principal visual impact components: visual resource change and viewer response to that change. Visual resource change is analyzed in terms of visual dominance and other specific visual effects of alternatives, together with change in visual quality. Viewer responses to these changes are interpreted on the basis of identified viewer types in the study area. In addition, the relationship of the project to applicable visual/scenic plans and policies is examined, and any inconsistencies between potential impacts and adopted plans and policies are highlighted.

2.3.2 Visual Impact Types and Assessment Criteria

Visual impacts have been categorized into general types. Separate criteria apply to each different visual impact type.

Criteria-Specific Effects on Viewers. The criteria used to determine effects on viewers include visual dominance of the project; view obstruction or view expansion; effects on community disruption; viewer orientation; and design quality issues, such as changes in vividness, intactness, and unity.

An overall determination of adverse and beneficial effects on viewers is based on a combined evaluation of all the criteria identified above.

Visual Dominance. Visual dominance refers to the contrast between the proposed improvements and their setting described in terms of vegetation, landform, and structural changes. Dominance is a function of how potentially noticeable the project is to the viewer, ranging from:

- **Inevident** – Project is visible but generally not noticeable.
- **Subordinate** – Project is noticeable, but attracts less attention than other components of the setting.
- **Co-dominant** – Project attracts attention equally with other components of the setting.
- **Dominant** – Project dominates the view and attracts more attention than other components of the setting.

Visual elements of scale, form, line, and position, as seen from representative sensitive viewing locations, determine the degree of contrast and dominance.

2.3.3 Overall Visual Impact

As described above, the overall visual impact resulting from the project is determined based on visual resource change and viewer response to that change.

Four evaluation criteria have been identified to determine the overall beneficial and adverse effects on visual quality (Caltrans, 2008):

- **Low** – Minor adverse change to the existing visual resource, with low viewer response to change in the visual environment.
- **Moderate** – Moderate adverse change to the visual resource with moderate viewer response.
- **Moderately High** – Moderate adverse visual resource change with high viewer response or high adverse visual resource change with moderate viewer response.
- **High** – A high level of adverse change to the resource or a high level of viewer response to visual change.

2.4 STUDY AREA

The proposed project sits at the southern end of the San Joaquin Valley in Kern County, California. The study area is bound on the east by Cottonwood Road, on the west by Coffee Road, on the north by Gilmore Avenue, and on the south by Wilson Road.

Chapter 3 Affected Environment

3.1 EXISTING VISUAL CHARACTER

The proposed project area, as shown in Figure 1-2, is located at the southern end of the San Joaquin Valley in west-central Kern County. The regional landscape of west-central Kern County is characterized by relatively flat topography. The nearest naturally elevated features are the Greenhorn Mountains, about 10 miles northeast of the project area. The Kern River is an important visual and recreational corridor and runs through the proposed project study area. All of the project alternatives span the river; therefore, the river is readily visible from all of the project alternatives.

The entire regional landscape, except for the northwestern portion, consists of urbanized land uses. Existing views are typical of a developed urban setting with little topographic variation, and few opportunities for uninterrupted middle-ground or background vistas. Some locations within the region allow for visual relief from the urban setting. These include parkland such as Centennial Park, Saunders Park, and the Kern River Parkway.

3.2 LANDSCAPE UNITS

To provide a framework for describing the visual environment of the project area, the study area viewshed was divided into four geographic landscape units as shown in Figure 3-1. Table 3.1 summarizes the existing visual quality within each of the four landscape units. Key viewpoints identified for the project are also shown in Figure 3-1.

3.2.1 SR 58 Landscape Unit

The SR 58 Landscape Unit runs east to west along existing SR 58 from Cottonwood Avenue to the SR 58/SR 99 interchange. The landscape unit contains portions of all the build alternatives analyzed for the project; however, most of the proposed project design in this landscape unit is located within the existing right-of-way of SR 58. This landscape unit is characterized by flat topography, transportation facility infrastructure, and light industrial, commercial, and residential properties next to the freeway.

3.2.2 SR 99 Landscape Unit

The SR 99 Landscape Unit encompasses the area from Rosedale Highway on the north to Ming Avenue on the south. This landscape unit contains a freeway as its main identifying characteristic. Most of Alternative C is located within this landscape unit. The SR 99 landscape unit is characterized by flat topography, SR 99 and other roadways, Saunders Park, and residential, light industrial, and commercial uses.

Table 3.1 Summary of Landscape Units

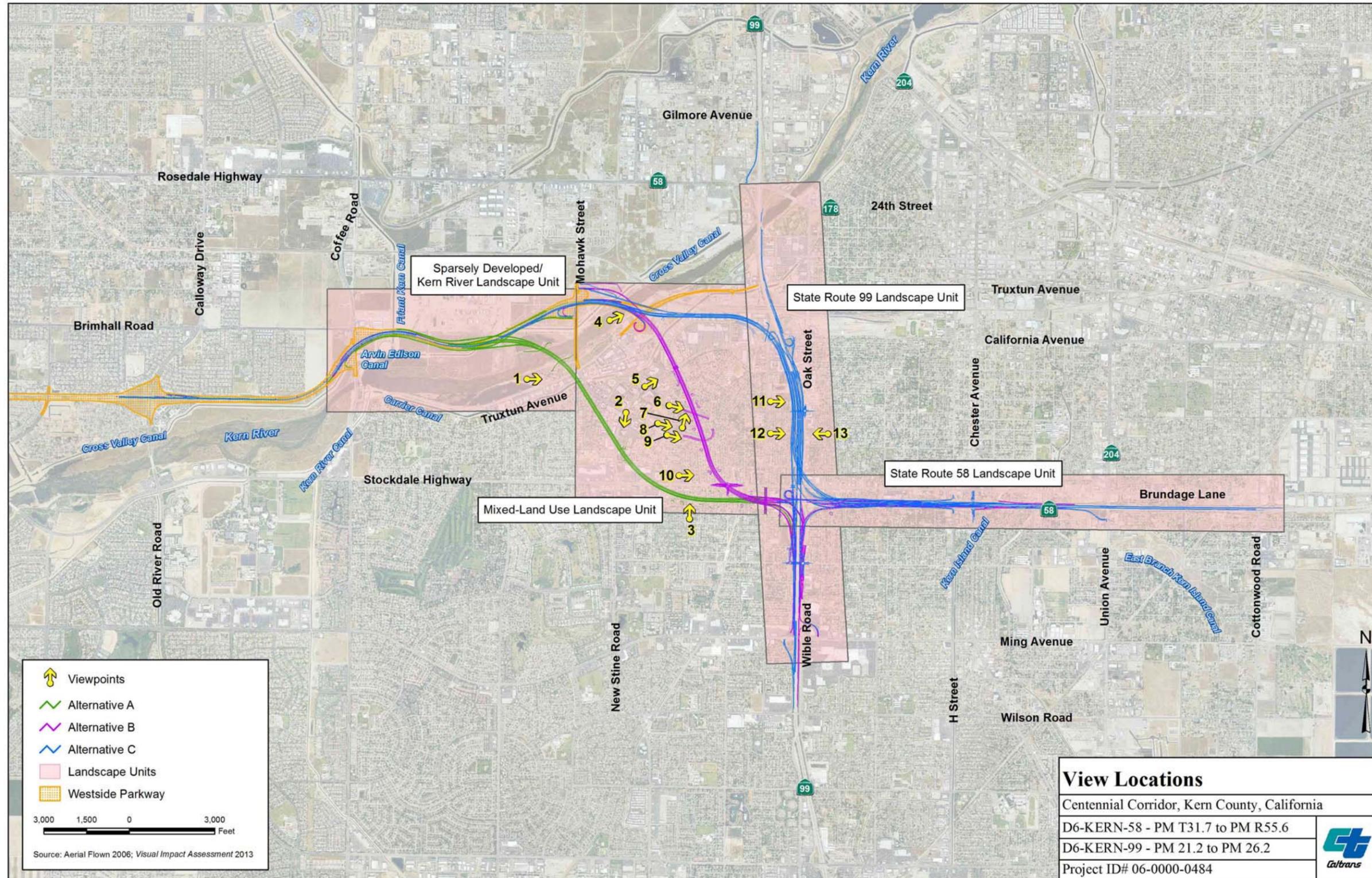
Landscape Unit	Description	
<i>SR 58</i>	Image Types	Commercial, residential, industrial
	Viewer Groups	Motorists, residents, commercial employees
	Visual Resources	Residential neighborhoods and commercial properties
	Overall Visual Character	Established transportation facility, low- to middle-income residential neighborhoods, commercial properties
<i>SR 99</i>	Image Types	Commercial, residential, recreational, industrial
	Viewer Groups	Motorists, residents, commercial employees, recreational viewers
	Visual Resources	Residential neighborhoods and commercial properties, Saunders Park
	Overall Visual Character	Established transportation facility, low- to middle-income residential neighborhoods, commercial properties, Saunders Park
<i>Mixed-Land Use</i>	Image Types	Commercial, residential, recreational, industrial
	Viewer Groups	Commercial employees, motorists, residents, recreational users
	Visual Resources	Strip mall commercial development, with some larger buildings, Centennial Park, Kern River, Kern River Parkway and Bike Path
	Overall Visual Character	Dense, urbanized strip mall development, low- to middle-income residential neighborhoods, parkland, Kern River
<i>Sparsely developed/ Kern River</i>	Image Types	Residential, recreational, industrial
	Viewer Groups	Residents, motorists, commercial employees, recreational users
	Visual Resources	Expansive undeveloped land, Kern River, Kern River Parkway and Bike Path, Lake Truxtun
	Overall Visual Character	Underdeveloped area, parkland, Kern River

Source: Parsons, 2011.

3.2.3 Mixed-Land Use Landscape Unit

The Mixed-Land Use Landscape Unit sits in the middle of the proposed project study area from Garnsey Avenue to Mohawk Street. Alternatives A and B are best represented by this landscape unit. A large portion of developed land within this landscape unit would require right-of-way acquisitions as part of the implementation of Alternatives A and B.

This landscape unit is characterized by flat topography; Centennial Park; the Kern River Parkway and Bike Path; residential neighborhoods; major commercial pockets, including businesses along Stockdale Highway and California Avenue; and areas where the proposed project crosses the Kern River and the Cross Valley Canal for Alternatives B and C. There is an additional area just southeast of where the proposed project would cross the Kern River where there is light industrial use, a medical complex, and associated medical businesses. This landscape unit also contains most of the key viewpoints analyzed for the proposed project.



Source: Parsons, 2012.

Figure 3-1 Landscape Units and Viewpoint Locations

3.2.4 Sparsely Developed/Kern River Landscape Unit

The Sparsely Developed/Kern River Landscape Unit encompasses the western portion of the project study area from Mohawk Street to Coffee Road. It contains the area where the alternatives would connect with the Westside Parkway Project (Segment 2). This landscape unit contains portions of Alternative A that would cross the Kern River and the Cross Valley Canal. This landscape unit is characterized by relatively flat natural topography, undeveloped land, oil infrastructure, the Cross Valley Canal, the Kern River, and the Kern River Parkway and Bike Path.

3.3 EXISTING VISUAL IMAGE TYPES AND VIEWER GROUPS

As described above, the study area viewshed was subdivided into four landscape units that encompass distinct spatial areas. These smaller-scale land uses or features within each landscape unit are called “image types.” Four visual image types are located within the study area, as described below and shown in Figure 3-2.

3.3.1 Visual Image Types

Sparsely Developed/Industrial Area – The sparsely developed/industrial image type is characterized by sparsely vegetated land dotted with industrial plants in the northwest portion of the project area.

Residential – Residential properties in the study area are usually suburban in character, with most of the residences clustered in the middle of the study area. Single-family homes and multi-family properties are included in this image type.

