

## 3.16 Aesthetics and Visual Resources

This Draft Supplemental EIR/EIS compares the Fresno to Bakersfield Locally Generated Alternative (F-B LGA) to the complementary portion of the Preferred Alternative that was identified in the *Fresno to Bakersfield Section California High-Speed Train Final Project Environmental Impact Report/Environmental Impact Statement*. As discussed in Section 1.1.3 of this Draft Supplemental EIR/EIS, the complementary portion of the Preferred Alternative consists of the portion of the Burlington Northern and Santa Fe (BNSF) Alternative from Poplar Avenue to Hageman Road and the Bakersfield Hybrid from Hageman Road to Oswell Street (further referenced as the “May 2014 Project” in this Draft Supplemental EIR/EIS). Since the Fresno to Bakersfield Section Final EIR/EIS does not evaluate the May 2014 Project as a discrete subsection of the Fresno to Bakersfield Project (as it did for the Allensworth Bypass, for example), affected environment and impact summary discussion included in this section for the May 2014 Project has been extrapolated from the available information contained in the Fresno to Bakersfield Section Final EIR/EIS.

This section describes the existing visual environment of the F-B LGA to the Fresno to Bakersfield Section for the California High-Speed Rail (HSR) system, including scenic resources, and analyzes potential impacts on aesthetics and visual resources in and along the alignment. The regulatory setting, affected environment, impacts, and mitigation measures that would reduce project environmental consequences for aesthetics and visual resources are provided. Section 3.13.3 in Section 3.13, Station Planning, Land Use, and Development, in this Draft Supplemental EIR/EIS provides information on issues related to land use compatibility.

### 3.16.1 Regulatory Setting

This section identifies the federal, state, regional, and local regulations, laws, and orders that apply to aesthetics and visual resources. As described in the Fresno to Bakersfield Section Final EIR/EIS (California High-Speed Rail Authority [Authority] and Federal Railroad Administration [FRA] 2014a), the Authority and FRA would comply with all applicable federal and state regulations. The F-B LGA would be designed to be compatible with policies in the Kern County General Plan, the City of Shafter General Plan, the Metropolitan Bakersfield General Plan, and the Kern River Plan Element.

#### 3.16.1.1 Federal

Please see pages 3.16-1 and 3.16-2 in Section 3.16.2.1 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a) for a discussion of these applicable federal regulations:

- Department of Transportation Act, Section 4(f) [DOT Act 49 U.S.C.303]
- National Historic Preservation Act [16 U.S.C. Section 470 et seq.]

#### 3.16.1.2 State

Please see page 3.16-2 in Section 3.16.2.2 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a) for a discussion of this applicable state regulation:

- State Scenic Highways [California Streets and Highways Code Sections 260 to 263]

#### 3.16.1.3 Regional and Local

Please see pages 3.16-2 through 3.16-6 in Section 3.16.2.3 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a) for a discussion of these applicable local and regional plans and their policies:

- Kern County General Plan (Kern County 2009)
- City of Shafter General Plan (City of Shafter 2005)
- Metropolitan Bakersfield General Plan (City of Bakersfield 2007)

- Metropolitan Bakersfield General Plan and Kern County General Plan, Kern River Plan Element (City of Bakersfield and Kern County 1985)

### 3.16.2 Methods for Evaluating Impacts

A visual resource is a natural or built landscape feature that people see and that contributes to public enjoyment of the environment because of its visual characteristics or scenic qualities. For this discussion, visual resources also include state-designated scenic routes and views toward and in natural areas, parks, and urban areas identified as having historical or cultural significance or that include buildings of similar significance or notable landmark status. The list of visual resources was created based on analysts' review of policy documents and cultural resource reports, or observations of scenic value and apparent local popularity identified during fieldwork.

Aesthetics relates to the visual character and beauty of visual elements. Aesthetic and visual resource impacts are generally defined as changes in visual character or quality of the site and include the kind of perspective available to the viewer. Impacts are determined based on the extent to which the project's physical elements and characteristics, including the potential visibility of scenic resources, would change the visual character and visual quality of the landscape. Some changes in visual character or quality are compatible with surrounding uses and resources, while some changes are incompatible.

The methodology used to evaluate aesthetics and visual quality impacts follows the federal guidelines provided in the *Visual Impact Assessment for Highway Projects* (FHWA 1988) and California Department of Transportation (Caltrans) guidelines provided in the *Standard Environmental Reference* (Caltrans 2007), as applied in the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a). The FHWA visual impact assessment methodology, the accepted methodology used by federal and state transportation agencies, provides an approach and the terminology for analyzing both visual quality and viewer response for transportation corridors. Chapter 27 of the *Standard Environmental Reference* (Caltrans 2016) provides an overview of the visual and aesthetics review process that Caltrans uses, and references the FHWA methodology for visual impact assessment. The purpose of this methodology is to define the visual character or quality of a landscape and objectively evaluate whether the project has the potential to impose a substantial adverse impact on a scenic vista or substantially degrade the existing visual character or quality of a landscape. For purposes of this analysis, the term "scenic vista" either refers to designated scenic viewpoints (as identified in public documents or formally developed for sightseeing) or to a view generally of exceptional scenic quality, particularly if widely recognized or identified in public documents. Please see page 3.16-59 in Section 3.16.4 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a) for a list of examples of scenic vistas.

The FHWA methodology for visual impact assessment includes the following components:

- Define the project setting and viewshed
- Determine who has views of the proposed project
- Identify key viewpoints (KVP) and views for the assessment of visual impacts
- Analyze changes in existing visual resources and viewer response
- Depict the visual appearance with simulations of the project
- Assess the project's visual impacts
- Propose methods to mitigate adverse visual impacts

#### Key Viewpoint (KVP)

The KVP is a location with views that are available to sensitive viewer groups or representative of visual condition of entire landscape unit.

Change to the visual quality of each KVP was determined by applying the FHWA visual quality analysis system, using professional judgment and familiarity with the F-B LGA. Engineering drawings of project components and aerial images were examined along with visual simulations of the KVP. The determination of the impacts on an entire landscape unit was based in large part upon the impacts on the KVP in the landscape units, but the determination also included the review of engineering drawings of project components for the entire landscape unit combined with

on-the-ground familiarity with the landscape units for the visual resource study area of the F-B LGA. Impacts at each KVP were judged by the extent to which the project’s physical elements and characteristics, including the potential visibility of scenic resources, would change the visual character and visual quality of the landscape. Some changes in visual character or quality are compatible with surrounding uses and resources, while some changes are incompatible. The following describes terms and concepts that are used when evaluating the visual impacts associated with long, linear transportation projects such as the F-B LGA of the California HSR system.

**3.16.2.1 Landscape Units**

Landscape units are used to “break up” long, linear projects into logical geographic entities for which project-period or operational impacts from a proposed project can be assessed. (Construction-period impacts, by contrast, apply broadly across the study area and are not analyzed by landscape unit.) These landscape units generally have broadly similar visual characteristics (or character), although the visual characteristics of specific locations in each unit may differ from the unit’s overall character.

Collectively, the landscape units for a project comprise its visual resource study area or viewshed (i.e., both the areas that could have views of project features and the areas potentially viewed from the project). The study area for the F-B LGA is located in Shafter, Bakersfield, and Kern County. It is mostly on flat terrain, and includes agricultural and urban areas. Viewing distances toward the corridor vary throughout the study area. In agricultural and other open areas, the corridor is visible over long distances due to the limited number of buildings and tall vegetation that could block views. In these areas, the study area is considered to be all areas within 0.5 mile of the alignment centerline from which the F-B LGA could be visible. In urbanized areas, views toward the F-B LGA are often restricted by the presence of buildings and tall vegetation. In these cases, the study area includes all areas within 0.25 mile of the alignment centerline from which the F-B LGA could be visible and within 0.25 mile of the edge of large facilities on the alignment (i.e., the Bakersfield F Street Station and the maintenance of infrastructure facility [MOIF]).

In each landscape unit, KVPs provide representative examples of existing views of the landscape as seen by key sensitive viewer groups for each landscape unit, and assist in characterizing the existing visual conditions and determining the impacts on that landscape unit. KVPs also illustrate how a proposed project would change those views. These locations are typically selected to either represent (1) “typical” views from common types of viewing areas from which a proposed project could be seen by viewers of high visual sensitivity, such as certain highways or residential areas with high exposure to the project, or (2) specific, high-sensitivity areas such as parks, scenic viewpoints, and historic districts that may be impacted by a proposed project. Some KVPs are chosen to be representative of the visual condition of the entire landscape unit, and some are selected to represent sensitive or unique viewing locations. KVPs are very useful for depicting the range of visual character and visual quality found in a landscape unit, and those selected for analysis serve as representative examples of existing visual conditions. In this way, the view can be evaluated with the proposed project simulated in place to assess impacts. The impact for an individual KVP may not be the same as the impact for the entire landscape unit in which the KVP is located. This is because when evaluating impacts on landscape units, the entire unit is considered rather than just one specific location. The condition of the viewed landscape seen from a sensitive or unique KVP may be different than that of the entire landscape unit.

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*Landscape Unit*

The landscape unit is the logical geographic entity in the greater study area, having broadly consistent internal visual character.

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*Visual Resource Study Area*

This term describes the geographic scope of aesthetics analysis, including areas that could have views of the project or could be viewed from the project

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### 3.16.2.2 *Visual or Landscape Character*

Visual or landscape character is an impartial description of what comprises the landscape and is defined by the relationships between the existing visible natural and built landscape features. These relationships are considered in terms of dominance, scale, diversity, and continuity. Visual character-defining resources and features include landforms, vegetation, land uses, buildings, transportation facilities, overhead utility structures and lighting, open space, viewpoints and views to visual resources, water bodies, historic structures, downtown skylines, and apparent upkeep and maintenance of property. Examples of types of visual or landscape character found along the F-B LGA include irrigated row crop agriculture, industrial uses, automobile-oriented retail shopping centers, single-family residences, undeveloped vacant lots, downtown business districts, and parks.

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#### *Visual Character*

Visual character indicates an impartial description of the overall nature of a landscape, based on visible natural and built features.

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### 3.16.2.3 *Viewer Response*

Under the FHWA method for assessing visual impacts, viewer response is an assessment of the concern viewer groups may have to a project based on two factors: (1) viewer sensitivity to visual change, and (2) viewer exposure to those visual changes.

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#### *Viewer Response*

The viewer response is a product of viewer sensitivity and exposure to visual change.

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Viewer groups in the study area include such people as roadway/highway/rail users, residents, commercial building users, office users, park and trail users, and agricultural and industrial workers. The FHWA method recognizes viewer activity and awareness, local values, and cultural significance as the key factors in predicting viewer sensitivity (i.e., viewers' degree of concern with the scenic quality of their surroundings and resulting sensitivity to visual change). Sensitivity to visual change varies among viewer groups and activity types. Generally, residents and recreationists are considered to be highly sensitive viewers because visual quality is a primary concern associated with the activity type. However, active recreationists (such as students engaged in sports) often have less viewer sensitivity than other recreationists, because the primary focus of the activity is the sport. Alternatively, hikers, sightseers, or picnickers would represent highly sensitive viewers as the scenery is a primary concern. This analysis also considers the viewer response by environmental justice communities, or minority and low-income populations, where applicable. Although minority and low-income populations are not more sensitive to visual impacts than other viewers, they can experience disproportionate effects depending on the location of project features.

Local businesspersons and commuters are considered moderately sensitive viewers, although viewer sensitivity in established downtown areas can be high. In these areas, particularly in parks or along pedestrian-oriented sidewalks, viewers are likely to have expectations of a built environment with a higher level of vividness, intactness, and unity associated with an identifiable urban core, and such expectations can lead to high viewer sensitivity. Viewers in the workplace are generally considered to have moderate or low sensitivity because visual quality is not typically a focus or expectation associated with their activity. Local values, especially those reflected in public policies related to community design and cultural significance that address the designated historic status of a site, are also potential indicators of high viewer sensitivity.

Viewer exposure also determines the response of viewers. Project effects that are not visible or that are highly screened will not have adverse effects on viewers. In contrast, project effects in the visual foreground (up to 0.5 mile, or foreground "distance zone") are more likely to have noticeable effects, while those outside that distance are not. The immediate visual foreground is considered to be within 0.25 mile of the project. Viewer number and duration of views are also important exposure factors affecting likely viewer response.

Viewer response ratings reflect the professional judgment of the analyst based on the relative, combined levels of viewer sensitivity and exposure that prevail in a particular location. For example:

- Low viewer response may exist when there are few viewers who experience a defined view or when potential views of the project are screened or filtered by intervening terrain, structures, or landscaping (low viewer exposure). Low viewer response may also occur where viewers are not particularly concerned about the quality of views due to their activity type (low viewer sensitivity), such as a commuter on the freeway.
- Moderate viewer response may occur where views of a project are distant enough that the project does not dominate the view (moderate viewer exposure), or where viewer activity is not focused on visual quality and expectations are moderate, as with office workers or shoppers (moderate viewer sensitivity).
- High viewer response occurs where a project is highly prominent, open to view, and seen by relatively high numbers of viewers (high viewer exposure), and where viewer concern and expectations of visual quality are also high, as in a rural park where scenery is a primary focus or in a residential neighborhood (high viewer sensitivity).

As applied in this study, a five-point scale of low, moderately low, moderate, moderately high, and high was used to rate both viewer response and its constituent components, which are viewer sensitivity and viewer exposure.

### 3.16.2.4 Visual Quality

Visual quality is an assessment of the composition of the character-defining features of the landscape. Under the FHWA visual quality analysis system, visual quality is determined by evaluating the viewed landscape's existing characteristics in terms of vividness, intactness, and unity, which are defined below. The five-point scale was used to rate visual quality and its components. To determine overall visual quality, the vividness, intactness, and unity of a viewed landscape are rated, and the ratings of these three factors determine the overall visual quality. The following three factors determine visual quality:

#### Visual Quality

Visual quality is an assessment of attractiveness of a landscape, based on its vividness, intactness, and unity.

- Vividness is the degree of drama, memorability, or distinctiveness of the landscape components as seen from a particular view.
- Intactness is a measure of visual integrity of the natural and built landscape and its freedom from encroaching elements. This factor can be present in well-kept urban and rural landscapes as well as in natural settings. High intactness means that the landscape is free of unattractive and out-of-place features, and that elements do not break up the landscape. Low intactness means that visual elements in a view are unattractive or detract from the view's quality.
- Unity is the landscape's degree of visual coherence and compositional harmony considered as a whole. High unity frequently attests to the careful design of individual components and their relationship in the landscape or an undisturbed natural landscape.

Analysts familiar with the FHWA methodology visited the study area on several occasions to determine its existing visual quality. Section 3.16.3.5, Landscape Units, Key Viewpoints, and Existing Visual Quality, describes the existing visual quality categories for the KVPs in the study area.

### 3.16.2.5 Methods for Evaluating Effects under NEPA

In the *Fresno to Bakersfield Section Final EIR/EIS*, analysts applied specified thresholds for each resource topic to assess whether the intensity of each impact is negligible, moderate, or substantial for the Build Alternatives, and provided a conclusion of whether the impact was "significant". Since the *Fresno to Bakersfield Section Final EIR/EIS* does not evaluate the May

2014 Project as a discrete subsection of the Fresno to Bakersfield Project (as it did for the Allensworth Bypass, for example), it does not provide conclusions using intensity thresholds for the May 2014 Project. Therefore, intensity thresholds are not used for the F-B LGA. Instead, the evaluation of impacts under NEPA in this Draft Supplemental EIR/EIS focuses on a comprehensive discussion of the project's potential impacts in terms of context, intensity, and duration and provides agency decision makers and the public with a comparison between the May 2014 Project and the F-B LGA.

### **3.16.2.6 CEQA Significance Criteria**

For this project, the following criteria are used in determining whether the project would result in a significant impact on aesthetics and visual quality in the following instances:

- The project would have a substantial adverse impact on a scenic vista
- The project would substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historical buildings within a state-designated scenic highway
- The project would substantially degrade the existing visual character or quality of the site and its surroundings
- The project would create a new source of substantial light or glare, which would adversely affect day or nighttime area views

A significant impact would also occur if the project were to (1) introduce elements that would conflict with the visual character of an historic district, state, or federally listed or eligible historic property, or (2) substantially affect a park, recreational destination, or other feature or area identified as an important visual resource.

In applying the criteria listed above, the term "substantial" is defined as a decrease of two or more levels of visual quality in a landscape viewed by viewers with moderate to moderately high viewer response, or as a decrease of one level in a landscape viewed by viewers with high viewer response.

### **3.16.3 Affected Environment**

This section discusses the effects on the aesthetics and visual resources in the F-B LGA visual resource study area. Existing visual resources are inventoried, and the landscape units and subunits into which the study area has been divided for this analysis are described. Photographs of representative views are used to characterize the existing visual character and quality of the landscape.

Similar to the May 2014 Project, visual resources in the study area for the F-B LGA include designated scenic routes and views toward and in natural areas, parks, and urban settings that have been identified as having historic or cultural significance or that include buildings of similar significance or landmark status. These visual resources have been identified in planning and policy documents, in cultural resource reports, and in evaluations of scenic quality and public popularity observed during aesthetics and visual resources fieldwork for the F-B LGA. The selection of representative KVPs for this analysis was based on the identified visual resources that could be seen from the perspective of identified viewer groups in the study area, and on comments received from the public.

#### **3.16.3.1 Summary of the May 2014 Project Affected Environment**

The affected environment for the May 2014 Project is similar to that of the F-B LGA where the two alignments overlap in Shafter and eastern Bakersfield. These areas are discussed as part of the affected environment for the F-B LGA.

In the May 2014 Project's San Joaquin Valley Rural/Agricultural landscape unit between Shafter and Bakersfield, row crops, orchards, and pasture are interspersed with a variety of scattered rural residential and agro-industrial structures. This landscape generally lacks variety and

vividness. Agro-industrial developments are typically of a highly utilitarian visual character. Visual quality ranges from low to moderate.

The Rosedale/Greenacres landscape unit of the May 2014 Project consists largely of single-story, single-family suburban residential neighborhoods with wide front lawns and mature landscaping. Blocks of these neighborhoods are broken up by small commercial development at the intersections of major streets. Industrial uses and empty parcels also occur adjacent to the HSR alignment. Visual quality is moderate overall.

Visual quality in the vicinity of the May 2014 Project's crossing of the Kern River varies greatly from very low in the industrial floodplain dominated by an oil refinery on the river's west bank to moderately high in the Kern River Parkway on the east bank. Although the floodplain appears somewhat barren for portions of the year, its vividness is enhanced year-round by riparian vegetation on both banks of the river, including a large area of restored riparian woodland, trails, and a large, attractive artificial lagoon, which adjoins the Kern River Parkway trail north of Truxtun Avenue.

The Central Bakersfield Landscape Unit of the May 2014 Project consists of industrial areas with an often chaotic appearance and utilitarian warehouse and manufacturing structures; extensive older residential, single-story, single-family neighborhoods with mature tree canopies; and distinctive early twentieth-century, high-rise buildings in the downtown district. Visual quality ranges from low in industrial areas to moderately high in residential neighborhoods and downtown.

### **3.16.3.2 Fresno to Bakersfield Locally Generated Alternative Visual Resources**

#### **City of Shafter**

Potentially sensitive visual resources in the urbanized portion of Shafter include the town center, some residential areas, and cultural destinations. The visually intact, old town center to the west of the BNSF railroad tracks on Central Avenue is in the visual foreground of the alignment, approximately 350 feet away. Elements contributing to the visual quality of the town center include cohesive, older architectural design; street trees; median plantings; and other elements that were part of the main street development. Sensitive residential neighborhoods located in the immediate project foreground (0 to 0.25 mile from the F-B LGA) occur to the west of State Route (SR) 43 between Mayer Lane and W Tulare Avenue and to the east of Walker Street between E Tulare Avenue and Jackson Avenue. The Shafter Depot Museum on SR 43, an historic building, is also a potentially sensitive visual resource from the perspective of visitors.

#### **Rural San Joaquin Valley**

Similar to the May 2014 Project, the F-B LGA includes a section of the rural part of the San Joaquin Valley between the urban centers of Shafter and Bakersfield. In this area, visual resources consist of vast spans of orchards and open field crops, as well as panoramic views toward the Sierra Nevada Mountains on clear days.

#### **Kern River and Parkway**

The F-B LGA would cross the Kern River immediately northeast of SR 204. The Kern River Parkway is an important scenic and recreational resource for Bakersfield, with trails, landscape improvements, habitat restoration areas, and active recreation facilities. Portions of the Greenhorn and Tehachapi Mountains are visible from the parkway. The Kern River Plan Element, a portion of the Metropolitan Bakersfield General Plan (Unincorporated Planning Area), identifies the river as "the single most valuable visual resource in the southern San Joaquin Valley" (City of Bakersfield and County of Kern 1985). While Section 3.16, Aesthetics and Visual Resources, in the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a) (page 3.16-12) determined that the May 2014 Project would not traverse the area covered by the Kern River Plan Element, the F-B LGA would be located in that area.

## Urban Bakersfield

Urbanized areas in metropolitan Bakersfield have a diverse range of potentially sensitive visual resources near the proposed alignment for the F-B LGA. Civic, government, and commercial destinations are located adjacent to the alignment in central and eastern Bakersfield along SR 204, Chester Avenue, Union Avenue, Sumner Street, E Truxtun Avenue, and Edison Highway. These destinations include, but are not limited to, the Kern County Museum and Valley Oaks Charter School on Chester Avenue and the Mercado Latino Tianguis at Edison Highway and Chamberlain Avenue. Sensitive residences are located west of the alignment on Norris Road in north Bakersfield and east of the alignment near Roberts Lane in Oildale, southwest of SR 204, across from the Bakersfield F Street Station in central Bakersfield, along Q Street to the north of SR 178, along E California Avenue to the south of Edison Highway, and to the north of Edison Highway.

### **3.16.3.3 Maintenance of Infrastructure Facility Visual Resources**

For the F-B LGA, one MOIF is proposed to be located in Shafter between the northern terminus of the F-B LGA section at Poplar Avenue and Fresno Avenue. The lead tracks for the MOIF would extend slightly north of Poplar Avenue. MOIFs provide equipment, materials, and replacement parts for the HSR system subdivision. For more information on the proposed MOIF, refer to Chapter 2 of this Draft Supplemental EIR/EIS. Potentially sensitive visual resources near the proposed MOIF site include single-family residences located as close as approximately 215 feet to the west of SR 43.

### **3.16.3.4 Bakersfield F Street Station Visual Resources**

The Bakersfield F Street Station would be located on the north side of SR 204, opposite F Street. The proposed station would provide intermodal connectivity, drop-off facilities, an entry plaza, a station house area for ticketing and support services, an indoor station room, and parking facilities. For more information on the station's features, please refer to Chapter 2 of this Draft Supplemental EIR/EIS. Potentially sensitive visual resources near the station site include residents located across SR 204 from the site.

### **3.16.3.5 Landscape Units, Key Viewpoints, and Existing Visual Quality**

This section describes the landscape units in the study area for the F-B LGA, including their KVPs and existing visual quality.

#### **Landscape Units in the Fresno to Bakersfield Locally Generated Alternative**

The following landscape units were identified between Shafter and Bakersfield for the F-B LGA:

- Shafter Town Landscape Unit
- Rural San Joaquin Valley Landscape Unit
- Bakersfield: North Bakersfield Landscape Unit
- Bakersfield: Kern River Landscape Unit
- Bakersfield: Central Bakersfield Landscape Unit
- Bakersfield: East Bakersfield Landscape Unit



Figure 3.16-1 shows the general location of each landscape unit in the visual study area. Appendix 8-A discusses the similarities and differences between these landscape units and those of the May 2014 Project. As discussed therein, the F-B LGA and May 2014 Project would share approximately the same study area in the Shafter Town and East Bakersfield landscape units. However, the F-B LGA would shift the alignment in the Rural San Joaquin Valley landscape unit eastward relative to the May 2014 Project in rural Shafter, passing through a rural agricultural area and avoiding rural residents at the intersection of 7th Standard Road and Santa Fe Way. The eastward shift of the F-B LGA would continue to the North Bakersfield Landscape Unit, a largely industrial and commercial area, avoiding the extensive single-family residential neighborhoods of the May 2014 Project's Rosedale/Greenacres landscape unit. The Kern River landscape unit would also shift eastward for the F-B LGA. In the Central Bakersfield Landscape Unit, the F-B LGA would pass through a largely commercial area along SR 204, while the May 2014 Project would cross an area with moderately high visual quality including residences, landscaped medians, and distinctive early twentieth-century high-rise buildings.

### ***Shafter Town Landscape Unit and Key Viewpoints***

The Shafter Town landscape unit is a spatially distinct urban island in the broader agricultural landscape of the San Joaquin Valley. Figure 3.16-2 shows the locations of representative and key views in the Shafter Town landscape unit.

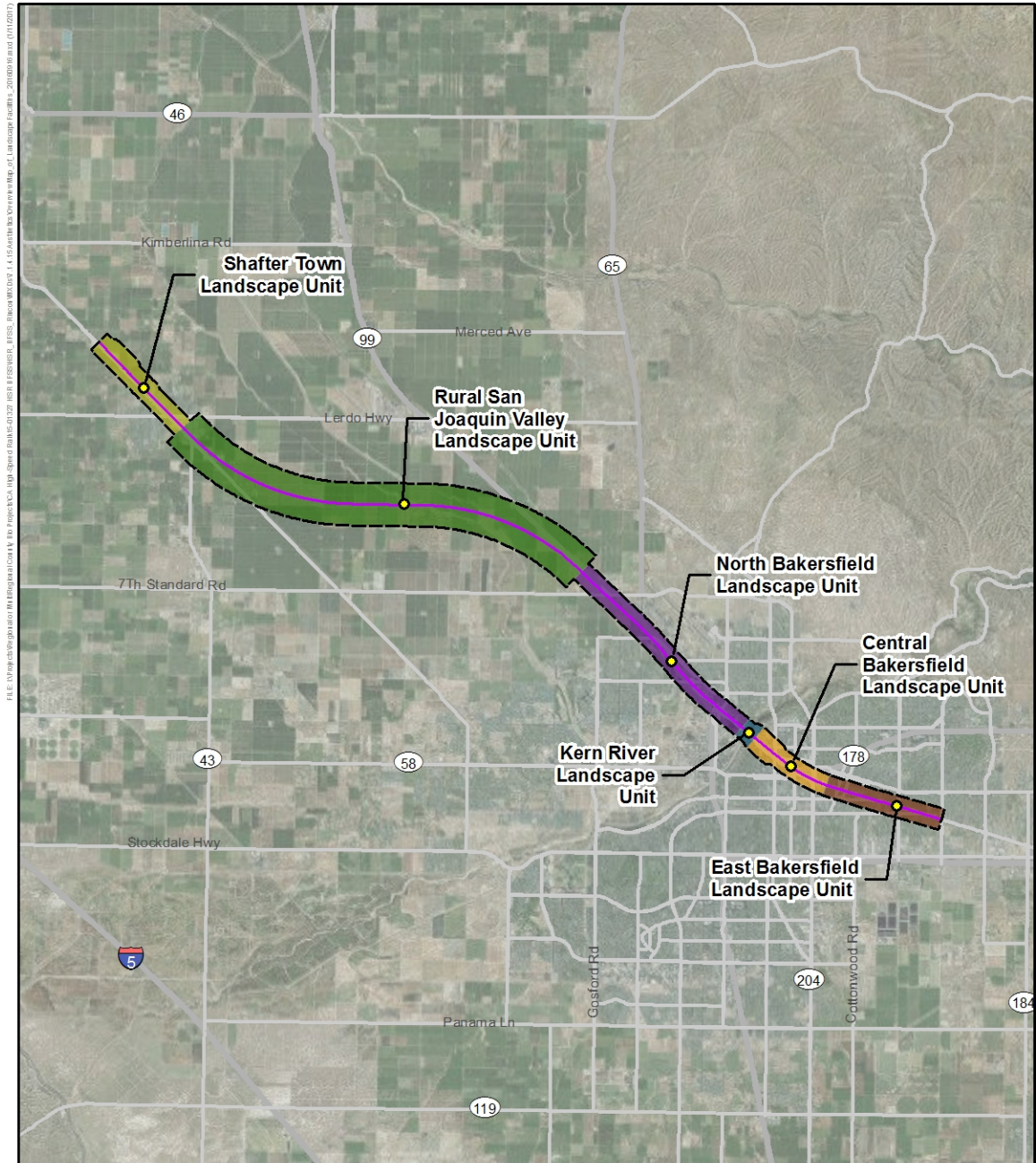
Shafter has residential neighborhoods (Figure 3.16-3) around a defined, old commercial district along Central Avenue (Figure 3.16-4).

The Shafter Town landscape unit also includes an agricultural area with orchards at the northern end of the F-B LGA, just outside the urban portion of Shafter. This agricultural part of the landscape unit is similar in visual character to the Rural San Joaquin Valley landscape unit to the south (Figure 3.16-5).

Visual quality in the Shafter Town landscape unit varies from low to moderately high. The industrial uses and vacant lots along the alignment have a low degree of intactness and unity with surrounding residential development and low to moderately low overall visual quality. The old town center, however, has moderate to moderately high visual quality, with corresponding levels of vividness, intactness, and unity. Elements contributing to visual quality in the town center include a cohesive design of earlier periods of architecture, local parks, street trees, median plantings, and other elements of the main street development. These features contribute to a prevailing intactness of character and unity of scale typical of old main streets. The Shafter Depot Museum, located on SR 43 near Shafter Avenue, is listed on the National Register of Historic Places in part for its historic architecture (United States Department of the Interior 1980). This building originally opened four blocks to the southeast for use as the Santa Fe Passenger and Freight Depot in 1917, and was moved to its current location in 1980, after which it was restored to its original architecture (City of Shafter 2015). The railroad depot (Shafter Depot Museum) is unique as the "central developmental building in Shafter" and one of the few such buildings to survive demolition by railroad companies (U.S. Department of the Interior 1980). The two-story depot has a distinctive rustic appearance, with yellow ochre horizontal wooden siding and brown window frames.