Recreational – The recreational image types include the Kern River Parkway, Centennial and Saunders Parks, and other recreational facilities associated with the natural resource areas in the corridor, including the Kern River and the Kern River Parkway Bike Path.

Commercial – Commercial businesses are located throughout the proposed project area. This image type is characterized by mostly strip mall development, with several large-scale buildings.

3.3.2 Viewer Groups

“Viewer groups” are groups of people who regularly travel through the study area or who have a certain degree of sensitivity to changes in the visual environment. Viewer groups may be present in some landscape units and not in others, as land uses and travel patterns may vary between landscape units within the study area. Four viewer groups exist within the study area: motorists, residents, commercial employees, and recreational viewers, as described below.

Motorists – This viewer group consists of motorists who use SR 58, SR 99, and local roadways within Bakersfield for commuting, business, or recreational use. In general, motorists experience views of commercial properties and recreational areas if driving along the major roadways. If driving through local streets, the motorist will generally experience views of established low- to middle-income residential neighborhoods. Motorists would have a moderate sensitivity to changes in the visual character of the study area.

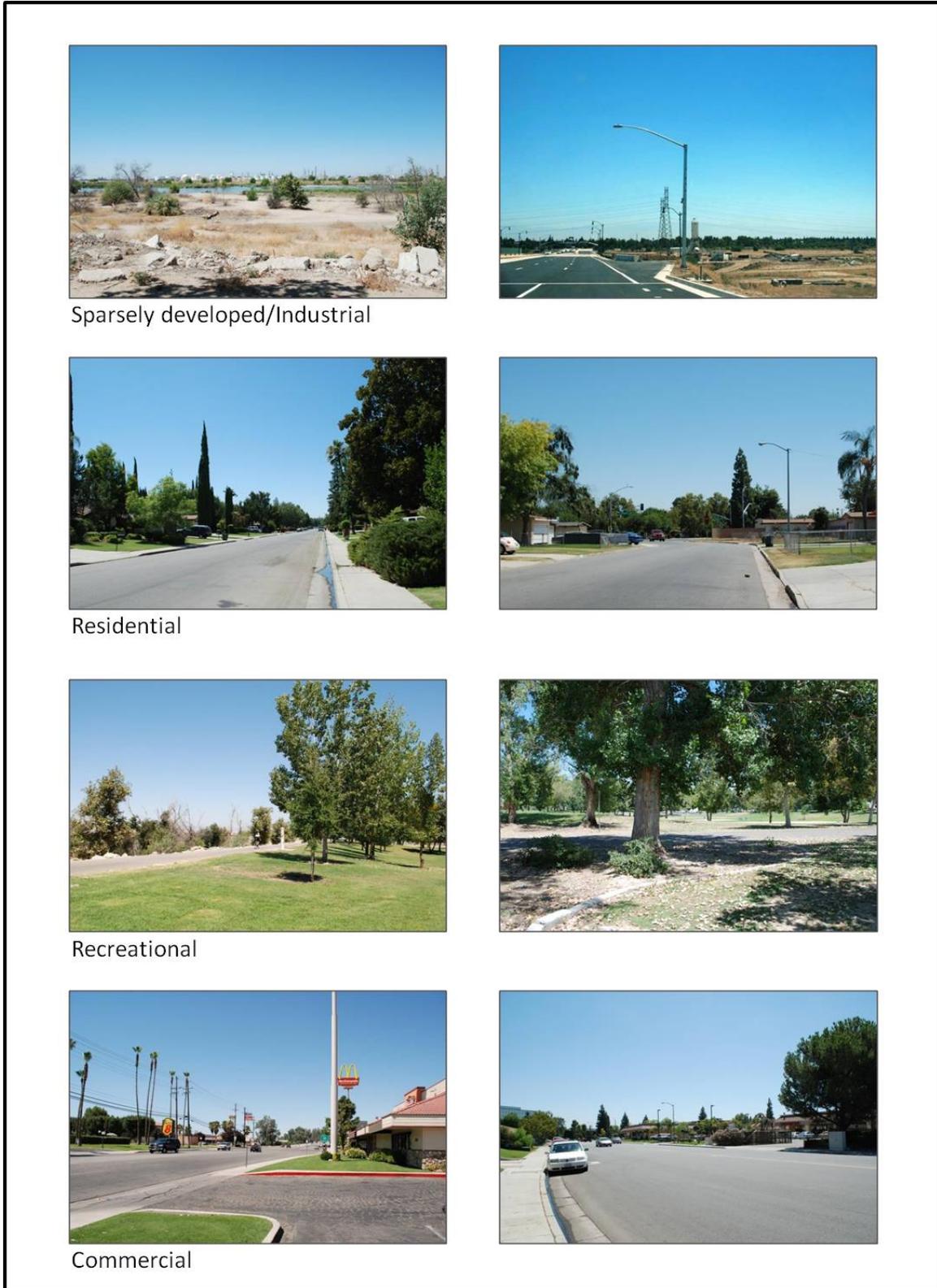
Residents – Some residents along local roadways have clear views of the roadways, where gaps in vegetation exist, while views of the roadway are fully screened for other residents. Local residents would have a moderately high to high sensitivity to changes in the visual character of the study area depending on their proximity to the proposed project.

Commercial Employees – The commercial employee viewer group is characterized by employees of commercial businesses with views during the daytime of the study area. Commercial employees within the study area would have a moderately low to moderate sensitivity to changes in the visual character of the study area.

Recreational Viewers – The recreational viewer group includes people who use the recreational areas within the study area, including the Kern River Parkway, Centennial and Saunders Parks, and other recreational facilities associated with the natural resource areas in the corridor. Recreational viewers have views of most major roadways within the study area; therefore, recreational viewers would have a moderately high to high sensitivity to changes in the visual character of the study area.

3.4 EXISTING VIEWPOINTS

Nine key viewpoints were identified from the visual influence zone of the study area to represent the visual character of the landscape units. To capture the variety of land uses located within the three build alternatives analyzed for the project, each alternative is shown with an open space, commercial, and residential key viewpoint. Each of the nine viewpoints was analyzed to determine the level of visual quality in terms of vividness, intactness, and unity. Seven evaluation criteria were applied and quantified to measure existing visual quality: very low, low, moderately low, average, moderately high, high, and very high. In order to quantify these ratings, numbers from 1 to 7 were applied to the evaluation criteria, with a 1 equal to very low, and a 7 equal to very high (Federal Highway Administration, 1981). The existing and simulated project viewpoints are shown in Figures 3-3 through 3-15. See Table 3.2 for existing and proposed vividness, intactness, and unity ratings, as well as overall visual ratings.



Source: Parsons, 2011.