As reflected in the General Plan policies for the City of Shafter, viewer sensitivity in the town center is anticipated to be high because of community concern for the integrity and quality of the downtown. Central Shafter would also rate as highly sensitive because residential areas are located near the alignment. Residents are typically considered sensitive to visual change, as they spend considerable time at home and place a high value on their home environment. The number of potential viewers in central Shafter may be high, as there is broad visibility from multiple locations and extended exposure to views. In Section 3.16.4, Environmental Consequences, KVP 1 (Figure 3.16-23) depicts the F-B LGA from the perspective of SR 43 by the Shafter Depot Museum. Visitors to the museum would have high sensitivity toward the visual setting around the historic architecture of the museum, a moderately high degree of exposure to the HSR alignment behind the building, and a high viewer response.

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SOURCE: USGS 30m Hillshade, 2015; National Hydrography Dataset USGS, 2015; ESRI, 2017; CHSRA, 2017.

January 11, 2017

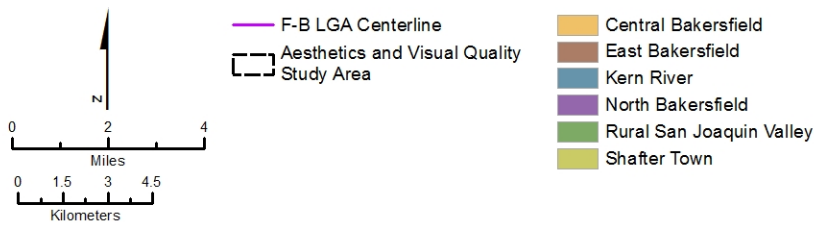
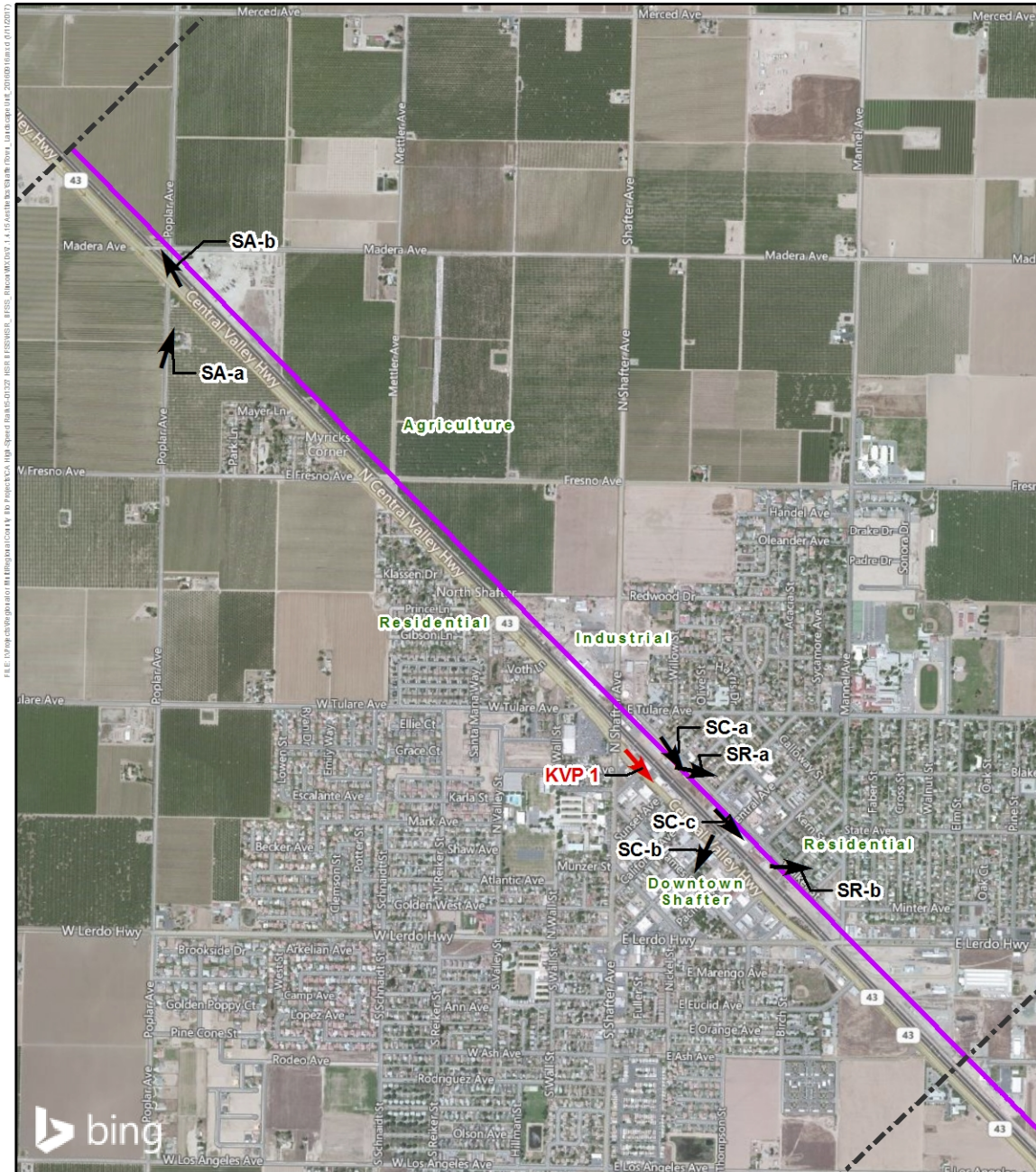


Figure 3.16-1 Overview of Landscape Units



SOURCE: Microsoft Corporation Bing Imagery ESRI Service Layer, 2017; CHSRA, 2017.

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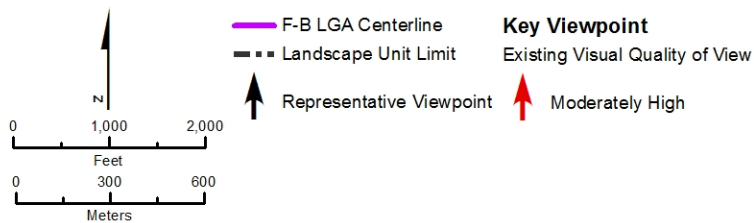


Figure 3.16-2 Shafter Town Landscape Unit



*SR-a. Single-family residence, looking south along Walker Street*



*SR-b. Multifamily apartments southeast of Walker and State Streets*

**Figure 3.16-3 Shafter Town Landscape Unit: Representative Residential Views**



SC-a. Alignment at vacant business park along BNSF Railway, looking south



SC-b. Central Avenue in downtown Shafter, looking southwest from SR 43



SC-c. Alignment at mural on Floyd's General Store, looking south across Central Avenue

**Figure 3.16-4 Shafter Town Landscape Unit: Representative Commercial and Industrial Uses**



*SA-a. Agricultural property and residence on Poplar Avenue, looking in direction of proposed alignment 0.20 mile to the north*



*SA-b. Orchards at northern end of proposed alignment, looking north from Poplar Avenue and BNSF Railway*

**Figure 3.16-5 Shafter Town Landscape Unit: Representative Agricultural Views**

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### ***Rural San Joaquin Valley Landscape Unit and Key Viewpoints***

The Rural San Joaquin Valley landscape unit is located partially inside the city limits of Shafter and partially in unincorporated Kern County, southeast of urbanized Shafter but northwest of Bakersfield.

Figure 3.16-6 shows the locations of representative and key views in the area. This landscape unit consists predominantly of orchards and vineyards on flat land, interspersed with scattered rural residences and agro-industrial areas (Figure 3.16-7). Public viewpoints in the area are limited to widely spaced two-lane roads on a grid system through large blocks of agricultural land.

Pages 3.16-12 through 3.16-59 in Section 3.16.4.2 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a) provide a discussion of the visual quality of existing views and the principal sensitive viewers in this landscape unit, which are similar for the F-B LGA except for the lack of suburban-style rural residential developments between urban Shafter and metropolitan Bakersfield in the F-B LGA. Visual quality is predominantly moderate but ranges from moderately low to moderately high depending on specific local circumstances. Although generally of moderate intactness and unity, the landscape often lacks variety and vividness. Views of mountains or natural riparian corridors are few and of limited prominence. Agro-industrial developments are typically of a highly utilitarian visual character.

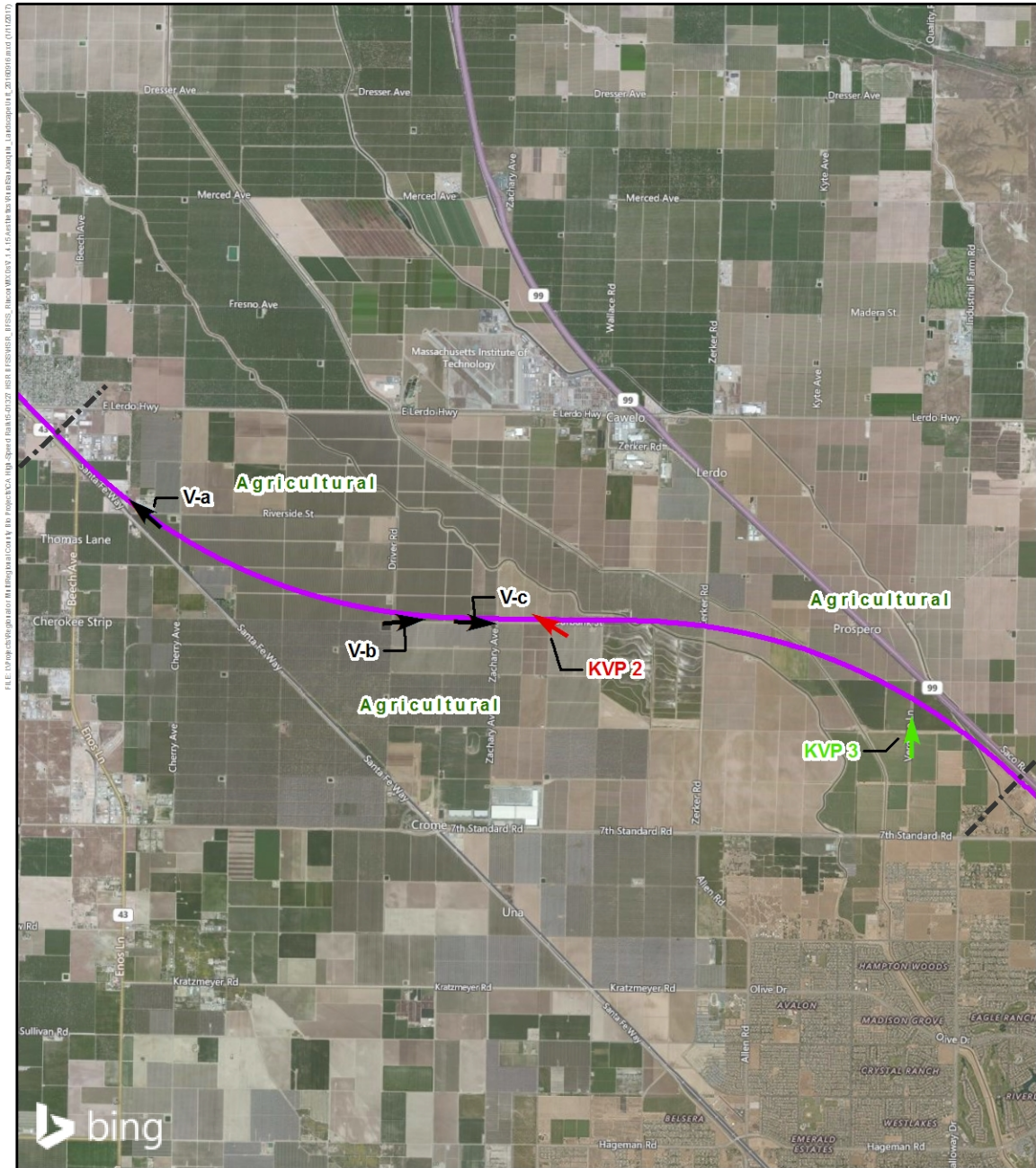
Viewers in the Rural San Joaquin Valley landscape unit are few, and viewer activities are predominantly work-oriented. Viewer sensitivity is moderate for motorists and moderately low for workers. However, scattered rural residents within the 0.5-mile foreground distance have high visual sensitivity. Viewer exposure of rural residents in the valley varies primarily by distance because there is often little to screen or filter views. Overall, viewer exposure in the valley is moderated by a low density of viewers.

In Section 3.16.4, Environmental Consequences, KVPs 2 and 3 (Figure 3.16-24 and Figure 3.16-25) offer views of existing conditions and then simulations of potential HSR effects from the perspectives of Burbank Street and Verdugo Lane in the Rural San Joaquin Valley landscape unit.

### ***Bakersfield***

As shown on Figure 3.16-8, this analysis divides the F-B LGA and its surroundings in the metropolitan area of Bakersfield (including areas in the Bakersfield corporate limits and those in unincorporated Kern County areas close to the city) into four landscape units, each with a distinct visual character. These include North Bakersfield, Kern River, Central Bakersfield, and East Bakersfield. While each urban landscape unit, as described below, has a broad common character and identity, they also contain a range of land uses and corresponding image types with varying levels of visual quality.

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SOURCE: Microsoft Corporation Bing Imagery ESRI Service Layer, 2017; CHSRA, 2017.

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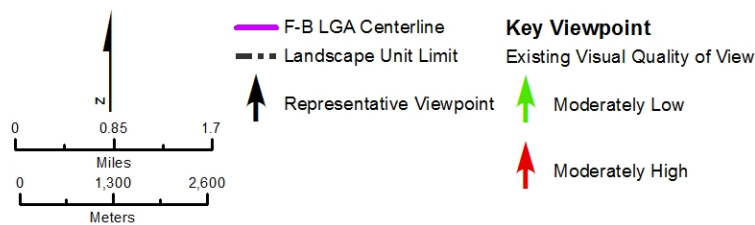


Figure 3.16-6 Rural San Joaquin Valley Landscape Unit



V-a. F-B LGA at agro-industrial property on Riverside Street, looking northwest

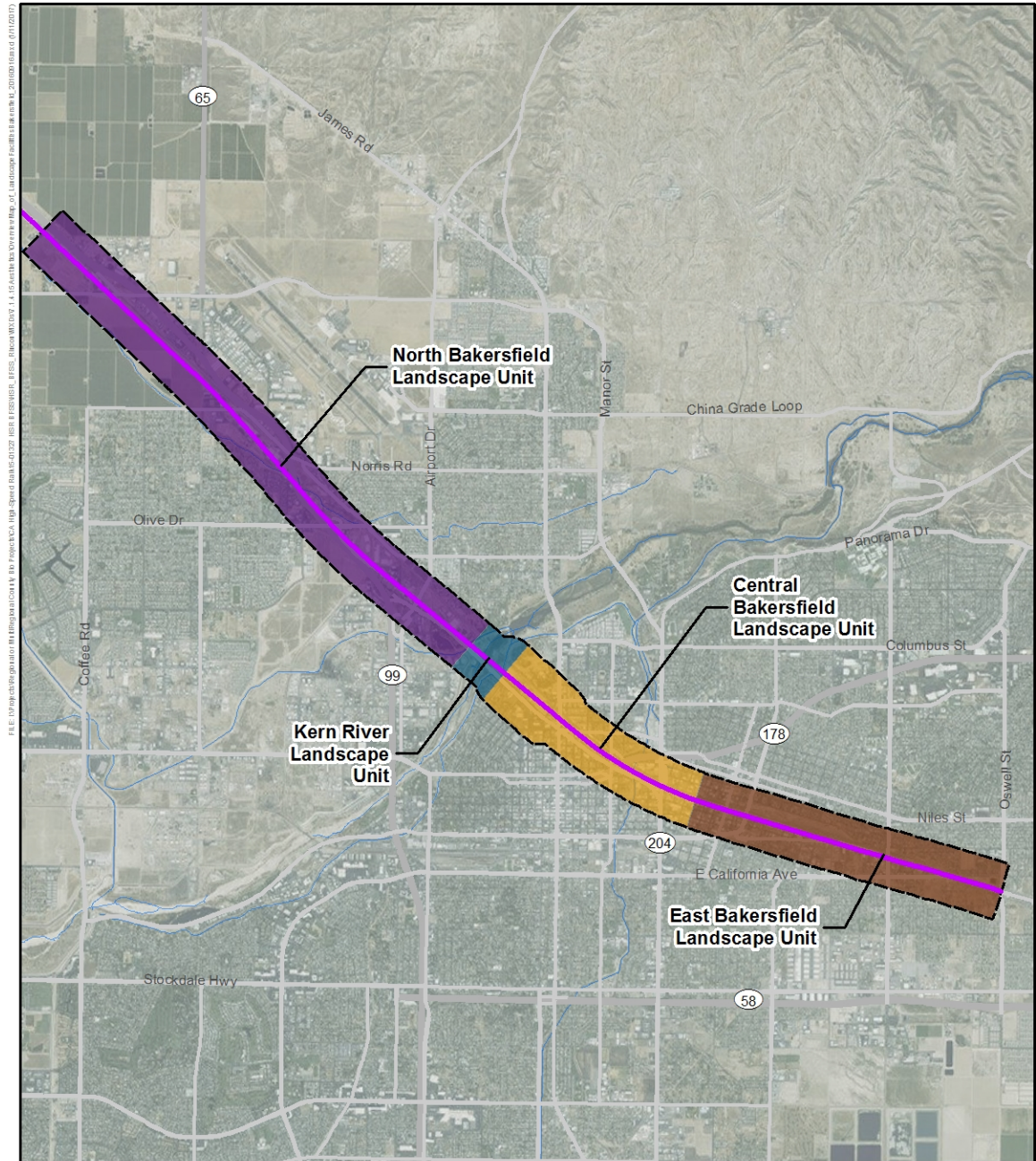


V-b. F-B LGA at orchard on Burbank Street near Driver Road, looking east



V-c. F-B LGA at vineyard and orchard on Burbank Street, looking east

**Figure 3.16-7 Rural San Joaquin Valley Landscape Unit: Representative Views**



SOURCE: USGS 30m Hillshade, 2015; National Hydrography Dataset USGS, 2015; ESRI, 2017; CHSRA, 2017.

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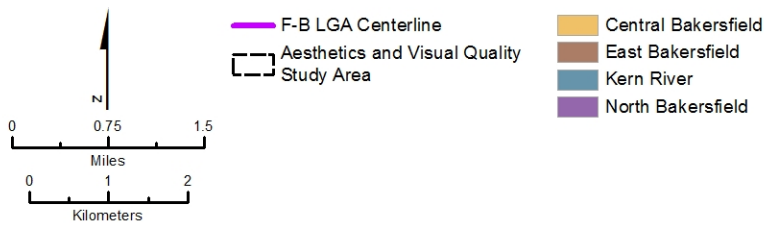


Figure 3.16-8 Landscape Units in Metropolitan Bakersfield

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### North Bakersfield Landscape Unit and Key Viewpoints

The North Bakersfield Landscape Unit covers a predominantly industrial and commercial corridor along SR 99 and SR 204 from 7th Standard Road southeast to the northern bank of the Kern River. Figure 3.16-9 shows the locations of representative and key views in northern Bakersfield.<sup>1</sup> This area is typified by commercial warehouses, agro-industrial structures, and retail commercial buildings (Figure 3.16-10). The overall visual setting has low vividness because of the generic character of the industrial and commercial built environment. The area also has a low degree of intactness as a result of the lack of attractive features in the built environment and the presence of SR 99, SR 204, and the Union Pacific Railroad (UPRR) as encroaching elements that break up the landscape's continuity. The commercial and industrial components of the landscape do cohere to a limited extent, so the degree of unity is moderately low. Commuters on highways and arterial roads are the principal viewers in the area and would have moderately low sensitivity to the visual effects of F-B LGA features. In addition, industrial and commercial workers at businesses in the North Bakersfield Landscape Unit would have moderately low sensitivity. For commuters and workers, the exposure as viewers would be high because of the proximity of high-volume roadways and numerous businesses to the proposed alignment. Since the F-B LGA would be prominent, on an elevated viaduct throughout this landscape unit, it would also generate high exposure for the viewers. With moderately low sensitivity and a high degree of exposure, these viewers would have a moderate overall response to visual effects.

Although the North Bakersfield Landscape Unit is primarily industrial and commercial, two residential areas would have views toward the alignment. Two-story, multifamily residential buildings and single-family residences along Norris Road to the west of SR 99 would have direct and proximate views of the alignment from as close as 300 feet away (Photo NBR-a of Figure 3.16-11). Single-family residences along Roberts Lane in Oildale would have partially obstructed westward views of the alignment across the UPRR and of industrial uses of low visual quality, from a distance of approximately 0.2 mile (Photo NBR-b of Figure 3.16-11). Local residents would be highly sensitive to the project because of their concern with visual quality and the alignment's proximity and visual prominence. The exposure of nearby residents along Norris Road would be high, while that of more distant residents along Roberts Lane would be moderately low. Therefore, the viewer response would be high for nearby residents but moderate for more distant residents.

In Section 3.16.4, Environmental Consequences, KVPs 4 through 6 (Figure 3.16-26 through Figure 3.16-28) offer views of existing conditions and then simulations of potential HSR effects from the perspectives of Coffee Road, Snow Road, and Olive Drive in the North Bakersfield Landscape Unit.

<sup>1</sup> The North Bakersfield Landscape Unit includes a small portion of the city of Shafter north of 7th Standard Road and unincorporated Kern County.

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SOURCE: Microsoft Corporation Bing Imagery ESRI Service Layer, 2017; CHSRA, 2017.

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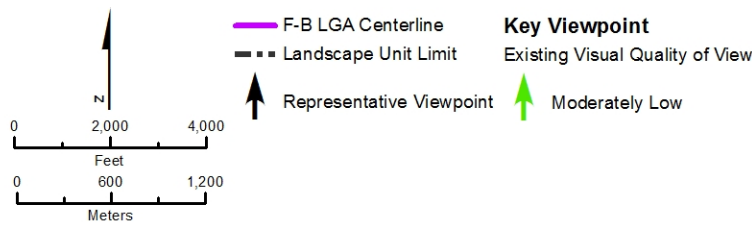


Figure 3.16-9 North Bakersfield Landscape Unit



*NBC-a. F-B LGA at industrial site, looking northwest from Norris and Snow roads*



*NBC-b. F-B LGA at commercial site, looking southeast from Olive Drive overcrossing of SR 99*

**Figure 3.16-10 North Bakersfield Landscape Unit: Representative Industrial and Commercial Views**



*NBR-a. View of F-B LGA north of multifamily residences on Norris Road*



*NBR-b. Westward view from residences on Roberts Lane in Oildale, about 0.25 mile from F-B LGA*

**Figure 3.16-11 North Bakersfield Landscape Unit: Representative Residential Views**

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### Kern River Landscape Unit and Key Viewpoints

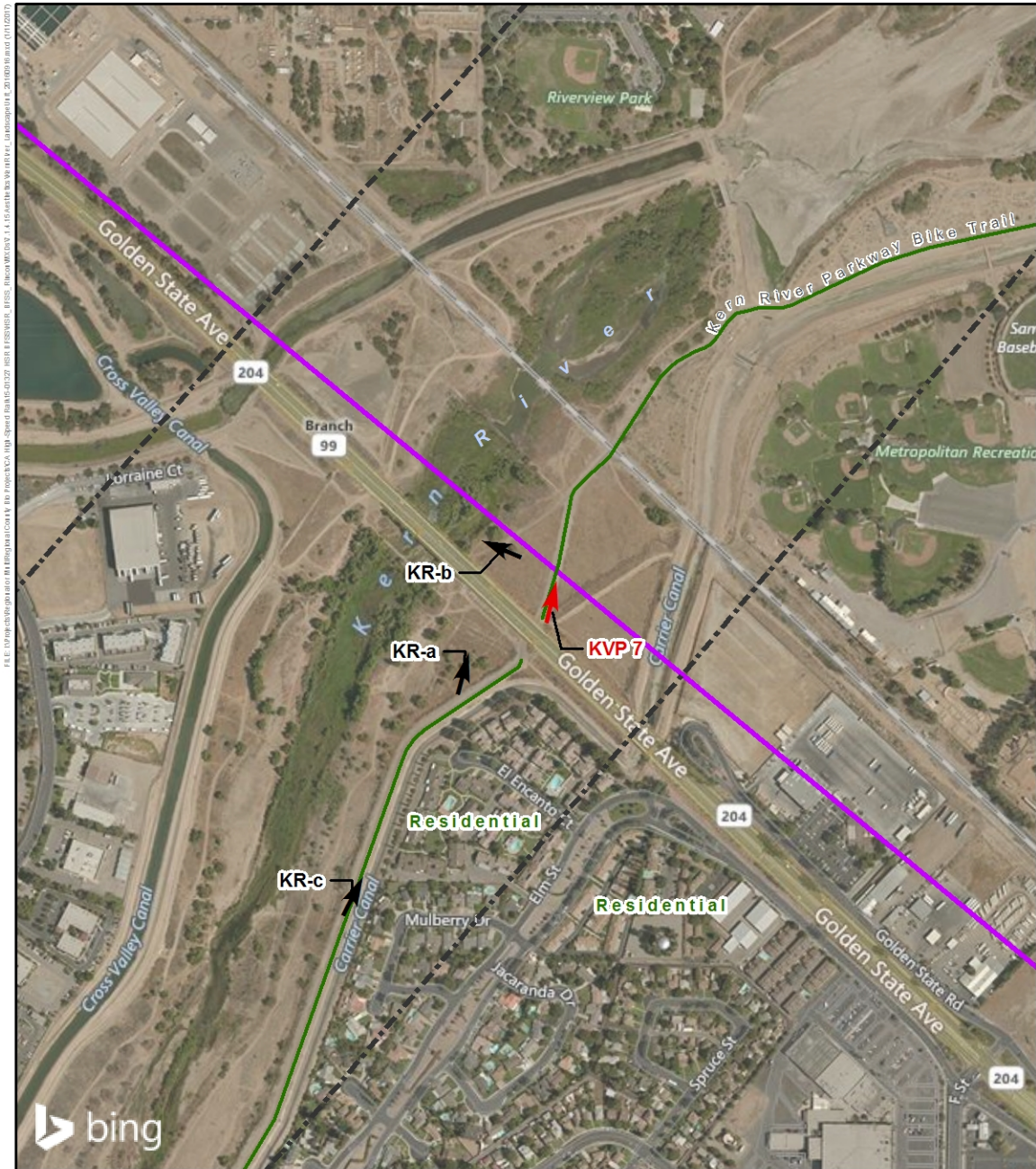
In the vicinity of the F-B LGA, the Kern River, where it traverses the city of Bakersfield, has a wide channel that runs dry and appears barren for portions of the year, with riparian grassland and woodland in the floodplain. Figure 3.16-12 shows the locations of representative and key views, and Figure 3.16-13 offers images of the channel from several points of view. The paved Kern River Parkway Bike Trail traverses the southern bank and is elevated above the river channel except when it dips down at an undercrossing of the SR 204 bridge over the Kern River. To the immediate northeast of this bridge, an earthen berm obstructs views to the southeast toward the proposed Bakersfield F Street Station site. To the southwest of the bridge, an adjacent concrete-lined flood-control channel and residences with landscaping are visible from the trail.

This area has a high degree of vividness because the scenic riparian environment of the Kern River is a rare, natural visual element in the greater urbanized landscape of Bakersfield. In addition, the dual SR 204 and UPRR railway crossings of the Kern River Parkway Bike Trail contribute to the memorability of the area. The intactness and unity of the Kern River landscape unit are, however, moderately low. Even though the Kern River is a natural riparian corridor, the highway and railway crossings break up the landscape, obstruct views of natural elements, and do not cohere with an otherwise natural area. The overall visual quality of the landscape unit varies from moderately low near the SR 204 bridge to moderately high on either side.

Recreational users of the trail, such as bicyclists and runners, are the key sensitive viewers in this area and would be highly sensitive to visual effects. Although active recreational users playing sports are not typically focused on scenery, bicyclists and runners on a trail in an open-space area would have more concern for aesthetics. Their exposure to the F-B LGA would be high because the alignment would cross the trail on an elevated viaduct between the existing SR 204 and UPRR railway bridges. Therefore, the visual response of recreational users would be high. In Section 3.16.4, Environmental Consequences, KVP 7 (Figure 3.16-29) depicts the existing view of the alignment from the perspective of trail users.

Commuters on SR 204 also would have views of the F-B LGA alignment to the immediate northeast of the Kern River crossing. These viewers would have moderate sensitivity to aesthetics. Motorists' exposure would be moderately low because of the brief amount of time they would see the alignment when traveling at highway speeds. Overall, commuters' viewer response would be moderately low.

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SOURCE: Microsoft Corporation Bing Imagery ESRI Service Layer, 2017; CHSRA, 2017.