Figure 3-2 Examples of Image Types within the Study Area

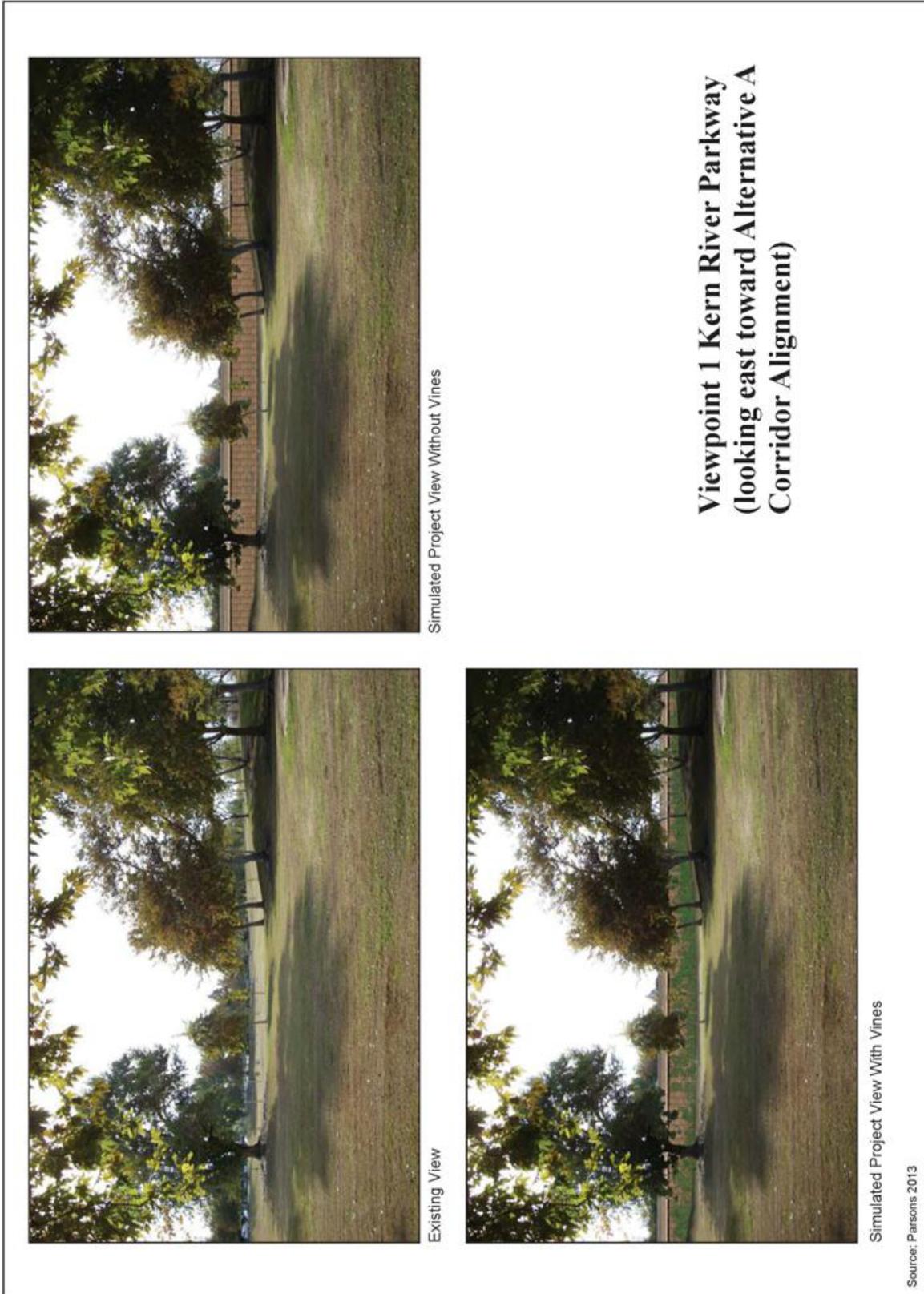


Figure 3-3 Viewpoint 1



Existing View



Simulated Project View

**Viewpoint 2 California Avenue
near Lennox Avenue (looking
south toward Alternative A
Corridor Alignment)**

Source: Parsons 2013

Figure 3-4 Viewpoint 2



Figure 3-5 Viewpoint 3



Figure 3-6 Viewpoint 4



Existing View



Simulated Project View

**Viewpoint 5 California Avenue
near Marella Way (looking
northeast toward Alternative B
Corridor Alignment)**

Source: Parsons 2013

Figure 3-7 Viewpoint 5



Figure 3-8 Viewpoint 6



Existing View



Simulated Project View

**Viewpoint 7 Centennial Park
(looking north on Fallbrook Street
toward Alternative B Corridor
Alignment)**

Source: Parsons 2013

Figure 3-9 Viewpoint 7



Existing View



Simulated Project View

**Viewpoint 8 Centennial Park
(looking east toward Alternative B
Corridor Alignment)**

Source: Parsons 2013

Figure 3-10 Viewpoint 8



Existing View



Simulated Project View

**Viewpoint 9 La Mirada Drive at
Fallbrook Street (looking east
toward Alternative B Corridor
Alignment)**

Source: Parsons 2013

Figure 3-11 Viewpoint 9

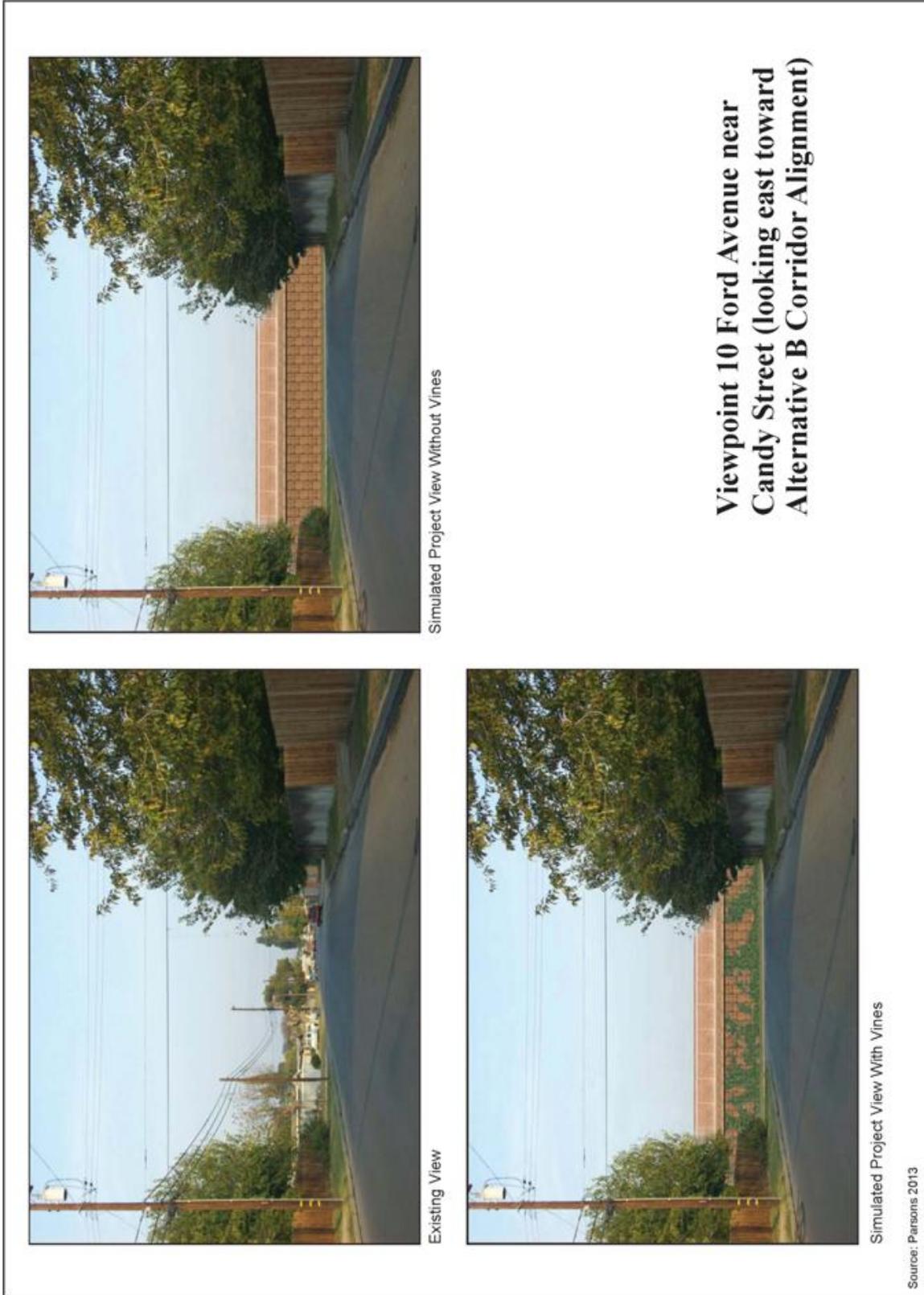


Figure 3-12 Viewpoint 10

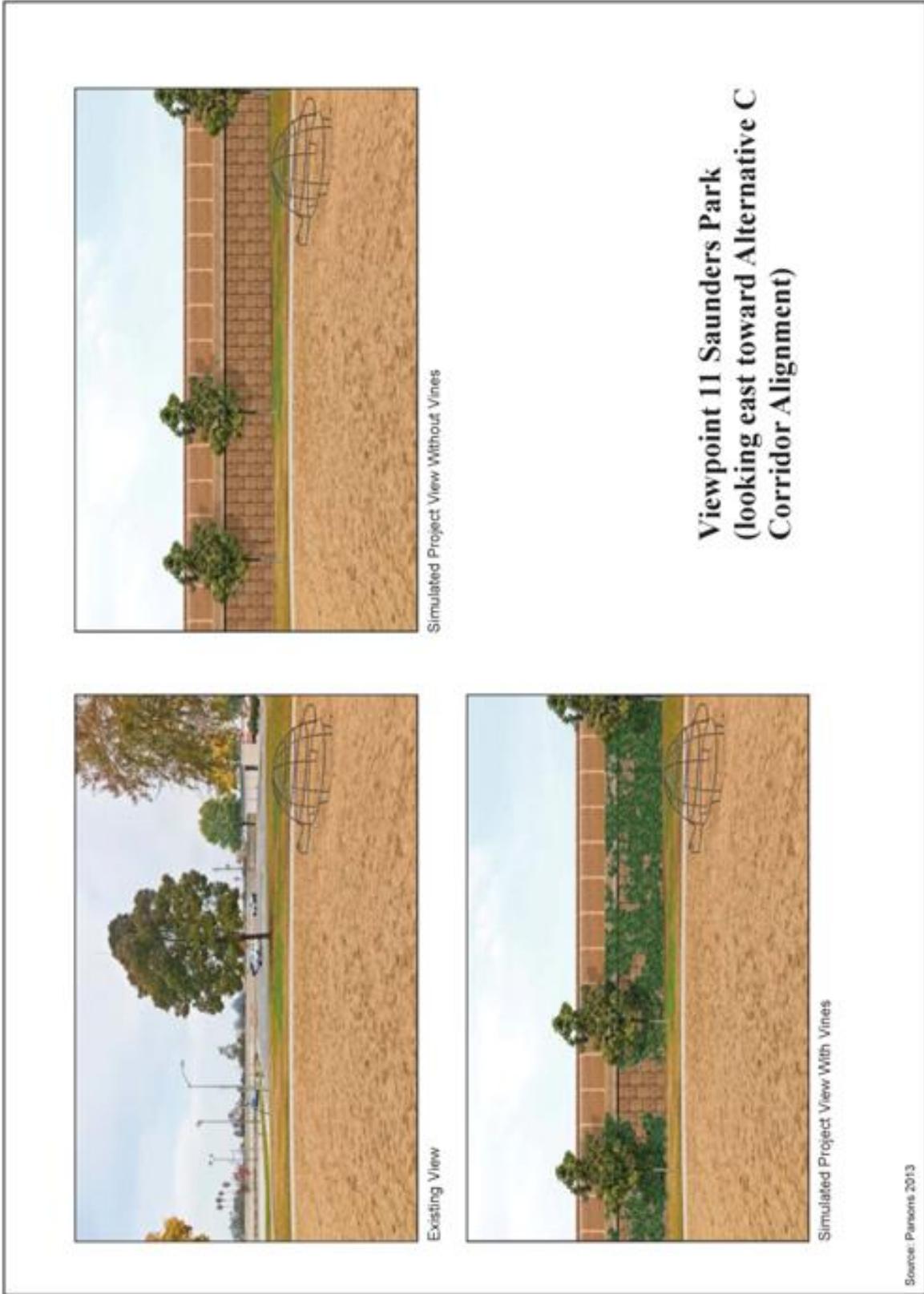


Figure 3-13 Viewpoint 11

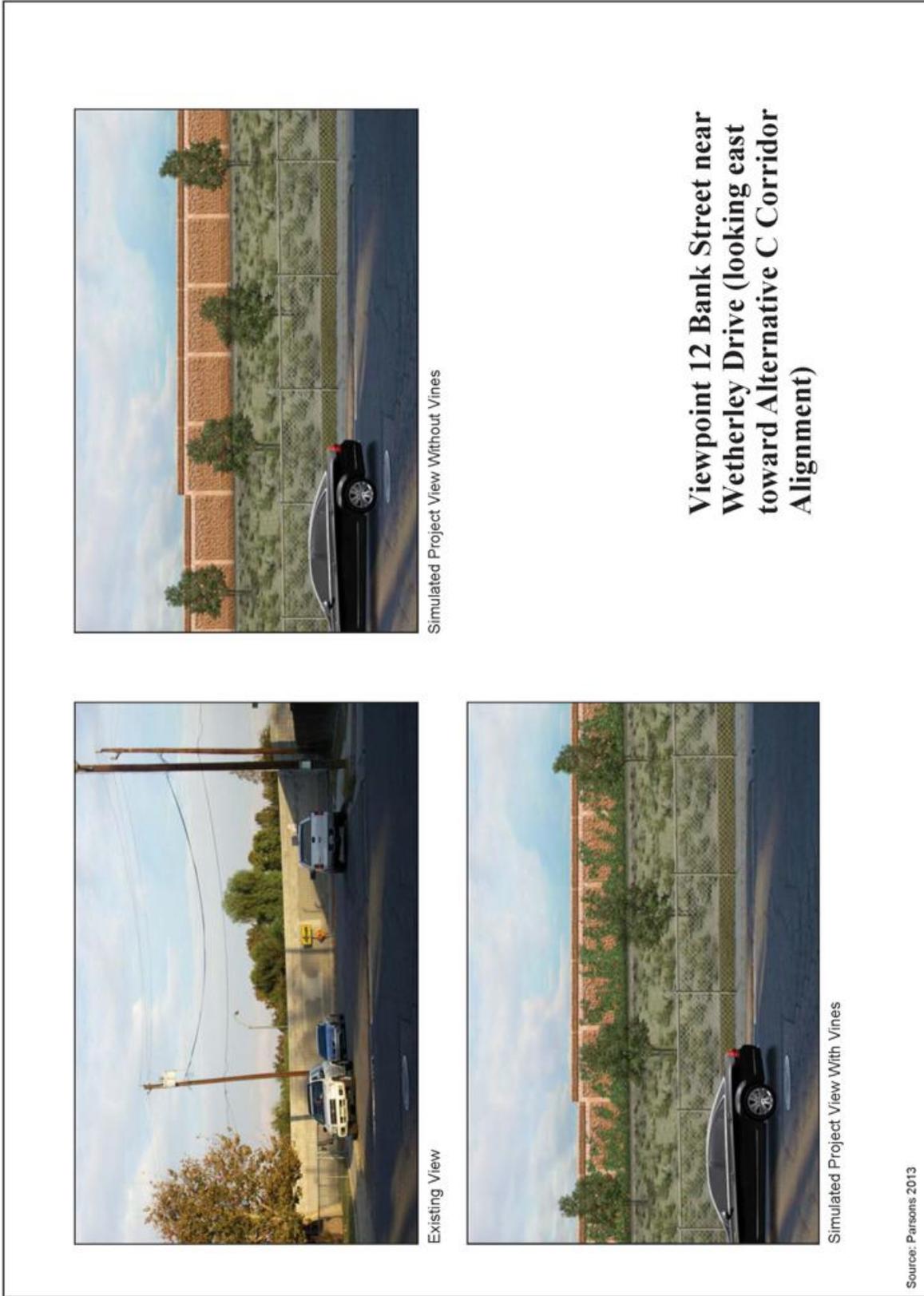


Figure 3-14 Viewpoint 12



Existing View



Simulated Project View

**Viewpoint 13 Bank Street near
Olive Street (looking west toward
Alternative C Corridor Alignment)**

Source: Parsons 2013

Figure 3-15 Viewpoint 13

Table 3.2 Summary of Existing Visual Quality for Viewpoints¹

Viewpoint			Vividness	Intactness	Unity	Overall Visual Quality ²
Build Alternative A						
Viewpoint 1	Kern River Parkway (looking east toward Alternative A)	Existing	Moderately High (5)	Moderately High (5)	Moderately High (5)	Moderately High (5)
		With Project	Average (4)	Moderately Low (3)	Average (4)	Average (3.7)
Viewpoint 2	California Avenue near Lennox Avenue (looking south toward Alternative A)	Existing	Average (4)	Average (4)	Average (4)	Average (4)
		With Project	Moderately Low (3)	Moderately Low (3)	Moderately Low (3)	Moderately Low (3)
Viewpoint 3	McDonald Way near Peckham Avenue (looking north toward Alternative A)	Existing	Average (4)	Average (4)	Average (4)	Average (4)
		With Project	Moderately Low (3)	Moderately Low (3)	Moderately Low (3)	Moderately Low (3)
Build Alternative B						
Viewpoint 4	Kern River Parkway (looking northeast toward Alternative B)	Existing	Moderately High (5)	Average (4)	Average (4)	Average (4.3)
		With Project	Average (4)	Moderately Low (3)	Moderately Low (3)	Moderately Low (3.3)
Viewpoint 5	California Avenue near Marella Way (looking northeast toward Alternative B)	Existing	Average (4)	Moderately High (5)	Average (4)	Average (4.3)
		With Project	Moderately Low (3)	Average (4)	Moderately Low (3)	Moderately Low (3.3)
Viewpoint 6	Centennial Park (looking east on Marella Way toward Alternative B)	Existing	Average (4)	Moderately High (5)	Average (4)	Average (4.3)
		With Project	Moderately Low (3)	Average (4)	Moderately Low (3)	Moderately Low (3.3)
Viewpoint 7	Centennial Park (looking north on Fallbrook Street toward Alternative B)	Existing	Average (4)	Moderately High (5)	Average (4)	Average (4.3)
		With Project	Moderately Low (3)	Moderately Low (3)	Moderately Low (3)	Moderately Low (3)
Viewpoint 8	Centennial Park (looking east toward Alternative B)	Existing	Average (4)	Moderately High (5)	Average (4)	Average (4.3)
		With Project	Average (4)	Average (4)	Average (4)	Average (4)
Viewpoint 9	La Mirada Drive at Fallbrook Street (looking east toward Alternative B)	Existing	Average (4)	Average (4)	Average (4)	Average (4)
		With Project	Average (4)	Moderately Low (3)	Moderately Low (3)	Moderately Low (3.3)
Viewpoint 10	Ford Avenue near Candy Street (looking east toward Alternative B)	Existing	Average (4)	Average (4)	Average (4)	Average (4)
		With Project	Moderately Low (3)	Moderately Low (3)	Moderately Low (3)	Moderately Low (3)
Build Alternative C						
Viewpoint 11	Saunders Park (looking east toward Alternative C)	Existing	Average (4)	Moderately High (5)	Average (4)	Average (4.3)
		With Project	Moderately Low (3)	Average (4)	Moderately Low (3)	Moderately Low (3.3)

Table 3.2 Summary of Existing Visual Quality for Viewpoints¹

Viewpoint		Vividness	Intactness	Unity	Overall Visual Quality ²	
Viewpoint 12	Bank Street near Wetherley Drive (looking east toward Alternative C)	Existing	Moderately Low (3)	Average (4)	Moderately Low (3)	Moderately Low (3.3)
		With Project	Moderately Low (3)	Moderately Low (3)	Moderately Low (3)	Moderately Low (3)
Viewpoint 13	Bank Street near Olive Street (looking west toward Alternative C)	Existing	Average (4)	Average (4)	Average (4)	Average (4)
		With Project	Average (4)	Average (4)	Average (4)	Average (4)

Source: Parsons, 2012.
¹ Seven evaluation criteria were applied to measure visual quality: very low, low, moderately low, average, moderately high, high, and very high (Federal Highway Administration, 1981).
² Overall visual quality = (Vividness + Intactness + Unity)/3

3.4.1 No-Build Alternative

Because there would be no changes to the existing environment under the No-Build Alternative, no viewpoints were analyzed for the No-Build Alternative.

3.4.2 Build Alternative A

Viewpoint 1 – Kern River Parkway (looking east toward Alternative A Corridor Alignment)

This viewpoint is in the Kern River Parkway near the intersection of Truxtun Avenue and the Mohawk Street extension, which is part of the Westside Parkway Project and under construction. The natural topography and views of Kern River Parkway and various tree types and foliage exhibit a “moderately high” degree of overall visual quality (see Figure 3-3, Existing View).

Viewpoint 2 – California Avenue near Lennox Avenue (looking south toward Alternative A Corridor Alignment)

This viewpoint is near the intersection of California Avenue and Lennox Avenue in a busy commercial area. The streetscape is developed with commercial land uses, traffic control and lighting poles, and business signs. This viewpoint exhibits an “average” degree of overall visual quality (see Figure 3-4, Existing View).

Viewpoint 3 – McDonald Way near Peckham Avenue (looking north toward Alternative A Corridor Alignment)

This viewpoint is near the intersection of McDonald Way and Peckham Avenue in a quiet single-family residential neighborhood. The McDonald Way streetscape represents residential homes,

trees, and overhead utility lines exhibiting an “average” degree of overall visual quality (see Figure 3-5, Existing View).

3.4.3 Build Alternative B

Viewpoint 4 – Kern River Parkway (looking northeast toward Alternative B Corridor Alignment)

This viewpoint is in the Kern River Parkway north of the Truxtun Avenue and Commercial Way intersection. The flat, open space topography and views of the Kern River Parkway Bike Trail, relatively undeveloped land, fences, petroleum infrastructure, and overhead utility lines exhibit an “average” degree of overall visual quality (see Figure 3-6, Existing View).

Viewpoint 5 – California Avenue near Marella Way (looking northeast toward Alternative B Corridor Alignment)