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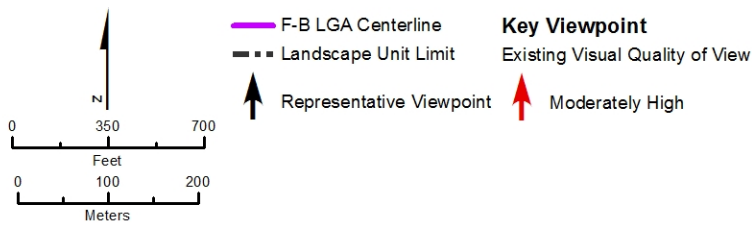


Figure 3.16-12 Kern River Landscape Unit



*KR-a. Kern River Parkway Bike Trail, looking north toward SR 204 bridge over Kern River*



*KR-b. F-B LGA at Kern River, looking west from Kern River Parkway Bike Trail*



*KR-c. Kern River Parkway Bike Trail looking north, with Stine Canal and residential neighborhood in Central Bakersfield to the east*

**Figure 3.16-13 Kern River Landscape Unit: Representative Views**



### Bakersfield: Central Bakersfield Landscape Unit and Key Viewpoints

In the Central Bakersfield Landscape Unit, which stretches from the Kern River southeast to Union Avenue in Bakersfield, the F-B LGA would run parallel to SR 204 in the northeast and along the western portion of Sumner Street. Figure 3.16-14 shows the locations of representative and key views. The landscape consists of a mix of retail commercial uses, office buildings, vacant lots, surface parking lots, residential neighborhoods, and institutional buildings (Figure 3.16-15 through Figure 3.16-18). Highway-oriented billboards also line SR 204, a four- to six-lane divided highway in this area.

The quality of existing views toward the F-B LGA from locations in the Central Bakersfield Landscape Unit ranges from low to moderately low. As the landscape is similar in character to many other automobile-oriented, commercial areas along highways in Bakersfield, it has an overall low degree of vividness. The Chester Avenue corridor north of Garces Circle, however, has a distinct visual character. The segment of Chester Avenue between Garces Circle and the UPRR undercrossing has moderate visual quality, with some topographic diversity at the UPRR undercrossing, a median paved with rounded bricks, and prominent roadside trees. To the north of the UPRR undercrossing, the Chester Avenue corridor has a moderately high degree of vividness and visual quality because of the distinctive architecture of the historic Kern County Museum building and Beale Memorial Clock Tower. The museum, located adjacent to and directly north of the F-B LGA, is influenced by the Beaux Arts and Mission Revival styles (City of Bakersfield 2015). Nevertheless, the overall Central Bakersfield Landscape Unit has a moderately low degree of intactness because of the predominance of expansive surface parking lots and generic commercial and governmental architecture. Considering the diversity of the built environment, this landscape unit has a low degree of visual coherence or compositional harmony.

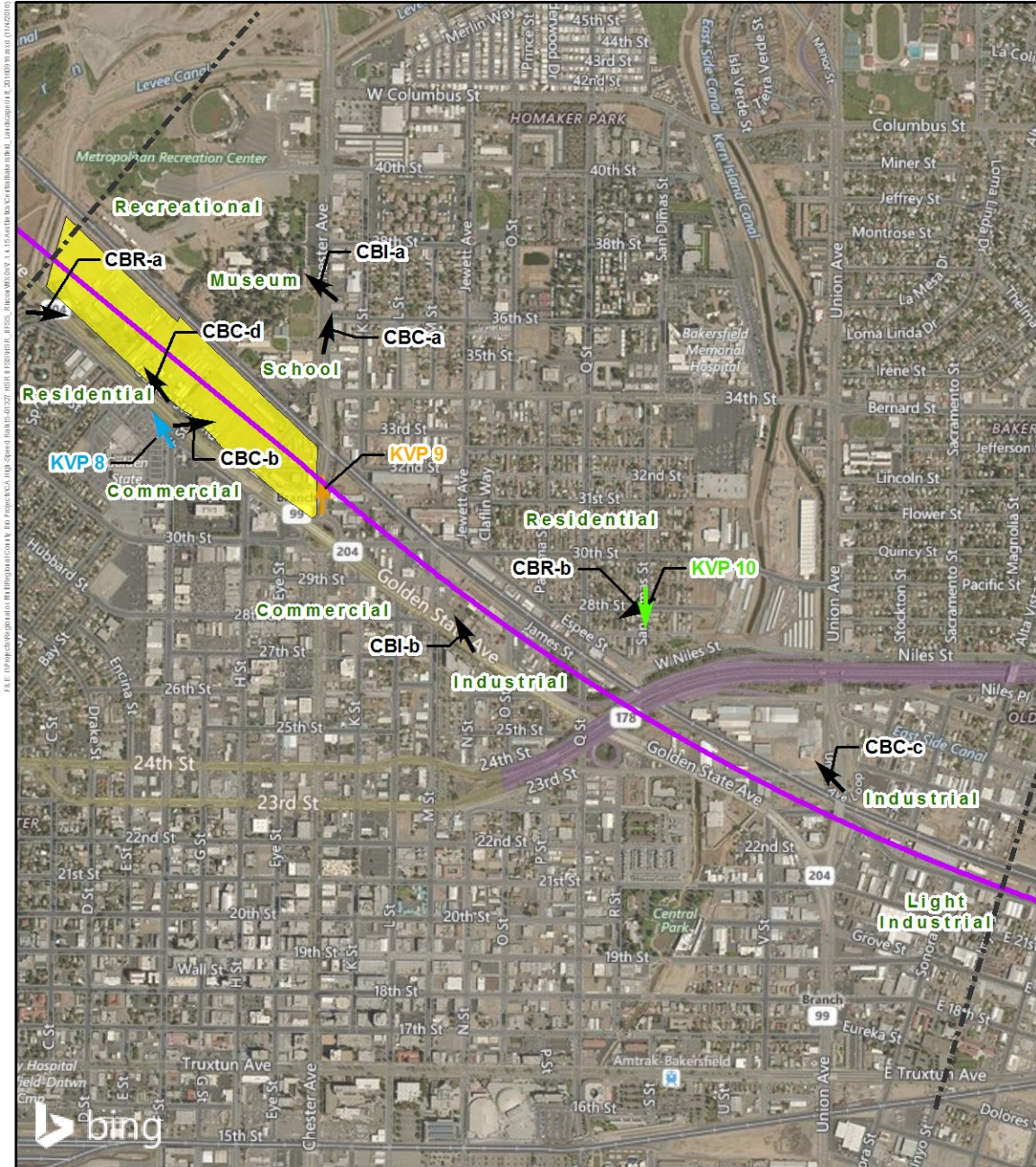
Commuters on SR 204, Sumner Street, and cross-streets would have views of the F-B LGA. As they would largely be in moving vehicles, these viewers would have moderate sensitivity to aesthetics. Their exposure would be moderately high because the F-B LGA would run on an elevated viaduct adjacent to the highway through most of the Central Bakersfield Landscape Unit and on top of Sumner Street. Overall, commuters' viewer response would be moderately high.

Workers in the area would have moderately low sensitivity. People at their workplace become accustomed to the visual character of their surroundings. Because of this familiarity and their focus principally on work, they are typically not highly concerned with the quality of the aesthetics and visual resources of the immediate surroundings of their workplaces. Workers' high exposure to nearby visual effects would, however, result in a moderate overall viewer response. Visitors to the historic Kern County Museum would have high sensitivity and high exposure to adjacent construction activities associated with the F-B LGA. Museum visitors would, therefore, have a high viewer response.

Residents would have a high sensitivity to visual effects. The exposure of residents located across SR 204 from the proposed Bakersfield F Street Station location would be moderately high. In addition, residents located north of the alignment near Q Street and SR 178 would have direct and proximate views from as close as 350 feet away. Residents' overall exposure would be moderately high.

In Section 3.16.4, Environmental Consequences, KVPs 8 through 10 (Figure 3.16-30 through Figure 3.16-32) offer views of existing conditions and then simulations of potential HSR effects in the vicinity of the proposed Bakersfield F Street Station site, Garces Circle, and SR 178 in the Central Bakersfield Landscape Unit.

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SOURCE: Microsoft Corporation Bing Imagery ESRI Service Layer, 2017; CHSRA, 2017.

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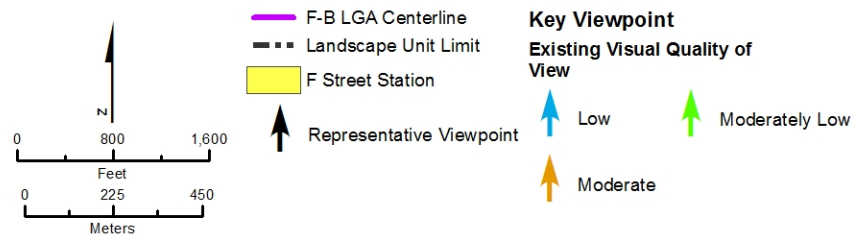


Figure 3.16-14 Central Bakersfield Landscape Unit



*CBC-a. Statue in front of military store on Chester Avenue near proposed 34th Street entrance to the Bakersfield F Street Station*



*CBC-b. Vacant commercial property at the proposed Bakersfield F Street Station site looking northeast from SR 204*

**Figure 3.16-15 Central Bakersfield Landscape Unit: Representative Commercial Views**



CBC-c. Commercial facilities to the northwest of Union Avenue overpass of BNSF Railway with F-B LGA to the left



CBC-d. Existing northward view of commercial development on proposed Bakersfield F Street Station site

**Figure 3.16-16 Central Bakersfield Landscape Unit: Representative Commercial Views**



CBI-a. Kern County Museum on Chester Avenue to north of proposed 34th Street entrance to Bakersfield F Street Station, looking west



CBI-b. Kern County Veterans Service Department looking northwest from SR 204 toward F-B LGA

**Figure 3.16-17 Central Bakersfield Landscape Unit: Representative Institutional Views**



*CBR-a. SR 204 on berm to east of Elm Street residences, looking east with the proposed Bakersfield F Street Station to the left*



*CBR-b. Single-family residences on 28th Street near San Dimas Street, looking southwest*

**Figure 3.16-18 Central Bakersfield Landscape Unit: Representative Residential Views**

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**Bakersfield: East Bakersfield Landscape Unit and Key Viewpoints**

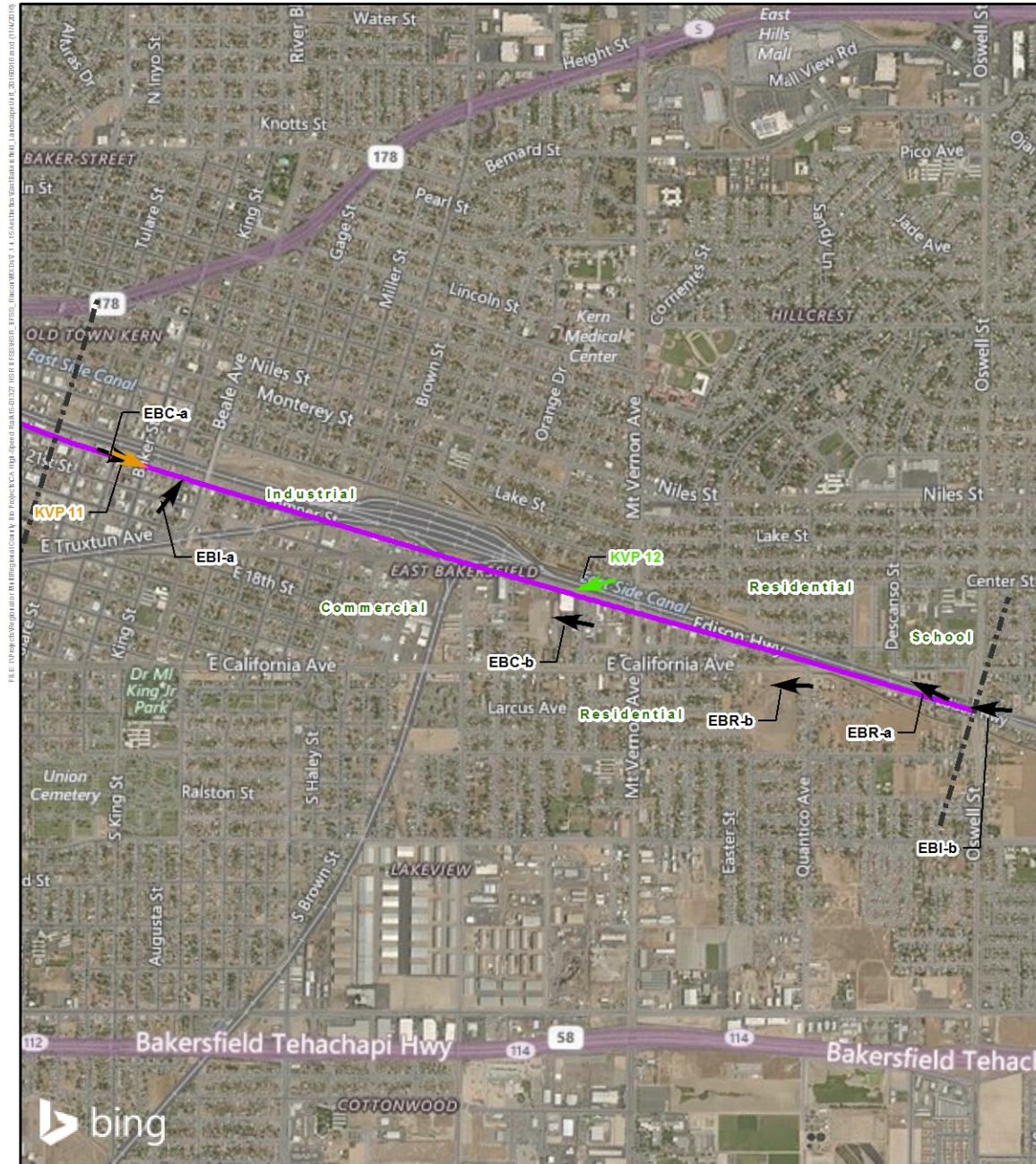
East of Union Avenue, the F-B LGA would continue to the southeast as an elevated viaduct above Sumner Street and Edison Highway, paralleling freight rail lines located to the north, until the eastern terminus of this alignment. Figure 3.16-19 shows the locations of representative and key views. The East Bakersfield Landscape Unit is primarily an industrial zone in Bakersfield typified by warehouses, employee parking, material storage, and vacant lots. The Edison Highway corridor is dominated by open material and equipment storage, parking, and a general lack of attention to visual order. Localized areas in the greater landscape unit have distinct, nonindustrial visual characteristics. For example, two-story retail commercial uses are clustered on the south side of Sumner Street by Baker Street, and the Mercado Latino Tianguis is a colorful retail and cultural center that re-creates the feel of a Mexican village market at Edison Highway and Chamberlain Avenue (Figure 3.16-20). Isolated civic uses, such as The Mission at Kern County, add diversity to the overall industrial character of the landscape unit (Figure 3.16-21). This corridor is also characterized by prominent bridges crossing over Sumner Street at Beale Avenue and Union Avenue and Edison Highway at Mt. Vernon Avenue and Oswell Street (Figure 3.16-21).

The overall East Bakersfield landscape has a low degree of vividness because of its light industrial character. The visual obstruction caused by multiple overpasses of Sumner Street and Edison Highway as well as the presence of large vacant lots results in a landscape with a low degree of visual unity and intactness. On the whole, the visual quality of this area is low.