This viewpoint is near the intersection of California Avenue and Marella Way. The urban streetscape and views of California Avenue and the various commercial land uses with tree canopy exhibit an “average” degree of overall visual quality (see Figure 3-7, Existing View).

Viewpoint 6 – Centennial Park (looking east on Marella Way toward Alternative B Corridor Alignment)

This viewpoint is in Centennial Park along Marella Way. The residential streetscape and views of the park’s sidewalk, trees, and distant tennis courts exhibit an “average” degree of overall visual quality (see Figure 3-8, Existing View).

Viewpoint 7 – Centennial Park (looking north on Fallbrook Street toward Alternative B Corridor Alignment)

This viewpoint is in Centennial Park along Fallbrook Street. The grassy park area, tennis courts, sidewalk, and views of homes, trees, and lampposts exhibit an “average” degree of overall visual quality (see Figure 3-9, Existing View).

Viewpoint 8 – Centennial Park (looking east toward Alternative B Corridor Alignment)

This viewpoint is in Centennial Park near the picnic area. The views of the grassy park and picnic area, mature trees, and adjacent neighborhood exhibit an “average” degree of overall visual quality (see Figure 3-10, Existing View).

Viewpoint 9 – La Mirada Drive at Fallbrook Street (looking east toward Alternative B Corridor Alignment)

This viewpoint is near the intersection of La Mirada Drive and Fallbrook Street. The residential streetscape and views of homes, trees, roadway, and cars exhibit an “average” degree of overall visual quality (see Figure 3-11, Existing View).

Viewpoint 10 – Ford Avenue near Candy Street (looking east toward Alternative B Corridor Alignment)

This viewpoint is near the intersection of Ford Avenue and Candy Street. The residential streetscape and views of homes, trees, fences, and overhead utility lines exhibit an “average” degree of overall visual quality (see Figure 3-12, Existing View).

3.4.4 Build Alternative C

Viewpoint 11 – Saunders Park (looking east toward Alternative C Corridor Alignment)

This viewpoint is in Saunders Park near the children’s sand play area. The views of the play area, parking lot, park building, wall, trees, foliage, and overhead utility lines exhibit an “average” degree of overall visual quality (see Figure 3-13, Existing View).

Viewpoint 12 – Bank Street near Wetherley Drive (looking east toward Alternative C Corridor Alignment)

This viewpoint is near the intersection of Bank Street and Wetherley Drive, next to the west side of SR 99. The residential streetscape views of overhead utility lines, trees, and a wall exhibit a “moderately low” degree of overall visual quality (see Figure 3-14, Existing View).

Viewpoint 13 – Bank Street near Olive Street (looking west toward Alternative C Corridor Alignment)

This viewpoint is near the intersection of Bank Street and Olive Street, next to the east side of SR 99. The streetscape is commercial, with a car lot on the left side of the viewpoint and trees and foliage that exhibit an “average” degree of overall visual quality (see Figure 3-15, Existing View).

3.5 REVIEW OF SCENIC/VISUAL RESOURCE PLANS AND POLICIES

This section provides a review of the applicable scenic/visual resource plans and policies affecting development within the study area. The study area sits in the city of Bakersfield in Kern County and is subject to the applicable plans and policies identified in Table 3.3.

Table 3.3 Applicable Scenic/Visual Resource Plans and Policies

Plan/Policy	Policy/Goal
<p>Caltrans – Aesthetics Policies</p>	<p>Context Sensitive Solutions: Context Sensitive Solutions is a policy established by Caltrans as an “approach to plan, design, construct, maintain, and operate its transportation system.” Context Sensitive Solutions is an approach to transportation projects that places preservation of historic, aesthetic, scenic, natural environment and other community values on an equal basis with transportation safety, mobility, economics, and maintenance. The intended result of employing Context Sensitive Solutions design on projects is to create transportation projects that are in harmony with a community’s values and objectives by allowing community input into the design process.</p>
	<p>Landscape Regulations: Caltrans has established a plant selection and set-back guide for all new landscape plantings. In most instances, these are more limiting than previous requirements. The primary concern of the requirements is the safety of maintenance workers and travelers on the roadway. Under the revised guidelines, new plantings may be restricted in their locations, and it cannot be assumed that new plantings will be in-kind and in-place of the existing plantings. In addition, an increase in disease and insect vectors has limited the species that can be replanted.</p> <p>Another potential limitation to new landscaping is the new water quality requirements as a result of additional paving in the corridor. Some of the methods typically employed to improve the quality of the water running off of adjacent project pavement include detention ponds that allow pollutants to settle out, and bioswales (i.e., grassed ditches) that use plantings along the swale to filter out the impurities. In both of these treatments, woody landscape plantings, including shrubs and groundcovers, are not allowed. In the case of the basin, this is because the basin must be cleaned out to remove sediment. In the case of the bioswale, grass is needed to act as the filter. Therefore the placement of these elements within a corridor can greatly restrict landscape plantings at any one particular location.</p>
<p>Kern County General Plan – Land Use, Open Space, and Conservation Element</p>	<p>Policy 47: Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.</p>
	<p>Policy 48: Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.</p>
<p>Metropolitan Bakersfield Freeway Beautification Master Plan Design Guidelines</p>	<p>Design Goal – Beautification: To develop implementable and sustainable landscape design solutions for the cleanup, beautification, and an enhanced community image along the key transportation corridors included in the Freeway Beautification Master Plan and Design Guidelines.</p>
	<p>Design Goal – View Orientation: To preserve and direct view orientation windows from both directions along the four key transportation corridors where there are panoramic or scenic vista opportunities by permitting filtered screening of appropriate adjacent land uses, and providing dense screening or camouflage of areas with unsightly visual appearance or impeding impact from the vehicular travelway.</p>
	<p>Design Goal – Distinctive Landscape: To generate distinctive landscape features and a design vocabulary of image infrastructure that formulates a series of community assets capable of receiving national recognition and commendation.</p>
	<p>Design Goal – Constructability: To produce landscape design solutions that support the mission and vision of the Department to move people, products, and services by providing aesthetic and safety conscious travelways in accordance with the Department’s <i>Route 99 Corridor Master Plan (2004)</i> (partial overlap with Alternative C) that when transformed into construction documents meet highway planting design principles and constructability guidelines.</p>

Table 3.3 Applicable Scenic/Visual Resource Plans and Policies

Plan/Policy	Policy/Goal
<p>City of Bakersfield General Plan – Kern River Plan Element</p>	<p>Policy 3.2.3-2: Siting of buildings and structures shall be designed to create an attractive and harmonious relationship with surrounding developments and the natural environment, and shall be supported by a lot-use feasibility study approved by the Planning Director of the respective jurisdiction.</p>
	<p>Policy 3.2.3-3: Buildings, structures, and vegetation shall be constructed, installed, or planted in a manner to minimize to the greatest extent possible, the obstruction of scenic views of the Kern River from highways, streets, trails, parks, or beach areas.</p>
	<p>Policy 3.2.3-4: Land developments which would detract from the scenic quality of the Kern River shall be screened by vegetation, fencing, or landscaped berms, or be located in a reasonably inconspicuous manner.</p>
	<p>Policy 3.2.3-5: Natural topography, vegetation, and scenic features shall be retained to the greatest feasible extent in future development along the River.</p>
	<p>Policy 3.2.3-6: Grading or earthmoving for projects within the secondary floodway shall blend with existing topography, and vegetation shall subsequently be harmoniously re-established where it does not conflict with channel maintenance and recharge facilities.</p>
	<p>Policy 3.2.3-9: Signs shall be limited to those necessary for directions and premises identification. Sign size, design, color, texture, materials, and location shall, to the greatest extent possible, be compatible with the open space character of the area.</p>
	<p>Policy 3.2.3-11: New or relocated utility lines shall be placed underground, except in areas subject to intensive agricultural uses, areas designated as 8.4 (Mineral and Petroleum) and electrical power lines to oil wells, water wells, and water control devices in areas designated as 8.5 (Resource Management) unless otherwise required by law, and at River crossings, or where it can be shown that the specific nature of the facility is such that it is entirely infeasible to do so.</p>
<p>Route 99 Corridor Enhancement Master Plan</p>	<p>Goal 2: Create a San Joaquin Valley Route 99 Corridor identity. Objective 2A: Establish a Route 99 corridor logo. Objective 2B: Establish corridor themes (landscape, color, median, structures, etc). Objective 2C: Develop design concepts and aesthetic guidelines.</p>
<p>Sources: Caltrans Aesthetics Policies – Context Sensitive Solutions, 2001; Landscape Regulations, 2010; Kern County General Plan – Land Use, Open Space, and Conservation Element, 2004; Metropolitan Bakersfield Freeway Beautification Master Plan Design Guidelines, 2003; City of Bakersfield General Plan. Kern River Plan Element, 1985; Route 99 Corridor Enhancement Master Plan, 2004.</p>	

Chapter 4 Environmental Consequences

The following section contains analysis of the potential visual changes as a result of the proposed Centennial Corridor Project. The visual analysis uses the methodology contained in Chapter 2, Methodology.

4.1 VISUAL CHANGES AND EFFECT ON VIEWER GROUPS

The following section discusses the visual changes and effect on viewer groups at the nine representative viewpoints within the four landscape units, as described in Section 3.4 and shown in Figure 3-1. The assessment results are summarized in Table 4.1.

4.1.1 Visual Impact Assessment for Viewpoint Locations

No-Build Alternative

Because there would be no changes to the existing environment, there would be no environmental consequences associated with the No-Build Alternative.

Build Alternative A

Viewpoint 1 – Kern River Parkway (looking east toward Alternative A Corridor Alignment)

Proposed Project Features – Alternative A would build a new retaining wall and elevated freeway north of Truxtun Avenue crossing the Kern River Parkway. Project design has not been finalized, but the retaining wall height is assumed to be 16 feet tall.

Change to Visual Quality/Character – The addition of the retaining wall and elevated freeway would be a change in the visual environment of the park landscape. The change would affect vividness, intactness, and unity of the existing view because the new freeway would change the visual character of the Kern River Parkway; the man-made structure would encroach on the natural landscape. There would be a moderately high to high adverse change in the visual quality/character of this viewpoint, decreasing the overall visual quality to “average” with the implementation of Alternative A (see Figure 3-3, Simulated Project View).

Viewer Response – The Kern River Parkway users would have foreground to middle-ground views of the new freeway and would have a “high” sensitivity and awareness of the project and its effect on views. The view through the Kern River Parkway at this location would be interrupted by the new transportation facility, no longer allowing the viewer to have a tranquil recreational experience. Viewer awareness of the changes is likely to be high for park users because the duration of their view of the changes is long (more than 10 seconds) due to recreational visits.

Resulting Visual Impact – There would be moderately high adverse changes to Viewpoint 1 with implementation of Alternative A.

Table 4.1 Summary of the Visual Impact Assessment¹

Viewpoint		Overall Visual Quality ²	Viewer Response	Resulting Visual Impact ³	
Build Alternative A					
Viewpoint 1	Kern River Parkway (looking east toward Alternative A)	Existing Visual Quality	Moderately High (5)	High (6)	Moderately High (4.9)
		Visual Resource Change	Average (3.7)		
Viewpoint 2	California Avenue near Lennox Avenue (looking south toward Alternative A)	Existing Visual Quality	Average (4)	Moderately Low (3)	Moderately Low (3)
		Visual Resource Change	Moderately Low (3)		
Viewpoint 3	McDonald Way near Peckham Avenue (looking north toward Alternative A)	Existing Visual Quality	Average (4)	High (6)	Moderately High (4.5)
		Visual Resource Change	Moderately Low (3)		
Build Alternative B					
Viewpoint 4	Kern River Parkway (looking northeast toward Alternative B)	Existing Visual Quality	Average (4.3)	Moderately High (5)	Average (4)
		Visual Resource Change	Moderately Low (3)		
Viewpoint 5	California Avenue near Marella Way (looking northeast toward Alternative B)	Existing Visual Quality	Average (4.3)	Low (2)	Moderately Low (2.7)
		Visual Resource Change	Moderately Low (3.3)		
Viewpoint 6	Centennial Park (looking east on Marella Way toward Alternative B)	Existing Visual Quality	Average (4.3)	High (6)	Moderately High (4.5)
		Visual Resource Change	Moderately Low (3)		
Viewpoint 7	Centennial Park (looking north on Fallbrook Street toward Alternative B)	Existing Visual Quality	Average (4.3)	High (6)	Moderately High (4.5)
		Visual Resource Change	Moderately Low (3)		
Viewpoint 8	Centennial Park (looking east toward Alternative B)	Existing Visual Quality	Average (4.3)	High (6)	Moderately High (5)
		Visual Resource Change	Average (4)		
Viewpoint 9	La Mirada Drive at Fallbrook Street (looking east toward Alternative B)	Existing Visual Quality	Average (4)	High (6)	Moderately High (4.7)
		Visual Resource Change	Moderately Low (3.3)		
Viewpoint 10	Ford Avenue near Candy Street (looking east toward Alternative B)	Existing Visual Quality	Average (4)	High (6)	Moderately High (4.5)
		Visual Resource Change	Moderately Low (3)		
Build Alternative C					
Viewpoint 11	Saunders Park (looking east toward Alternative C)	Existing Visual Quality	Average (4.3)	High (6)	Moderately High (4.7)
		Visual Resource Change	Moderately Low (3.3)		
Viewpoint 12	Bank Street near Wetherley Drive (looking east toward Alternative C)	Existing Visual Quality	Moderately Low (3.3)	Average (4)	Average (4)
		Visual Resource Change	Moderately Low (3)		

Table 4.1 Summary of the Visual Impact Assessment¹

Viewpoint		Overall Visual Quality ²	Viewer Response	Resulting Visual Impact ³
Viewpoint 13	Bank Street near Olive Street (looking west toward Alternative C)	Existing Visual Quality	Average (4)	Average (4)
		Visual Resource Change	Average (4)	
Source: Parsons, 2012.				
¹ Seven evaluation criteria were applied to measure visual quality: very low, low, moderately low, average, moderately high, high, and very high (Federal Highway Administration, 1981).				
² Visual Resource Change summation taken from Table 3.2 Summary of Existing Visual Quality for Viewpoints.				
³ Resulting Visual Impact = (Visual Resource Change of the Overall Visual Quality + Viewer Response)/2				

Viewpoint 2 – California Avenue near Lennox Avenue (looking south toward Alternative A Corridor Alignment)

Proposed Project Features – Alternative A would build a new elevated freeway north of Stockdale Highway crossing California Avenue. There would be concrete freeway decking and concrete columns supporting the new transportation facility.

Change to Visual Quality/Character – The proposed freeway would be a substantial change in the visual environment of the commercial landscape, primarily because the scale of the structure is massive at this viewpoint. The change would affect the vividness, intactness, and unity of the existing view because the new freeway would add an above-grade structure into the commercial area. However, when compared to other large buildings surrounding the area, the scale of the proposed transportation facility would not be as sizeable as it appears in this viewpoint. Because the area is mostly commercial and built out, it has an average existing rating; therefore, change from the project would affect vividness, intactness, and unity due to bisecting the commercial area, indicating a visual resource change to “moderately low” with the implementation of Alternative A (see Figure 3-4, Simulated Project View).

Viewer Response – Motorists using southbound California Avenue would have short-term (drivers would view the proposed project driving at the posted speed limit for approximately one to 5 seconds) middle-ground views of the new freeway. The view from southbound California Avenue includes commercial development and obtrusive signage. Viewer awareness of the changes is likely to be low because duration of the view is short (less than 5 seconds). Commercial employees are likely to have a moderate/average viewer awareness of the proposed project changes as they will have views of the proposed project only during business hours.

Resulting Visual Impact – The resulting visual impact to Viewpoint 2 would be moderately low with implementation of Alternative A.

Viewpoint 3 – McDonald Way near Peckham Avenue (looking north toward Alternative A Corridor Alignment)

Proposed Project Features – Alternative A would build a cul-de-sac at the end of McDonald Way and Peckham Avenue, a chain-link fence would be constructed in front of a landscaped slope leading to an elevated freeway and soundwall south of Stockdale Highway crossing McDonald Way. Until project design is complete, both the retaining wall and soundwall were assumed to be 16 feet tall. These project features would result in the potential acquisition of residential properties to accommodate the proposed transportation facility.

Change to Visual Quality/Character – The proposed retaining wall, soundwall, and raised freeway would be a substantial change in the visual environment of the residential landscape. The change would affect the vividness, intactness, and unity of the existing view because the new freeway would add an above-grade structure into the residential area. The existing character of the area would change from a quiet residential street to a neighborhood bisected by a large-scale transportation facility. There would be a moderate to high adverse change in the visual quality/character of this viewpoint, indicating a decrease in the visual quality to “moderately low” with the implementation of Alternative A (see Figure 3-5, Simulated Project View).

Viewer Response – Motorists using northbound McDonald Way would have short-term (less than 5 seconds) foreground and middle-ground views of the proposed new freeway (Alternative A); however, residents would have longer duration (more than 10 seconds because they live in the neighborhood) foreground to middle-ground views of the new freeway and would have a “high” sensitivity and awareness of the project and its effect on views from their homes and neighborhood. Residents’ views down McDonald Way would be interrupted by the proposed transportation facility; no longer allowing them to look down the street at a neighbor’s house. Viewer awareness of the changes is likely to be high because duration of the view is long for residents, and the proposed project would affect the character of the residential landscape.

Resulting Visual Impact – There would be moderately high adverse changes to Viewpoint 3 with implementation of Alternative A.