Industrial workers in the workplace would be the principal viewers in this area and would have low sensitivity to the visual effects of the project. Commuters on Sumner Street and Edison Highway would have high exposure to the F-B LGA, which would be on an overhead guideway, but moderately low sensitivity because of the low visual quality of this primarily industrial corridor. Single-family residents along Quantico and E California avenues would have direct views of a HSR construction laydown area at an existing vacant lot (Figure 3.16-22). Both the viewer sensitivity and exposure of these residents would be high due to their very close proximity to the alignment. Views of the F-B LGA itself from residences to the south would generally be filtered by intervening industrial land uses of low visual quality. The residents at a three-story apartment building located adjacent and to the north of the UPRR would, however, have unobstructed views of the elevated HSR guideway above Edison Highway (Figure 3.16-22). Their sensitivity and exposure as viewers would be high. Single-family residences on the north side of the UPRR would also have partially obstructed views of the alignment on Edison Highway. These viewers would have high sensitivity, moderate exposure, and a moderately high viewer response. At the Mercado Latino Tianguis, visitors would be exposed to the elevated viaduct for brief periods of time while entering and exiting the market. However, considering the cultural importance of the market to the Latino community, visitors would have moderately high viewer sensitivity and a moderately high viewer response.

In Section 3.16.4, Environmental Consequences, KVPs 11 and 12 (Figure 3.16-33 and Figure 3.16-34) depict simulations of potential F-B LGA effects at Baker Street and the Mercado Latino Tianguis in the East Bakersfield Landscape Unit.

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SOURCE: Microsoft Corporation Bing Imagery ESRI Service Layer, 2017; CHSRA, 2017.

January 11, 2017

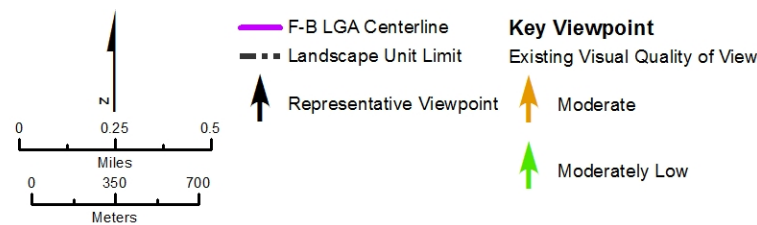


Figure 3.16-19 East Bakersfield Landscape Unit



*EBC-a. The Pyrenees Basque Restaurant looking eastward at the F-B LGA on Sumner Street*



*EBC-b. Outdoor plaza at the Mercado Latino Tianguis along Chamberlain Avenue south of the F-B LGA, looking northwest*

**Figure 3.16-20 East Bakersfield Landscape Unit: Representative Commercial Views**



*EBI-a. The Mission at Kern County on King Street looking north toward F-B LGA on Summer Street*



*EBI-b. F-B LGA along Edison Highway looking west toward Oswell Street bridge*

**Figure 3.16-21 East Bakersfield Landscape Unit: Representative Infrastructure and Civic Views**



*EBR-a. F-B LGA at Edison Highway looking northwest toward UPRR railway and multifamily residences*



*EBR-b. Vacant lot proposed for HSR construction laydown area, looking west from single-family residences on Quantico Avenue*

**Figure 3.16-22 East Bakersfield Landscape Unit: Representative Residential Views**

### **Scenic Vistas and Highways**

No formally designated scenic vistas or vista points were identified in the F-B LGA study area. However, a scenic vista that is not formally designated in the study area is the view of the Kern River and Greenhorn Mountains by recreational visitors in the Kern River Parkway in Bakersfield. For recreational users of the parkway, views of the river and mountains are among its principal attractions.

In California, state scenic highways are designated by Caltrans. To be designated scenic, a highway must traverse an area of outstanding scenic quality—one containing striking views, flora, geology, or other unique natural attributes. The project study area contains no state or local designated scenic highways (Caltrans 2015).

#### **3.16.4 Environmental Consequences**

This section provides the impact analysis for the aesthetics and visual quality of the F-B LGA. Impacts are identified based on project-related changes in visual quality of the existing landscape unit setting, prevailing viewer sensitivity, project visibility, and anticipated viewer response.

##### **3.16.4.1 Summary of Analysis for the May 2014 Project**

This section provides a summary of those effects of the May 2014 Project using information from the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a). The Final EIR/EIS (Section 3.16.5.3, page 3.16-67) concluded that the introduction of new sources of light and glare during construction of the Fresno to Bakersfield Section, including the May 2014 Project, would cause aesthetic effects that are of negligible intensity, localized, and temporary. New sources of temporary night lighting during construction would adversely affect nighttime views, resulting in a significant impact, but mitigation to shield and direct lighting downward would reduce impacts to a less than significant level. Operational lighting for the Fresno to Bakersfield Section, including the May 2014 Project, was determined to have less than significant impacts, as the HSR station would be designed to direct lighting downward, guideways would not have overhead lights, and train lights would be directed toward the guideway.

With regard to visual quality, the Fresno to Bakersfield Section, including the May 2014 Project, would have adverse effects resulting from blocked views or visual intrusion of the HSR guideway and associated road crossings near historic resources or residential areas with high-sensitivity viewers. In Shafter and Bakersfield, long-term significant impacts on visual quality under CEQA were found to occur because of the close proximity of sensitive viewers. As detailed in Appendix 8-A, in the San Joaquin Valley Rural/Agricultural landscape unit, the elevated viaduct would have a significant impact on rural residences that are within 0.5 mile of the viaduct and not adjacent to agro-industrial facilities. In the Rural Towns landscape unit, the elevated viaduct would degrade visual quality from moderate to moderately low or low from the perspective of nearby residents, park users, and visitors to the central business district in Shafter, and the at-grade alignment would degrade the visual quality of rural residences at 7th Standard Road, resulting in a significant impact. In the Rosedale/Greenacres landscape unit, where residents were determined to have a moderately high viewer response, the elevated viaduct would create very strong declines in intactness and unity at a foreground distance, creating a significant impact. At the Kern River Parkway in Bakersfield, the May 2014 Project would cause a substantial decline in visual quality for viewers, generating a significant impact on a scenic vista. In the Central Bakersfield Landscape Unit, the elevated viaduct would pass within 140 feet of residences, decreasing visual quality, resulting in a significant impact. In the East Bakersfield Landscape Unit, the alignment would run adjacent to residences located to the east of Union Avenue near Truxtun Avenue, resulting in a significant impact to these residences. Residual impacts would be significant under CEQA because the effectiveness of site-specific mitigation measures was uncertain. At the HSR station, however, the improvements to visual quality in downtown urban centers would represent beneficial effects.

### 3.16.4.2 *Fresno to Bakersfield Locally Generated Alternative*

A complete definition of the F-B LGA is provided in Chapter 2 of this Draft Supplemental EIR/EIS. Table 3.16-2 on pages 3.16-61 through 3.16-64 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a) provides a summary of the physical characteristics of typical HSR components. For the F-B LGA, the primary components would be elevated viaducts, and embankment fill/at-grade tracks. Elevated viaducts would be constructed atop columns that are typically about 10 feet in diameter at the ground. The beam on which elevated viaducts sit would have a minimum clearance of approximately 16.5 feet over roadways and 24 feet over railways. At-grade profiles would be built on compacted soil and ballast material. An overhead catenary system (OCS) of poles and wires lining the guideway would be up to 23 feet in height above the track.

The following sections discuss temporary construction impacts and permanent impacts potentially resulting from the F-B LGA.

Table 3.16-1 presents a summary of the range of impacts from the F-B LGA at KVPs in each landscape unit. The change in visual quality at each KVP in the landscape units is detailed further in the discussion that follows.

**Table 3.16-1 Summary of Aesthetic Impacts at F-B LGA Key Viewpoints**

Landscape Unit	CEQA Impacts
Shafter Town	Significant
Rural San Joaquin Valley	Significant
North Bakersfield	Less than significant to significant
Kern River	Significant
Central Bakersfield	Less than significant
East Bakersfield	Less than significant to significant

#### ***Construction-Period Impacts***

Project construction is expected to be completed within six years from the beginning of the first phase of construction and through operational testing of the HSR system, not including property acquisition or permitting. Heavy construction activities (e.g., grading, excavating, and laying the HSR railbed and trackway) are expected to be accomplished in a four-year period.

#### ***Impact AVR #1 – Construction Impacts on Scenic Vistas***

As indicated in Section 3.16.3.5, the project's visual study area contains a scenic vista where the F-B LGA would cross the Kern River. Construction of an elevated viaduct across the Kern River would introduce new lines, forms, and colors, causing a decrease in the visual unity and intactness of the scenic vista of the Kern River and the foothills of the southern Sierra Nevada Mountains from the Kern River Parkway Bike Trail. In addition, the use of large construction equipment, such as cranes to build the proposed Bakersfield F Street Station immediately to the southeast, may intrude on scenic vistas available to trail users. It is judged that this would decrease the visual quality of the vista from moderately high to moderate. This impact would be temporary, lasting up to five years. Because construction would decrease the visual quality rating by one level and viewers would have moderately high sensitivity to construction-period visual changes, it is considered to have a less than significant impact under CEQA.

#### ***Impact AVR #2 – Construction Impacts on Existing Visual Quality***

Similar to the May 2014 Project, and as discussed on page 3.16-67 in Section 3.16 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a), clearing, earthmoving, and the erection of project facilities would introduce new lines, forms, and colors that would typically contrast with the existing landscape forms and patterns in urban and rural areas, causing a



decrease in the visual unity and intactness of most existing views. This would be most noticeable in rural areas between urban Shafter and metropolitan Bakersfield, especially near a construction staging area by Burbank Street and Driver Road, where largely undeveloped landscapes would be disturbed by intensive construction activities, causing a reduction in the visual quality rating of landscapes by one to two levels, depending on the setting.

Construction of the proposed MOIF in an agricultural area of northern Shafter would have similar impacts on visual quality. This construction activity would be visible to nearby residential neighborhoods located across SR 43 to the west in northern Shafter. In urban areas such as Shafter and Bakersfield, because the F-B LGA would typically be located in commercial and industrial areas related to freight rail, the contrast introduced by project construction would be less noticeable and would not decrease the visual quality of the landscape. However, single-family residents along Quantico and East California Avenues in the East Bakersfield Landscape Unit would have direct views of a 24-acre construction laydown area in an adjacent vacant lot. Most construction activities would cease in one to two years at any given location. The exception to this would be concrete batch plants used to fabricate project components and some construction laydown areas that would be used for up to five years. Because construction could reduce the visual quality rating of a landscape unit by one or two levels depending on the setting, and viewer sensitivity would often be moderate or, in some cases, high, the impact of project construction on existing visual quality in the study area could be significant under CEQA.

### ***Impact AVR #3 – Construction Impacts from Light and Glare***

For the F-B LGA, construction impacts associated with the creation of new sources of light and glare would be identical to those discussed for the May 2014 Project on page 3.16-67 in Section 3.16 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a). Although construction would not occur at night at all times, lighting associated with construction may be an annoyance to viewers, especially in rural areas. Similar to the May 2014 Project, lighting would reduce visual quality by one level and viewer sensitivity would often be moderate or, in some cases, high. The impact would be significant under CEQA.

### **Project-Period Impacts**

As described in Section 3.16.2, aesthetic and visual impacts on each landscape unit in the study area were assessed by examining changes to visual quality at KVPs in each landscape unit using the FHWA visual quality analysis system that was applied in the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014). In most cases, photo simulations were prepared to support the impact analysis and are shown in the analysis of impacts on visual quality. Existing views were compared to photo simulations, considering changes in visual quality and character and taking into account viewer response, which includes viewer sensitivity and exposure. KVPs studied include one identified scenic vista, the view of the Kern River from the adjoining Kern River Parkway. The FHWA method was then applied to the applicable visual impact criteria of CEQA.

### **Common Aesthetics and Visual Quality Impacts**

This section discusses impacts to aesthetics and visual quality that would be common across all landscape units. Similar to the May 2014 Project, and as discussed generally on pages 3.16-68 and 3.16-69 in Section 3.16 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a), the proposed F-B LGA would result in permanent changes to areas adjacent to or in viewing range of the HSR. These visual changes would occur with the introduction of new features to the environment, including both elevated and non-elevated portions of the HSR guideways, guideway support columns, contact power system, bridges, and roadway grade separations. They would also include a variety of HSR infrastructure, such as traction power supply stations, HSR alignment fencing, required sound walls up to 14 feet high in some locations, and the HSR trains. New utility towers to serve the HSR would generally replace existing towers on the same pads and may be 20 to 50 feet taller than existing towers. The average height of the F-B LGA above existing ground level would be 60 feet, which would obstruct views, cast shadows, and loom over surrounding development. The HSR guideway and

other features would be incompatible and out of scale with the existing visual character in many locations where viewer sensitivity and exposure are high.

In addition, the F-B LGA could cause visual intrusion and potential blocking of views from the use of sound barriers where these are required. Typically, the style of sound barriers is selected with input from the local jurisdiction to reduce adverse visual effects on adjacent land uses. Sound barriers could be solid or transparent, and made of various colors, materials, and surface treatments. The F-B LGA would involve construction of sound barriers in the following locations:

- Southbound track from south of Madera Avenue to north of E Ash Avenue (11,930 feet)
- Northbound track from north of Venable Lane to south of E Ash Avenue (8,425 feet)
- Southbound track from north of Fruitvale Avenue to Olive Drive (9,925 feet)
- Northbound track from Norris Road to north of Elm Street (12,460 feet)
- Southbound track from north of Elm Street to Oswell Street (26,220 feet)
- North of H Street to Oswell Street (23,275 feet)

For comparison, the May 2014 Project would involve construction of sound barriers in the following potential locations between Poplar Avenue in Shafter and Oswell Street in Bakersfield, pursuant to Mitigation Measure N&V-MM#3:

- Southbound track from Poplar Avenue to E Ash Avenue (8,560 feet)
- Northbound track from south of Fresno Avenue to north of E Lerdo Highway (7,205 feet)
- Southbound track from Hageman Road to north of Palm Avenue (12,043 feet)
- Southbound track from north of Palm Avenue to west of Mohawk Street (15,353 feet)
- Southbound track from west of F Street to Oswell Street (22,733 feet)
- Northbound track from north of Jomani Drive to south of Palm Road (10,720 feet)
- Northbound track from south of Palm Avenue to east of Coffee Road (10,180 feet)
- Northbound track from east of SR 99 to west of Eye Street (6,950 feet)
- Northbound track from west of S Street to Oswell Street (18,500 feet)

A general description of the potential visual quality impacts from sound barriers is provided on pages 3.16-68 and 3.16-69 in Section 3.16 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a).

The F-B LGA also would introduce new sources of light at the site of the proposed Bakersfield F Street Station, along the HSR guideway, and on trains. Lighting at the Bakersfield F Street Station is discussed below in Impact AVR#4. As with the May 2014 Project, no overhead lights on the HSR guideway are proposed, and train lights would be directed toward the guideway. These design features would minimize spillover of light to surrounding areas.

Because no officially designated state scenic highways exist near the F-B LGA, no impacts on such resources exist, and they are not discussed further.