Build Alternative B

Viewpoint 4 – Kern River Parkway (looking northeast toward Alternative B Corridor Alignment)

Proposed Project Features – Alternative B would build an elevated freeway and ramps between the Kern River and Truxtun Avenue. There would be concrete freeway decking and

concrete columns supporting the new transportation facility. The proposed project may also result in the relocation of utility power lines shown in this view.

Change to Visual Quality/Character – The proposed elevated freeway would be a substantial change in the visual environment of the landscape. The change would affect vividness, intactness, and unity of the existing view because the new freeway would add an above-grade structure into the sparsely developed area. The existing visual character would be changed from a sparsely developed recreational area to one with a large-scale transportation facility. The change in the visual quality/character of this viewpoint would reduce the quality to “moderately low” with the implementation of Alternative B (see Figure 3-6, Simulated Project View).

In addition to the project, the Westside Parkway project, recently constructed, is within the area encompassed by this viewpoint. As shown in Figure 3-6, Simulated Project View, the freeway deck and concrete columns associated with the Westside Parkway project is visible from this viewpoint. Support structures and a portion of the flyover associated with the Centennial Corridor project would be visible from this viewpoint.

Viewer Response – Kern River Parkway users would have long duration (more than 10 seconds) foreground to middle-ground views of the new freeway and ramps and would have a “moderate to high” sensitivity and awareness of the project and its effect on views from the parkway. The view of the Kern River Parkway Bike Path at this location would be interrupted by the new transportation facility, no longer allowing the viewer to have the same recreational experience as before the construction of the proposed transportation facility. Viewer awareness of the changes is likely to be moderate/average to high because the proposed project would slightly decrease the visual character of the key view.

Resulting Visual Impact – There would be average adverse changes to Viewpoint 4 with implementation of Alternative B.

Viewpoint 5 – California Avenue near Marella Way (looking northeast toward Alternative B Corridor Alignment)

Proposed Project Features – Alternative B would build a new freeway northwest of Centennial Park crossing California Avenue. There would be concrete freeway decking and concrete columns supporting the new transportation facility.

Change to Visual Quality/Character – The proposed elevated freeway would be a change in the visual environment of the commercial landscape. The change would affect vividness, intactness, and unity of the existing view because the new freeway would add an above-grade structure into the mostly commercial building area. There would be an adverse change in the

visual quality/character of this viewpoint because the area would be bisected by the proposed transportation facility. The visual quality of this viewpoint would change to “moderately low” with the implementation of Alternative B (see Figure 3-7, Simulated Project View).

Viewer Response – Motorists using eastbound California Avenue would have short-term (less than 5 seconds) foreground and middle-ground views of the proposed freeway (Alternative B). Commercial area users and employees would have long duration (more than 10 seconds because they likely work in the area during daytime hours) foreground to middle-ground views of the new freeway and would have a “low” sensitivity and awareness of the project because the proposed project would only slightly affect the current highly developed urban character of the landscape.

Resulting Visual Impact – There would be moderately low adverse changes to Viewpoint 5 with implementation of Alternative B.

Viewpoint 6 – Centennial Park (looking east on Marella Way toward Alternative B Corridor Alignment)

Proposed Project Features – Alternative B would build a new overcrossing on Marella Way at Centennial Park, a retaining wall and concrete barrier with pipe rail along the top between the new roadway and park, six-foot sidewalks on both sides of the road, street parking on both sides of the road, and street trees along the north side of the roadway. The project offers two design options for the south side of the overcrossing.

In Option A, a minor slope (approximately 12 inches) is used to provide a transition between the park property and the approach to the retaining wall/barrier. Most of the area in front of the wall remains at its existing elevation and landscaped with turf grasses to blend into the adjacent park landscape.

In Option B, a larger slope is used within existing right-of-way, which reduces the height appearance of the retaining wall and shortens the length of the barrier needed along the sidewalk. The area in front of the wall would be landscaped with turf grasses to blend into the adjacent park landscape.

The residential properties contained within this viewpoint would be removed with the proposed project. In addition, a soundwall would be built at the back of the park near the tennis courts to shield Centennial Park users from the noise created by the proposed freeway. Until the project design is complete, the soundwall is assumed to be 16 feet tall. The proposed freeway is not visible from this viewpoint because it is depressed below grade behind the soundwall in the background of this viewpoint.

Change to Visual Quality/Character – The proposed overcrossing and removal of houses would be a substantial change in the visual environment of the neighborhood residential landscape surrounding Centennial Park. The change would affect the vividness, intactness, and unity of the existing view because the new freeway would change the visual character of the residential area; the existing character of the area would change from a quiet residential street to a neighborhood bisected by a large-scale transportation facility. In addition, the residential properties contained within this viewpoint would be removed with the proposed project. Therefore, there would be a high adverse change in the visual quality/character of this viewpoint, resulting in a “moderately low” visual quality with the implementation of Alternative B (see Figure 3-8, Simulated Project View, Option A and Option B).

Viewer Response – Motorists using eastbound Marella Way would have short-term (less than 5 seconds) views of the proposed freeway (Alternative B) because Marella Way would be elevated over the freeway at this location. Residents would have longer-duration (more than 10 seconds) foreground to middle-ground views of the new freeway and would have a “high” sensitivity and awareness of the project and its effect on views from their homes and neighborhood. Viewer awareness of the changes is likely to be high because duration of the view is long (more than 10 seconds) for community residents, and the proposed project would remove all residential properties contained within this viewpoint.

Resulting Visual Impact – The resulting visual impact would be moderately high for Viewpoint 6 with implementation of Alternative B.

Viewpoint 7 – Centennial Park (looking north on Fallbrook Street toward Alternative B Corridor Alignment)

Proposed Project Features – Alternative B would build a new overcrossing on Marella Way and a cul-de-sac on Fallbrook Street. Until project design is complete, the soundwall is assumed to be 16 feet tall. The residential properties contained within this viewpoint would be removed with the proposed project. The proposed freeway is not visible from this viewpoint.

Change to Visual Quality/Character – The proposed overcrossing, cul-de-sac, and removal of houses would be a substantial change in the visual environment of the neighborhood residential landscape surrounding Centennial Park. The change would affect the vividness, intactness, and unity of the existing view because the new transportation facilities would change the visual character of the residential area; the existing character of the area would change from a quiet residential street next to the park to a neighborhood bisected by a large-scale transportation facility. Therefore, there would be a high adverse change in the visual quality/ character of this

viewpoint, resulting in a “moderately low” visual quality with the implementation of Alternative B (see Figure 3-9, Simulated Project View).

Viewer Response – Motorists using Fallbrook Street would have longer-term (more than 10 seconds) foreground and middle-ground views of the proposed project (Alternative B). Residents would have longer-duration (more than 10 seconds) foreground to middle-ground views of the new freeway and would have a “moderately high” sensitivity and awareness of the project and its effect on views from their homes and neighborhood. Viewer awareness of the changes is likely to be high because duration of the view is long (more than 10 seconds) for community residents and motorists who would now need to turn around in the cul-de-sac, rather than continue on to Marella Way, and the proposed project would affect the character of the residential landscape.

Resulting Visual Impact – The resulting visual impact would be moderately high for Viewpoint 7 with implementation of Alternative B.

Viewpoint 8 – Centennial Park (looking east toward Alternative B Corridor Alignment)

Proposed Project Features – Alternative B would build a soundwall, freeway, and cul-de-sac at Centennial Park. Except for the two houses directly behind the picnic area, the residential properties contained within this viewpoint would be removed with the proposed project. The proposed freeway is not visible from this viewpoint because it is depressed below grade behind the soundwall in the background of this viewpoint

Change to Visual Quality/Character – The proposed soundwall, freeway, cul-de-sac, and removal of houses would be a substantial change in the visual environment of the neighborhood residential landscape surrounding Centennial Park. The change would affect the intactness and unity of the existing view because the new freeway would change the visual character of the residential area; the existing character of the area would change from a quiet residential street to a neighborhood bisected by a large-scale transportation facility. Therefore, there would be a high adverse change in the visual quality/character of this viewpoint, resulting in an “average” visual quality with the implementation of Alternative B (see Figure 3-10, Simulated Project View).

Viewer Response – Motorists using Centennial Park would have longer-term (more than 10 seconds) background views of the proposed freeway (Alternative B). Residents would have longer-duration (more than 10 seconds) background views of the new freeway and would have a “high” sensitivity and awareness of the project and its effect on views from their homes and neighborhood. Viewer awareness of the changes is likely to be high because duration of the view is long (more than 10 seconds) for community residents and motorists, and the proposed project would affect the character of the residential landscape.

Resulting Visual Impact – The resulting visual impact would be moderately high for Viewpoint 8 with implementation of Alternative B.

Viewpoint 9 – La Mirada Drive at Fallbrook Street (looking east toward Alternative B Corridor Alignment)

Proposed Project Features – Alternative B would build an overcrossing on La Mirada Drive at Fallbrook Street. Residential properties in the background of this viewpoint would be removed as a result of the proposed project; foreground and middle-ground homes would remain with their driveways elevated to meet the new overcrossing. The proposed freeway would be depressed under the overcrossing at this location.

Change to Visual Quality/Character – The proposed overcrossing and removal of residential properties would be a substantial change in the visual environment of the neighborhood residential landscape. The change would affect the intactness and unity of the existing view because the new freeway would change the visual character of the residential area; the existing character of the area would change from a quiet residential street to a neighborhood bisected by a large-scale transportation facility. Therefore, there would be a high adverse change in the visual quality/character of this viewpoint, resulting in a “moderately low” visual quality with the implementation of Alternative B (see Figure 3-11, Simulated Project View).

Viewer Response – Motorists using the proposed La Mirada overcrossing would have longer-term (more than 10 seconds) foreground and middle-ground views of the proposed freeway and overcrossing (Alternative B). Residents would also have longer-duration (more than 10 seconds) foreground to middle-ground views of the new freeway and would have a “high” sensitivity and awareness of the project and its effect on views from their homes and neighborhood. Viewer awareness of the changes is likely to be high because duration of the view is long (more than 10 seconds) for community residents, and the proposed project would affect the character of the residential landscape.

Resulting Visual Impact – The resulting visual impact would be moderately high for Viewpoint 9 with implementation of Alternative B.

Viewpoint 10 – Ford Avenue near Candy Street (looking east toward Alternative B Corridor Alignment)

Proposed Project Features – Alternative B would build a new soundwall and an elevated freeway behind these features near the Ford Avenue and Candy Street intersection. Until project design is complete, the soundwall is assumed to be 16 feet tall.

Change to Visual Quality/Character – The proposed retaining wall, soundwall, and freeway would be a substantial change in the visual environment of the Westpark neighborhood residential landscape. The change would affect the vividness, intactness, and unity of the existing view because the new freeway would change the visual character of the residential area; the existing character of the area would change from a quiet residential street to a neighborhood bisected by a large-scale transportation facility. Therefore, there would be a high adverse change in the visual quality/character of this viewpoint, resulting in a “moderately low” visual quality with the implementation of Alternative B (see Figure 3-12, Simulated Project View).

Viewer Response – Motorists using eastbound Ford Avenue would have short-term (less than 5 seconds) foreground and middle-ground views of the proposed new freeway (Alternative B). Residents would have longer-duration (more than 10 seconds) foreground to middle-ground views of the new freeway and would have a “high” sensitivity and awareness of the project and its effect on views from their homes and neighborhood. Residents’ views down Ford Avenue would be interrupted by the proposed transportation facility, no longer allowing them to look down the street at a neighbor’s house. Viewer awareness of the changes is likely to be high because duration of the view is long (more than 10 seconds) for community residents, and the proposed project would affect the character of the residential landscape.

Resulting Visual Impact – The resulting visual impact would be moderately high for Viewpoint 10 with implementation of Alternative B.

Build Alternative C

Viewpoint 11 – Saunders Park (looking east toward Alternative C Corridor Alignment)

Proposed Project Features – Alternative C would build a new elevated freeway and soundwall. Until project design is complete, the soundwall is assumed to be 16 feet tall.

Change to Visual Quality/Character – The proposed freeway and soundwall parallel to the existing SR 99 would be a substantial change in the visual park landscape. The change would affect the vividness, intactness, and unity of the existing view. The visual character of Saunders Park would be affected by the removal of land and a new soundwall placed on the outside of the parking lot perimeter; therefore, there would be an adverse change in the visual quality/ character of this viewpoint, resulting in a “moderately low” visual quality with the implementation of Alternative C (see Figure 3-13, Simulated Project View).

Viewer Response – Saunders Park users would have long duration (more than 10 seconds) foreground to middle-ground views of the new freeway and wall. Viewer awareness of the

changes is likely to be high because duration of the view is long (more than 10 seconds), and the project would take out some mature trees and add a retaining wall and freeway.

Resulting Visual Impact – The resulting visual impact would be moderately high adverse changes to Viewpoint 11 with implementation of Alternative C.

Viewpoint 12 – Bank Street near Wetherley Drive (looking east toward Alternative C Corridor Alignment)

Proposed Project Features – Alternative C would build a chain-link fence in front of a landscaped slope leading to a soundwall and elevated freeway adjacent and parallel to the existing SR 99.

Nearby residential properties would be removed for project construction. In its existing condition, this viewpoint contains a wall. Until project design is complete, the soundwall is assumed to be 16 feet tall.

Change to Visual Quality/Character – The proposed fence, slope, and soundwall would be a change in the visual environment of the residential landscape. The intactness of the view would be affected because homes would be removed from this viewpoint. The change would not, however, affect the vividness or unity because there is an existing wall adjacent to the existing SR 99 freeway. Even though the intactness of the view would be affected, the overall visual quality/character of this viewpoint would remain “moderately low” with the implementation of Alternative C (see Figure 3-14, Simulated Project View).

Viewer Response – Motorists using eastbound Bank Street would have short-term (less than 5 seconds) foreground and middle-ground views of the proposed fence, slope, and soundwall (Alternative C). Residents would have longer duration (more than 10 seconds) foreground to middle-ground views of the proposed project and would have a “moderate” sensitivity and awareness of the project and its effect on views from their homes and neighborhood because there would be removal of some homes within the viewpoint. Viewer awareness of the changes is likely to be moderate/average because the proposed project would affect the character of the residential landscape due to the change in the number of residences.

Resulting Visual Impact – There would be average adverse changes to Viewpoint 12 with implementation of Alternative C.

Viewpoint 13 – Bank Street near Olive Street (looking west toward Alternative C Corridor Alignment)

Proposed Project Features – Alternative C would build a short concrete barrier with a chain-link fence on top of it, adjacent and parallel to the existing SR 99. Until project design is complete, the retaining wall is assumed to be 16 feet tall.

Change to Visual Quality/Character – The addition of the concrete barrier and fence would change the visual environment of the mixed commercial/residential area. The change would not, however, affect the vividness, intactness, and unity of the existing view because other than losing some mature trees that would be replaced, the character of this viewpoint remains the same. Therefore, this viewpoint would remain an “average” rating with the implementation of Alternative B (see Figure 3-15, Simulated Project View).

Viewer Response – Motorists using westbound Bank Street would have short-term (less than 5 seconds) foreground and middle-ground views of the proposed project (Alternative C). The view from westbound Bank Street is from within a mixed commercial/residential area. Community residents would have longer duration (more than 10 seconds) foreground to middle-ground views of the proposed project and would have a “moderate” sensitivity and awareness of the project and its effect on views from their homes and businesses. Viewer awareness of the changes is likely to be moderate/average because duration of the view is long (more than 10 seconds) for residents and the project would affect the character of the overall landscape.

Resulting Visual Impact – There would be average adverse changes to Viewpoint 13 with implementation of Alternative C.

4.1.2 Visual Impact Assessment Summary

The following section is a summary of visual and aesthetic consequences for each alternative. Each alternative was given a rating to indicate the degree of change it would cause in the general visual environment. This rating was calculated using the results in the Resulting Visual Impact column in Table 4.1 Summary of the Visual Impact Assessment. As shown in Table 4.1, the Resulting Visual Impact Column identifies a rating for each viewpoint; the total rating used in the following paragraphs is the average of the three viewpoints for each alternative in the Resulting Visual Impact column.

No-Build Alternative

Because there would be no changes to the existing environment, there would be no environmental consequences associated with the No-Build Alternative.

Build Alternative A

Build Alternative A is the westernmost alternative analyzed as part of the proposed project. It would create a division between residential neighborhoods and commercial areas, as well as recreational areas such as the Kern River Parkway. The project would divide neighborhoods and create vertical visual changes. These vertical visual changes consist of new soundwalls and retaining walls; there would be segments of the proposed transportation facility that would be built at-grade with the existing development, as well as elevated segments. Because much of the project would not be built along an existing right-of-way, Build Alternative A would create an average change in the general visual environment of the study area.

Build Alternative B

Build Alternative B is the middle alternative analyzed as part of the proposed project. It would result in construction of a new freeway facility through the center of Westpark, which would result in a large number of residential and commercial property displacements. The new transportation facility would be elevated at the west end near California Avenue and be constructed below existing surface grade through most of this segment through the Westpark residential neighborhood beginning northwest of Marella Way to Ford Avenue. Because much of the proposed project would not be built along an existing right-of-way, Build Alternative B would create an average change in the general visual environment of the study area.

Build Alternative C

Build Alternative C is the easternmost alternative analyzed as part of the proposed project. Unlike Build Alternatives A and B, it would not divide neighborhoods because much of the proposed Build Alternative C would be built along an existing transportation facility right-of-way. This alternative would, however, also include similar vertical visual changes with the new soundwalls and retaining walls; there would be segments of the proposed transportation facility that would be built at-grade with the existing development, as well as elevated segments. Because much of the proposed project would be built along an existing right-of-way, Build Alternative C would create an average change in the general visual environment of the study area.

4.1.3 Consistency with Scenic/Visual Resource Plans and Policies

As described in Section 3.5, plans for the City of Bakersfield and Kern County set forth scenic/visual resource goals and policies intended to preserve, enhance, restore, and respect scenic vistas and visually important landscapes in each jurisdiction. Table 4.2 contains an evaluation of the consistency of the Centennial Corridor Project with the relevant plans and policies.

Table 4.2 Consistency with Applicable Scenic/Visual Resource Plans and Policies

Consistency with Scenic/Visual Resource Plans and Policies
Caltrans – Aesthetics Policies
Consistent with Build Alternatives. The proposed project would adhere to policies outlined in the Caltrans Aesthetics Policies. Caltrans would incorporate Context Sensitive Solutions design and follow its adopted landscape regulations.
Kern County General Plan – Land Use, Open Space, and Conservation Element
Consistent with Build Alternatives. The proposed project would adhere to policies outlined in the Kern County General Plan. Light and glare would be minimized during construction and operation of the proposed project. Nighttime glare would also be minimized on neighboring properties.
Metropolitan Bakersfield Freeway Beautification Master Plan Design Guidelines
Consistent with Build Alternatives. The proposed project would adhere to the design goals outlined in the Master Plan and Design Guidelines. Sustainable landscape design would be implemented when possible. View corridors, different landscape features, and constructability would be encouraged during project construction.
City of Bakersfield General Plan – Kern River Plan Element
Inconsistent with Build Alternatives. Because the proposed project consists of building a new freeway through residential neighborhoods, commercial and recreational areas, it would not easily integrate with surrounding developments and the natural environment. Obstruction of views of the Kern River will occur. Mitigation shall include vegetation, fencing, and landscaped berms.
Route 99 Corridor Enhancement Master Plan
Consistent with Build Alternatives. The proposed project would adhere to the design goals outlined in the Route 99 Corridor Enhancement Master Plan, including incorporating the Route 99 logo and corridor themes.
Source: Parsons, 2011.

4.2 CUMULATIVE IMPACTS

A cumulative impact, as defined by the Council on Environmental Quality, is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency or person undertakes such actions. CEQA Guidelines define cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

No other major roadway projects are proposed within the visual study area for the foreseeable future with the exception of the Westside Parkway Project (Segment 2 of the proposed project), which was recently constructed. The portion of the Westside Parkway Project near the proposed Centennial Corridor Project is near the Truxtun Avenue and Mohawk Street intersection, which has already been built. The Westside Parkway Project analyzed views near the Kern River/Kern River Parkway and Bike Path and found no change to the overall visual impact as a result of the project. Within the same vicinity, the proposed Centennial Corridor Project found there to be a slight overall visual impact change as a result of the proposed project. Because the Westside Parkway Project did not create any overall visual impact changes, there would be no cumulative impacts from the Westside Parkway Project and the proposed Centennial Corridor Project.

Chapter 5 Visual Resource Management Objectives and Mitigation Measures

Caltrans and the Federal Highway Administration mandate that a qualitative/aesthetic approach be taken to mitigate for visual quality loss in the project area. This approach fulfills the letter and the spirit of Federal Highway Administration requirements because it addresses the actual cumulative loss of visual quality that would occur in a project viewshed when a project is implemented. It also would provide mitigation that can more directly address issues pertaining to public acceptance of the project.

Visual mitigation for adverse project impacts addressed in the key viewpoint assessments and summarized in the previous section would start by adhering to appropriate design requirements to be developed in cooperation with the District Landscape Architect.

According to the Department's Definitions of Visual Impact Levels, viewpoints with no resulting visual impact do not require mitigation measures. Resulting visual impacts that are low may or may not require mitigation, and visual impacts that are moderate, moderately high, or high must be addressed via mitigation.

5.1 PROPOSED PROJECT MITIGATION

5.1.1 No-Build Alternative

No mitigation is required.

5.1.2 Build Alternatives

Use of the following minimization measures would soften the addition of new transportation corridor infrastructure, reduce visual impacts, and improve visual appeal to the residential, open space, and commercial areas along the proposed project alternatives. These measures are also intended to mitigate the visual impacts of the proposed project for community residents, commercial employees, recreation viewers, and motorists traveling along commercial corridors near the proposed project.

V-1 In conjunction with final design, Caltrans shall develop, and the contractor shall implement, an irrigation plan, that includes the following requirements:

- All drip zones of isolated trees shall be protected with orange environmentally sensitive area fencing. In addition, the existing environmentally sensitive areas (parks, Kern River) shall remain to be protected.
- An irrigation system shall be provided to all new plantings.

- An extended 3-year maintenance period after the construction is completed shall be provided for single-source maintenance through the establishment period.
- V-2 The overall Centennial Corridor aesthetic design theme shall be compatible with surrounding neighborhoods and in keeping with the overall Westside Parkway design theme to the maximum extent possible, including landscaping, aesthetic soundwalls, bridge treatments, and lighting fixtures.
- V-3 As part of the stormwater runoff management, the infiltration basins will be designed to include buffer areas and/or plant screens to shield public views where practical.
- V-4 Landscaping would be implemented upon completion of construction. Plant material would use native, drought tolerant, and self sustaining once established. Any adapted plant materials shall be consistent with Caltrans District 6 approved plant palette and would not include any invasive plant species.
- V-5 Caltrans shall preserve as many mature trees as practical. The landscape plan will incorporate a tree replacement plan with a replacement ratio of 1:1 - for every one tree removed, a tree will be planted. Mature trees (larger than 20 feet high) that are to be removed shall be replaced using 20-inch box trees. A tree survey shall be completed during final design. Design plans shall indicate locations of existing specimen-sized trees (larger than 20 feet high) to be preserved if possible. Tree replacement shall meet all Caltrans and City standards and policies.