#### ***Impact AVR#4—Change to Visual Quality***

Table 3.16-2 provides viewpoint-specific impact summaries for KVPs in each landscape unit. The table lists the changes the F-B LGA would have on the existing visual quality rating at each KVP according to the evaluation methodology, and classifies these impacts on aesthetics and visual resources according to CEQA criteria. This table provides details for comparing the relative changes that the F-B LGA would have in each landscape unit and was used to help develop the impact determinations shown in Table 3.16-1.

**Table 3.16-2 Summary of Visual Quality Changes and Impacts at Key Viewpoints**

KVP Location	KVP #	Visual Quality Rating Existing	Visual Quality Rating With Project	Viewer Response	CEQA Impact
<b>Shafter Town Landscape Unit</b>					
Shafter Depot Museum	KVP 1	Moderately high	Moderate	High	Significant
<b>Rural San Joaquin Valley Landscape Unit</b>					
Burbank Street	KVP 2	Moderately high	Moderately low	High	Significant
Verdugo Lane	KVP 3	Moderately low	Low	High	Significant
<b>North Bakersfield Landscape Unit</b>					
Coffee Road	KVP 4	Moderately Low	Low	Moderately low	Less than significant
Snow Road at Creemore Street	KVP 5	Moderately low	Moderately low	High	Less than significant
Norris Road west of SR 99	N/A	Moderately low	Low	High	Significant
Olive Drive at Knudsen Drive	KVP 6	Moderately low	Moderately low	Moderately low	Less than significant
<b>Kern River Landscape Unit</b>					
Kern River Parkway Bike Trail	KVP 7	Moderately high	Moderate	High	Significant
<b>Central Bakersfield Landscape Unit</b>					
SR 204 South Frontage Road, looking toward F Street Station Site	KVP 8	Low	Moderate	Moderately high to high	No impact
Garces Circle	KVP 9	Moderate	Moderately low	Moderate	Less than significant
San Dimas Street at Homaker Place	KVP 10	Moderately low	Moderately low	Moderately high	Less than significant
<b>East Bakersfield Landscape Unit</b>					
Sumner Street at Baker Street	KVP 11	Moderate	Low	Moderate	Significant
Mercado Latino Tianguis	KVP 12	Moderately low	Low	Moderately low to moderately high	Less than significant

### Shafter Town Landscape Unit

The F-B LGA would run on a northwest-southeast axis through urban Shafter, with the HSR alignment adjacent and parallel to the east side of the existing BNSF right-of-way (ROW). From its northern terminus south to Tulare Avenue, the HSR alignment would have an embankment fill profile. South of Tulare Avenue, the embankment fill would be retained on the east side to allow Walker Street to remain in place. The retained fill section would continue down to E Lerdo Highway. Bridge openings would be provided in four locations: Fresno Avenue, a relocated Shafter Avenue, Central Avenue, and E Lerdo Highway. The existing, at-grade BNSF would be converted to an embankment profile with retaining walls from the northern terminus of the F-B LGA south to Ash Avenue. The area between the BNSF and the HSR guideway would be constructed as an embankment fill section. Poplar Avenue would be reconfigured from its existing at-grade intersections with SR 43 and the BNSF to an overcrossing, and a new connecting spur road would be constructed to re-establish access between Poplar Avenue and SR 43.

As shown by the representative photos of Shafter in Figure 3.16-3 through Figure 3.16-5, the F-B LGA would pass through a mixture of commercial, residential, industrial, and agricultural areas. In central Shafter, the alignment would run adjacent and to the east of the Shafter Depot Museum, which this analysis identifies as a KVP. On Figure 3.16-23, KVP 1 shows existing and simulated conditions at the Shafter Depot Museum, looking southeast from the perspective of SR 43. The Shafter Depot Museum is listed on the National Register of Historic Properties and is an historic property under Section 106 of the National Historic Preservation Act. It is also an historical resource under CEQA. The two-story museum building has distinctive architecture, restored to its original appearance, with yellow ochre, horizontal wooden siding and brown window frames. Palm trees line the frontage with SR 43. When viewing this site from the south on SR 43, the BNSF crossing at Shafter Avenue is visible behind the museum. Although the depot building has been moved from its original location, its setting remains largely intact because it is located adjacent to the at-grade railway. Under the F-B LGA, the BNSF would be elevated on an embankment with a retaining wall adjacent to the northeast of the museum, while a raised HSR embankment would be constructed adjacent and parallel to the northeast of the BNSF. The BNSF embankment would be a prominent industrial structure immediately behind the historic site that contrasts with the historic wood-frame architecture of the Shafter Depot Museum, degrading the visual unity of the site.

Moreover, the conversion of the existing, at-grade BNSF to a raised embankment with a retaining wall would degrade the intactness of views from the historic museum, which originally served as a depot for an at-grade railway. Because of the loss of visual unity and intactness, visual quality would decline one level, from moderately high to moderate. Furthermore, visitors to the museum would have a high viewer response to the change in the property's visual landscape, which is an important part of the viewer experience. The visual impact of the project would, therefore, be significant under CEQA.



*KVP 1. Existing view of Shafter Depot Museum from SR 43 looking southeast*



*KVP 1. Simulated view of Shafter Depot Museum from SR 43 looking southeast*

**Figure 3.16-23 KVP 1 Existing and Simulated Views at the Shafter Depot Museum**

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The retained HSR and BNSF embankments south of Tulare Avenue also would be visible to visitors in the historic part of downtown Shafter along Central Avenue. The following structures would be located in the foreground distance of the downtown center: the BNSF embankment, which would be located approximately 175 feet away from the northeastern edge of the downtown center at SR 43, and the HSR embankment, which would be located approximately 350 feet away. Currently, as shown by Photo SC-B in Figure 3.16-4, the downtown center is characterized by one- and two-story commercial retail buildings and visually prominent street trees. Because of the central location of the retained BNSF and HSR embankments in Shafter and their proximity to the downtown center, they would exert a strong influence on the image and character of the town, altering the prevailing scale and introducing a strongly contrasting urban and industrial character. The introduction of a pair of visually dominant embankments with an urban, industrial character would adversely affect the visual intactness and unity of the small-town setting of Shafter. However, street trees on Central Avenue and one- and two-story commercial buildings next to Central Avenue between SR 43 and the BNSF ROW would limit the embankments' visibility from the perspective of visitor to the town center. Visitors, who have a moderately high viewer response, would experience a decline in visual quality from moderate to moderately low. This decline of one level in visual quality would represent a significant impact under CEQA.

The F-B LGA would be visible to several residential areas in Shafter. Residences located to the east of the alignment would primarily be exposed to a retained HSR embankment to the south of Tulare Avenue and to HSR embankment fill to the north of Tulare Avenue. Residents located to the west of the alignment would primarily be exposed to the retained BNSF embankment throughout the urban area of Shafter. Existing residences would be located 120 feet east of the retained HSR embankment along Walker Street, 150 feet west of the BNSF embankment to the north of Fresno Avenue and west of SR 43, 170 feet west of the BNSF embankment along W Tulare Avenue and SR 43, and 500 feet west of the BNSF embankment to the south of E Lerdo Highway. Due to the scale and height of the HSR and BNSF embankments, these structures would be prominent in sight lines down perpendicular streets in the foreground distance of 0.25 mile and sometimes visible above nearby rooftops to high numbers of residential viewers.

In northern Shafter, the MOIF and associated roadway reconfigurations would be visible to residential neighborhoods between Poplar Avenue and Klassen Street. The MOIF would convert an agricultural area with orchards to an industrial site, altering the rural visual character of northern Shafter. The reconfiguration of Poplar Avenue from its existing at-grade intersection with SR 43 and the BNSF to an overcrossing next to the MOIF also would introduce a visually dominant feature. This overcrossing would be visible to residences located approximately 0.3 mile to the south through intervening orchards.

The F-B LGA would introduce visually dominant features with an urban, industrial character into a small-town setting near Shafter's downtown center and residential neighborhoods. Residents near the HSR structures would experience a decline in visual quality from moderate to moderately low or low. In residential areas with a high viewer response, this decline of one to two levels in visual quality would represent a significant impact under CEQA.

#### **Rural San Joaquin Valley Landscape Unit**

From the southern edge of urban Shafter, the F-B LGA would cut eastward across the Rural San Joaquin Valley landscape unit toward SR 99. The HSR tracks would run on an embankment from urban Shafter to just northwest of Coffee Road near the North Bakersfield Landscape Unit. An elevated bridge would be used at three bridge crossings of canals: the Calloway Canal just northeast of Burbank Street, the Friant-Kern Canal about 1.5 miles downtrack, and the Lerdo Canal another 1.5 miles downtrack. On the embankment to the west of Mendota Street, the HSR railbed would have a height of approximately 30 feet above ground level, with OCS poles and wires extending up to approximately 23 feet above the guideway. On the embankment to the east of Mendota Street, the HSR railbed would have a height of up to 20 feet above-grade, or up to 30 feet at roadway undercrossings, with OCS poles and wires extending up to approximately 23 feet above the railbed.

Figure 3.16-24 and Figure 3.16-25 (KVP 2 and KVP 3) depict typical views in the Rural San Joaquin Valley landscape unit and simulations of the F-B LGA. KVP 2 provides a close-up view of the embankment fill profile on the north side of Burbank Street, across from an orchard, and KVP 3 shows a view at a distance of approximately 0.4 mile of the embankment fill profile from fallow agricultural land along Verdugo Lane. Visual quality is generally moderate in the rural valley, where orchards and vineyards predominate, but can be moderately high along narrow roads that cut through agricultural land (e.g., KVP2) and moderately low in fallow areas (e.g., KVP 3) and agro-industrial sites.

Although generally of moderate intactness and unity, this landscape often lacks variety and vividness because of the ubiquity and uniformity of orchards and vineyards. Viewers in this landscape are often agricultural workers, rural residents, and motorists on nearby roads. Of these, nearby rural residents at single, isolated homes constitute the primary high-sensitivity viewer group that would be affected by the F-B LGA. Rural residences would be located as close as approximately 130 feet away from HSR facilities and 340 feet from the centerline of the HSR alignment.<sup>2</sup> The sensitivity of other viewer groups in this landscape unit ranges from moderate to low.

In the flat agricultural landscape, the F-B LGA would introduce prominent industrial features that contrast with the rural setting, including the elevated bridges, the embankment fill profile with its elevated berm, security fencing, OCS poles and wires (up to 23 feet in height), and roadway undercrossings at Riverside Street, Cherry Avenue, Driver Road, Zachary Avenue, Zerker Road, and Verdugo Lane. Within 0.25 mile of the F-B LGA, as shown on Figure 3.16-24, KVP 2, the combination of HSR alignment and road crossings would be prominent, resulting in a decline in visual intactness and unity, and a corresponding reduction of one to two levels in the visual quality rating. Although the overall number of residents in the Rural San Joaquin Valley landscape unit is small, they would have high viewer sensitivity to these visual effects. A moderate decline in visual quality in an area with high viewer sensitivity would represent a significant impact under CEQA.

At distances beyond 0.25 mile, as shown on Figure 3.16-25, KVP 3, the low horizontal line of the HSR railbed would parallel and blend with the dominant horizontal plane of the prevailing terrain, with a moderate or moderately low overall effect on existing visual intactness and unity. Residents would, however, have high viewer sensitivity to visual changes to a distance of 0.5 mile from elevated portions of the HSR. Residential viewers who are not near agro-industrial sites would experience a decline in visual quality of one level, which represents a significant impact under CEQA.

The F-B LGA also would be visible to motorists in this landscape unit where the alignment approaches within 800 feet of SR 99 near the North Bakersfield Landscape Unit. Currently, motorists on SR 99 have unobstructed views of agricultural land to the southwest, over the adjacent UPRR tracks, until industrial land uses intrude to the north of 7th Standard Road. The embankment fill profile in this section would represent a minor intrusion on agricultural views, reducing the intactness and unity of the landscape. Visual quality would decline by one level from the perspective of motorists. Because this viewer group has moderate sensitivity to visual changes, the F-B LGA would have a less than significant impact to motorists under CEQA.

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<sup>2</sup> The closest rural residences (approximately 130 feet from the HSR facilities) are those at the eastern end of Burbank Street in this landscape unit.





*KVP 2. Existing view of Burbank Street from Heath Road looking west*



*KVP 2. Simulated view of Burbank Street from Heath Road looking west*

**Figure 3.16-24 KVP 2 Existing and Simulated Views of Burbank Street from Heath Road, Looking West**



*KVP 3. Existing view of Verdugo Lane in rural Shafter looking north*



*KVP 3. Simulated view of Verdugo Lane in rural Shafter looking north*

**Figure 3.16-25 KVP 3 Existing and Simulated Views of Verdugo Lane in Rural Shafter, Looking North**

### North Bakersfield Landscape Unit

In the North Bakersfield Landscape Unit, the F-B LGA would run parallel to and southwest of the UPRR corridor. Southwest of the community of Oil Junction, the F-B LGA would cross over to east side of SR 99. Beyond Airport Drive, the F-B LGA would cross over SR 204 and would run parallel to and east of the highway. The HSR would be constructed on an elevated viaduct throughout this landscape unit, which is characterized primarily by commercial and industrial land uses, as well as cultivated fields south of 7th Standard Road. Roadway overcrossings of the viaduct would be built at 7th Standard Road, Snow Road, SR 99, Olive Drive, State Road, and Airport Drive.

Figure 3.16-26, Figure 3.16-27, and Figure 3.16-28 (KVPs 4, 5, and 6), provide simulations of the HSR at sites in the North Bakersfield Landscape Unit from the perspective of commuters and residents. KVP 4 is representative of visual effects from the F-B LGA overcrossings at high-volume roadways, while KVP 6 is representative of views of the elevated viaduct for motorists. As shown in KVP 4, the F-B LGA would be elevated on a viaduct below a new overcrossing for 7th Standard Road at the UPRR tracks and SR 99. Because of the height of the viaduct and roadway overcrossing above the flat agricultural landscape, these structures would be prominent and directly in the field of view of motorists on Coffee Road. At this time, KVP 4 has moderately low visual quality because of the large expanses of exposed soil on the shoulder of Coffee Road and at recently planted orchards, the intrusion of existing roadway and rail infrastructure, and the industrial character of buildings adjacent to 7th Standard Road and SR 99. The F-B LGA would introduce additional prominent industrial features that would be incompatible with the agricultural character of the foreground at KVP 4, incrementally degrading visual quality from moderately low, to low. However, commuters on Coffee Road would have moderately low sensitivity to these visual changes. The F-B LGA would, therefore, have a less than significant impact under CEQA to commuters at Coffee Road.

Similar to the elevated viaduct and new roadway overcrossing for 7th Standard Road at KVP 4, the elevated viaduct would be a prominent near-range feature at the overcrossing of SR 99 in the North Bakersfield Landscape Unit. At SR 99, the elevated viaduct would span the highway at a skewed angle for more than 660 feet, with a clearance of approximately 25 feet. Although this bridge would be prominent from the perspective of motorists, it would not substantially impair the already low visual quality of this industrial corridor. Motorists would have moderately low visual sensitivity in this area. The F-B LGA would, therefore, have a less than significant impact under CEQA to commuters on SR 99 at the HSR overcrossing.