Chapter 6 List of Preparers and Contributors

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Chapter 7 References

- California Department of Transportation (Caltrans). 2001. *Context Sensitive Solutions*. Accessed online December 13, 2011, at <http://www.dot.ca.gov/hq/transprog/ocip/te/dp-22.pdf>.
- . 2004. *Route 99 Corridor Enhancement Master Plan*. Accessed online December 5, 2011, at <http://www.dot.ca.gov/dist6/99masterplan/>.
- . 2008. *Visual Impact Assessment Guide. Standard Environmental Reference*. Accessed online December 5, 2011, at <http://www.dot.ca.gov/ser/vol1/sec3/community/ch27via/chap27via.htm#scope>.
- . 2010. *Landscape Regulations*. Accessed online December 13, 2011 at <http://www.dot.ca.gov/hq/LandArch/ec/plants/seed.htm>.
- City of Bakersfield. 2003. *Metropolitan Bakersfield Freeway Beautification Master Plan Design Guidelines*. Accessed online December 5, 2011, at http://www.bakersfieldcity.us/cityservices/pubwrks/Metro_FWY_PLAN/files/metro_fwy_%20beautiful_%20mp_design_guide.pdf.
- City of Bakersfield. 1985. *General Plan. Kern River Plan Element*. Accessed online December 5, 2011, at http://www.co.kern.ca.us/planning/pdfs/kcgp/kern_river_plan_ocr.pdf.
- Kern County. 2004. *General Plan. Land Use, Open Space and Conservation Element*. Accessed online December 5, 2011, at <http://www.co.kern.ca.us/planning/pdfs/kcgp/KCGPChp1LandUse.pdf>.
- United States Department of Transportation, Federal Highway Administration. Office of Environmental Policy. 1981. *Visual Impact Assessment for Highway Projects*.

Appendix A Analysis of Segment 2

1.0 Purpose of the Analysis

In January 2007, the Westside Parkway Final Environmental Assessment (EA) and Environmental Impact Report (EIR) was completed and approved by the Federal Highway Administration, the California Department of Transportation (Caltrans), and the City of Bakersfield. That document evaluated environmental impacts for the proposed 8.1-mile-long east-west freeway that extends from Heath Road at Stockdale Highway to a point near SR 99 at Truxtun Avenue in Bakersfield and an unincorporated portion of Kern County. Since approval of the EA/EIR, a number of design refinements have been necessary and re-validation reports were prepared to assess the potential environmental impacts associated with the design refinements. As part of the Centennial Corridor Project, additional design refinements to the Westside Parkway are proposed. These are discussed in Section 2.0, Change in Project Design.

This Visual Impact Assessment Technical Memorandum was prepared to assess the changes in the environmental setting; the circumstances; the impacts; and the avoidance, minimization or mitigation measures resulting from the project's design refinements as compared to the approved 2007 EA/EIR.

2.0 Changes in Project Design

Construction of the majority of the Westside Parkway has recently been completed ([Truxtun Avenue to Allen Road](#)). Incorporation of the road as part of the Centennial Corridor would require minor modifications to the approved design plans. This would include the addition of auxiliary lanes and changes to ramps. However, the impacts associated with these improvements are being addressed as part of Segment 1. This technical memorandum is focused on the potential impacts associated with the designation of the roadway as SR 58 and providing the connection to the existing SR 58 freeway, SR 99, and ultimately to I-5.

3.0 Changes in Environmental Setting

No changes in environmental setting have occurred pertaining to visual resources.

4.0 Changes in Environmental Circumstances

Designating Westside Parkway as SR 58 and creating a connection to the existing SR 58 freeway, SR 99, and ultimately to I-5 would cause no changes in environmental circumstances pertaining to visual resources.

5.0 Changes in Environmental Impact

Designating the Westside Parkway as SR 58 and creating a connection to the existing SR 58 freeway, SR 99, and I-5 would not create any changes in environmental impacts pertaining to visual resources.

6.0 Changes to Avoidance, Minimization, and Mitigation Measures Since Last Document Was Approved

Design changes associated with the approved Westside Parkway Project were revalidated in June 2008, and it was determined that the Westside Parkway Project would not require additional assessment of visual impacts, and therefore, there are no changes to avoidance, minimization, and mitigation measures since the last document was approved.

7.0 Changes to Environmental Commitment since Last Document was Approved

There are no changes to environmental commitments pertaining to visual resources since the last document was approved.

Appendix B Analysis of Segment 3

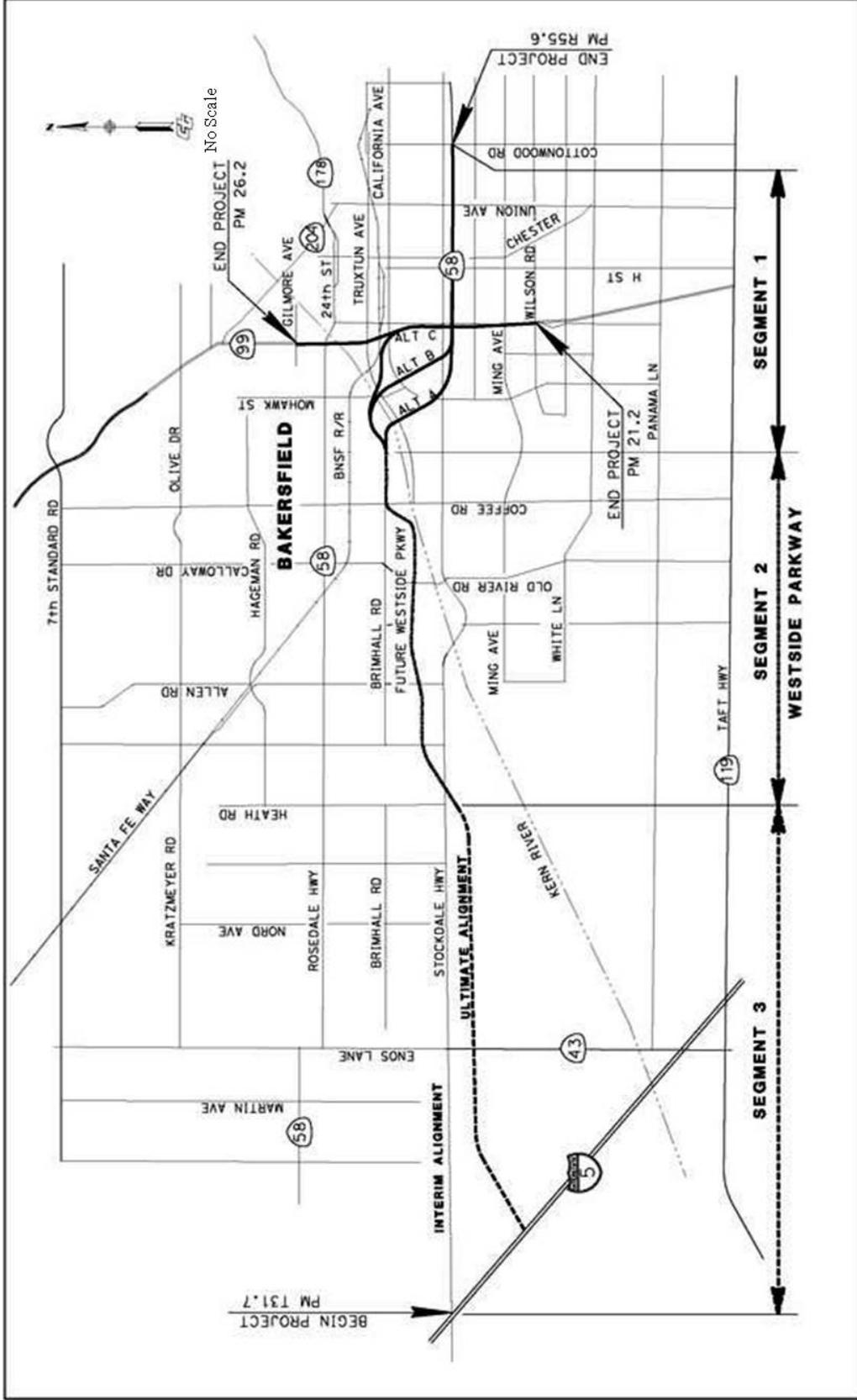
1.0 Purpose of the Analysis

The California Department of Transportation (Caltrans) proposes to establish a new alignment for SR 58, which would provide a continuous route along SR 58 from I-5 via the Westside Parkway to Cottonwood Road on existing SR 58, east of SR 99 (post miles T31.7 to R55.6). Improvements to SR 99 (post mile 21.2 to 26.2) would also be required to accommodate the connection with SR 58. The proposed continuous route, known as the Centennial Corridor, has been divided into three distinct segments. The segments of the corridor are shown in Figure B-1. A Visual Impact Assessment has been prepared for Segment 1. Segment 2 is composed of the Westside Parkway and extends from about Mohawk Street to Heath Road, which is currently under construction. This segment would be transferred into the State Highway System.

Segment 3, the focus of this technical memorandum, extends from Heath Road to I-5. The construction timing for this segment is unknown, but would not occur until there is sufficient funding and greater traffic demand. Therefore, the analysis of Segment 3 has been done at a conceptual level (Tier 1¹). The approval being sought is route adoption, with more detailed analysis occurring at the time construction is proposed.

An alignment for Segment 3 was identified as part of the 2002 *Route 58 Route Adoption Project Tier I Environmental Impact Statement/Environmental Impact Report (EIS/EIR)*. The analysis contained herein will incorporate the results of that study, and will update and re-evaluate those findings. A Tier II (project-level) document will be prepared for Segment 3 as a separate documentation effort at a later time when funding becomes available.

¹ A Tier I document evaluates the impacts at a programmatic level (i.e., conceptual level). This approach is used when facility construction is not anticipated in the foreseeable future. The Tier I document allows the preservation and acquisition of right-of-way. As such, a Tier I document is not adequate to address construction-level impacts. Therefore, subsequent documentation will be required before the project can move forward into the detailed engineering phase.



Source: Parsons, 2011.

Figure B-1 – Segments of the Centennial Corridor

2.0 Visual Impact Study Area

The Visual Impact Study Area for this analysis consists of any physical element visible from or toward the Segment 3 alignment (Cross Valley Canal Option). The alignment generally follows the Cross Valley Canal, which is south of the alignment, from the Westside Parkway's (Segment 2) planned terminus at Heath Road, west to I-5. From the Westside Parkway's terminus, the alignment would angle southwest to Heath Road and then assume an east-west direction for approximately six miles before angling slightly southwest for approximately 1.5 miles to its ultimate connection with I-5 near the Cross Valley Canal.

Land uses are primarily rural, including agricultural operations and light industrial (water storage); little development is present. The Union Pacific Railroad crosses the alignment approximately one mile east of Enos Lane. The Cross Valley Canal parallels the alignment to the south. The Pioneer Canal crosses the study area approximately 1.5 miles east of I-5.

3.0 Discussion of Construction Impacts

All three Build Alternatives would include the construction of additional turn lanes and the installation of a traffic signal at the Stockdale Highway and SR 43 (Enos Lane) intersection. The viewshed of this intersection is composed of typical flat, agricultural land with utility poles lining the roads, and no scenic views are present. Within the viewshed, there is a mix of crop types, including orchards and field crops. Construction at this intersection would create a temporary change in the visual environment because motorists and agricultural employees are likely used to seeing only the flat, agricultural plantings; however, no adverse construction impacts to visual resources are anticipated as a result of construction at this intersection.

4.0 Recommendations

This Tier I document addresses Segment 3 at a programmatic level; the Tier II document for Segment 3 will provide appropriate avoidance and minimization measures following the project-level analysis. A full visual impact assessment would be completed when the design of Segment 3 is near completion. Stockdale Highway would be used as an interim connection between Segment 2 and I-5.