Figure 3.16-28, KVP 6, features a more distant view of the elevated viaduct in the North Bakersfield Landscape Unit from the perspective of motorists in a commercial retail area at Olive Drive and Knudsen Drive at a distance of 0.2 mile. This area currently has moderately low visual quality because of the dominance of multi-lane roadways and the generic character of retail commercial development. The F-B LGA would introduce a linear element in the elevated viaduct, which would partially obstruct background views of the Sierra Nevada Mountains. The concrete exterior of the elevated viaduct would, however, be generally compatible with the multi-lane paved roads and surface parking lots currently present at commercial uses at KVP 6, and would not decrease the intactness or unity of the environment. In addition, only a narrow section of the viaduct would be visible between commercial buildings and the Olive Drive overpass of SR 99, and it would not be a dominant visual feature from a distance of 0.2 mile. Visual quality at KVP 6 would remain moderately low. Motorists would have moderately low sensitivity to visual effects. The F-B LGA would, therefore, have a less than significant impact under CEQA to commuters at Olive Drive and Knudsen Drive.

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*KVP 4. Existing view from Coffee Road looking northeast toward SR 99 interchange at 7th Standard Road*



*KVP 4. Simulated view from Coffee Road looking northeast toward SR 99 interchange at 7th Standard Road (HSR is shown crossing under 7th Standard Road)*

**Figure 3.16-26 KVP 4 Existing and Simulated Views from Coffee Road Looking Northeast Toward SR 99 Interchange at 7th Standard Road**



*KVP 5. Existing view of Snow Road at Creemore Street in north Bakersfield*



*KVP 5. Simulated view of Snow Road at Creemore Street in north Bakersfield*

**Figure 3.16-27 KVP 5 Existing and Simulated Views of Snow Road at Creemore Street in North Bakersfield, Looking Northeast**



*KVP 6. Existing view of Olive Drive and Knudsen Drive in North Bakersfield looking northeast*



*KVP 6. Simulated view of Olive Drive and Knudsen Drive in North Bakersfield looking northeast*

**Figure 3.16-28 KVP 6 Existing and Simulated Views of Olive Drive and Knudsen Drive in North Bakersfield, Looking Northeast**

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Figure 3.16-27, KVP 5 shows a representative residential view of the F-B LGA, looking northeast from the intersection of Snow Road/Creemore Street at a distance of approximately 0.3 mile from the elevated viaduct. This view is currently characterized by single-family residences with landscaped yards and an industrial site in the foreground, plus the Sierra Nevada Mountains in the background. As at KVP 6, the viaduct would partially obstruct background views of the mountains. However, the viaduct would be compatible with the area's industrial character and would not intrude into the foreground of residential views. Visual quality would remain moderately low at KVP 5.

Nevertheless, this KVP is not fully representative of the proximity of residential views in the North Bakersfield Landscape Unit. As shown on Figure 3.16-11, the two-story, multifamily residential buildings and single-family residences along Norris Road to the west of SR 99 would have much closer and more direct views of the F-B LGA from a distance of at least 300 feet. The introduction of an elevated viaduct at this distance from residences would increase the industrial character of foreground views, contrasting with the residential character of the area and reducing visual intactness and unity. Visual quality would decline one level, from moderately low, to low. With the high sensitivity of residents to visual effects, the F-B LGA would have a significant impact to these residents under CEQA.

#### **Kern River Landscape Unit**

The F-B LGA would cross the Kern River on an elevated viaduct roughly parallel to and between SR 204 and the UPRR. On the south side of the river, the alignment would cross over the Kern River Parkway Bike Trail. Figure 3.16-29, KVP 7, shows existing conditions and simulated views on the Kern River Parkway Bike Trail, looking northward across the alignment toward the UPRR bridge over the Kern River. This location has moderately high visual quality because of the predominance of grassland and riparian vegetation, despite the intrusion of urban elements like the SR 204 and UPRR bridges and towers supporting power lines to the east.

The F-B LGA would introduce another dominant urban element to the landscape, as shown in KVP 7, compatible with the existing bridges to the east and west. The viaduct would, however, represent a further intrusion of urban features into a riparian area that is in effect a natural oasis in the urbanized center of Bakersfield. It also would partially block views of scenic elements from the recreational trail, including riparian vegetation, sky, and distant mountains. In addition, the proposed Bakersfield F Street Station would likely be visible approximately 650 feet to the southeast of the formally designated Kern River Parkway Bike Trail, further intensifying the urban character of the built environment. Existing utility towers adjacent to and northwest of the Bakersfield F Street Station site also would be relocated slightly northward and may be replaced with new towers that are 20 to 50 feet taller, which would be visible from the Kern River Parkway Bike Trail. However, changes in utility infrastructure near the station would not substantially alter the area's visual setting because existing towers already intrude into the natural setting.

The introduction of an elevated viaduct and HSR station visible from the Kern River Parkway Bike Trail would reduce the intactness of the visual environment, causing a decline of one level in visual quality. Because of the high sensitivity of recreational users of the Kern River Parkway Bike Trail to visual elements, this decline in visual quality would be a significant impact under CEQA. Further impacts to the Kern River Parkway are discussed in Section 3.15.4 of Section 3.15, Parks, Recreation, and Open Space, in this Draft Supplemental EIR/EIS.

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*KVP 7. Existing view of Kern River Parkway Bike Trail from SR 204 bridge looking north*



*KVP 7. Simulated view of Kern River Parkway Bike Trail from SR 204 bridge looking north*

**Figure 3.16-29 KVP 7 Existing and Simulated Views of Kern River Parkway Bike Trail toward Alignment**

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The elevated viaduct would also be briefly visible to commuters on the SR 204 bridge over the Kern River, where its supporting columns would be as close as 150 feet from the existing bridge. Eastward views from the bridge of riparian vegetation and grassland in the Kern River channel would be largely obstructed, and visual quality would decline from moderately high to moderate. Assuming that motorists are driving at 65 miles per hour on the 1,650-foot-long bridge, the viaduct would be visible for an estimated 17 seconds. They would have moderate sensitivity to visual changes but a limited duration of exposure while traversing the bridge. Impacts on motorists in the Kern River landscape unit would, therefore, be less than significant under CEQA.

#### Central Bakersfield Landscape Unit

The F-B LGA would continue on an elevated viaduct throughout the Central Bakersfield Landscape Unit, first running parallel to and east of SR 204, then along Sumner Street. Roadway overcrossings of Chester Avenue, 30th Street, M Street, O Street, Q Street, SR 178, 24th Street, and Union Avenue would be constructed. As part of the F-B LGA, Bakersfield's HSR station would be located on the north side of SR 204, opposite F Street.

Figure 3.16-30, KVP 8, shows existing views of the proposed Bakersfield F Street Station site and simulated views of a conceptual design of the station, looking northward from the SR 204 South Frontage Road. This view is typical from the edge of commercial properties adjoining SR 204 in the Central Bakersfield Landscape Unit, where expansive surface parking lots and generic commercial architecture predominate. Figure 3.16-15 and Figure 3.16-16 offer a close-up view of automotive commercial development and a vacant lot at the proposed Bakersfield F Street Station site, located immediately north of SR 204 from KVP 8. The current visual quality in this area is low. As shown in KVP 8, the station would be a dominant feature to the north of SR 204. Regardless of the station's exact appearance, it would be designed with a distinctive and potentially iconic architectural form to create a beneficial change in visual character when viewed from adjacent locations in the Central Bakersfield Landscape Unit.

By introducing a building with distinctive and attractive architecture, the station would substantially enhance the area's vividness as compared to the representative commercial site in Image CBC-d on Figure 3.16-16. Pursuant to Mitigation Measure AVR-MM#2a, the Authority would work closely with the City of Bakersfield to develop and refine architectural, site design, and landscape treatments for the station and vicinity that enhance the area's character through coherent and unified design and features that provide interest and integrate visually with the context of nearby commercial and governmental uses. Whereas the existing pedestrian environment lacks sidewalks or consistent street tree plantings at SR 204 near F Street, extensive streetscape landscaping and improvements associated with the Bakersfield F Street Station would increase intactness and provide visual coherence as tree canopies mature. In addition, utility towers adjacent to and northwest of the Bakersfield F Street Station site would be relocated slightly northward and may be replaced with new towers that are 20 to 50 feet taller. Changes in utility tower infrastructure near the station would not substantially alter the area's visual setting relative to existing utility towers.

The proposed Bakersfield F Street Station is also expected to have beneficial indirect effects on visual quality in surrounding areas. As discussed on page 3.16-68 in Section 3.16 of the Fresno to Bakersfield Section Final EIR/EIS, the HSR station would increase the potential for economic incentives through new development and redevelopment in nearby areas. This would likely influence development patterns near the station and could result in new project and urban design improvements that would improve the visual character and quality of these areas over time. In residential, railroad, highway, and industrial areas, no indirect effects are anticipated because no new development along the alignment is anticipated. The proposed Bakersfield F Street Station and anticipated new transit-oriented development would improve visual quality at KVP 8 by two levels, from low to moderate.

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*KVP 8. Existing view from SR 204 South Frontage Road looking north toward proposed Bakersfield F Street Station site*



*KVP 8. Simulated view from SR 204 South Frontage Road looking north toward proposed Bakersfield F Street Station site*

**Figure 3.16-30 KVP 8 Existing and Simulated Views from SR 204 South Frontage Road, Looking North toward Bakersfield F Street Station Site**

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Considering the moderately high viewer response of commuters on SR 204 and cross streets, and the high viewer sensitivity of residents to the south of SR 204, the station would have no adverse impact under CEQA.

Roadway overcrossings on the F-B LGA also would affect the visual environment of motorists. Figure 3.16-31, KVP 9, shows a representative site where the elevated guideway would cross Chester Avenue just north of Garces Circle. Currently, this segment has moderate visual quality, with some topographic diversity at the UPRR undercrossing, a median paved with rounded bricks, and prominent roadside trees. The viaduct would introduce a dominant, imposing feature at KVP 9 that frames northward views toward the UPRR bridge and the commercial corridor beyond. Although the viaduct would be compatible in form with the UPRR bridge to the north and the SR 204 bridge over Garces Circle to the south, it would greatly intensify the urban character of KVP 9. Visual quality would decline one level to moderately low. Given that commuters in this area would have moderate viewer sensitivity, impacts would be less than significant under CEQA.

To the north of the UPRR overcrossing, the Chester Avenue corridor has a moderately high degree of vividness because of the distinctive Beaux Arts and Mission Revival architecture of the Kern County Museum. A proposed realignment of Chester Avenue near the Bakersfield F Street Station site would occur within approximately 480 feet of the Beale Memorial Clock Tower, and a road providing access to the station from Chester Avenue would be constructed approximately 790 feet to the south. Although roadwork on Chester Avenue would be visible from the Kern County Museum property, it would not occur adjacent to the site and would not substantially intrude on views of historic architecture available to museum visitors. Furthermore, streetscape landscaping and improvements on Chester Avenue would increase intactness and provide visual coherence as tree canopies mature. Impacts would, therefore, be less than significant under CEQA. Visual impacts on the Valley Oaks Charter School in the Chester Avenue corridor are discussed separately in Impact #AVR-5.

Aside from the residences across SR 204 from the proposed Bakersfield F Street Station site, the nearest residences to the F-B LGA in the Central Bakersfield Landscape Unit would be located in a neighborhood along Q Street, as close as approximately 350 feet northeast of the F-B LGA. Figure 3.16-32, KVP 10, shows a representative site in this residential neighborhood at the intersection of San Dimas Street and Homaker Place, located within approximately 475 feet of the proposed HSR overcrossing of SR 178. The neighborhood has moderately low visual quality as the presence of the elevated concrete structure and columns of SR 178, as well as adjacent industrial development and warehouses along the UPRR tracks to the south, reduces the intactness and unity of the residential streets. The HSR viaduct would be constructed south of the UPRR tracks and would cross over an elevated segment of SR 178 east of Q Street, where its concrete or steel parapet and concrete columns would be visually compatible in scale and character with the SR 178 structure and surrounding industrial development. Because the viaduct would not represent a substantial urban intrusion beyond existing industrial development and highway infrastructure, visual quality would remain moderately low. Despite the high sensitivity of residents to their visual environment, impacts would be less than significant under CEQA.

In addition to the proposed Bakersfield F Street Station and elevated viaduct, the F-B LGA would involve utility improvements at a site with existing power lines and towers to the west of Union Avenue and north of 30th Street. The expansion of power lines at this site would not further degrade its low visual quality and could represent an improvement if screened from public view by landscaping and a wall or fence. These utility improvements would, therefore, have potentially beneficial effects on visual quality and less than significant impacts under CEQA.

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*KVP 9. Existing view from Garces Circle in central Bakersfield*



*KVP 9. Simulated view from Garces Circle in central Bakersfield*

**Figure 3.16-31 KVP 9 Existing and Simulated Views from Garces Circle in Central Bakersfield Looking North**



*KVP 10. Existing view from intersection of San Dimas Street and Homaker Place*



*KVP 10. Simulated view from intersection of San Dimas Street and Homaker Place*

**Figure 3.16-32 KVP 10 Existing and Simulated Views at the Intersection of San Dimas Street and Homaker Place**

### East Bakersfield Landscape Unit

The F-B LGA would be constructed on an elevated viaduct between SR 204 and the UPRR, and parallel to those transportation corridors, in the primarily industrial East Bakersfield Landscape Unit. Most of the viaduct would be supported by straddle bents that span Sumner Street and Edison Highway. Although the corridor is mainly industrial, Figure 3.16-33, KVP 11, shows existing conditions and the simulated viaduct over a commercial retail segment of Sumner Street near Baker Street. This part of Sumner Street has a moderate degree of vividness because of the distinct architectural character of two-story retail commercial stores, and moderate visual quality. KVP 11 demonstrates that the F-B LGA would transform the area by introducing an elevated viaduct on straddle bents that looms over the adjacent commercial stores, shades the streetscape, and blocks views of the sky. This overhead railway would exhibit an industrial and utilitarian character that degrades the intactness and unity of the commercial corridor, reducing its visual quality by two levels, from moderate to low. Considering the moderate viewer sensitivity of motorists on Sumner Street and cross-streets, the F-B LGA would have a significant impact under CEQA.

At the Mercado Latino Tianguis, a marketplace and Latino cultural center on the south side of Edison Highway, Figure 3.16-34, KVP 12, shows existing conditions and the simulated viaduct. As shown in Figure 3.16-20, this site has colorful flagpoles and an outdoor market that enhance its vividness, but the surrounding highway and vacant gravel-filled space adjacent to the UPRR reduce the existing visual quality to a moderately low level. Columns supporting the elevated viaduct would displace the northern edge of the Mercado Latino Tianguis, introducing a large-scale industrial element that is incompatible with the distinct, nonindustrial character of the abutting commercial and cultural site. The viaduct would reduce the intactness and unity of the area, decreasing visual quality by one level, from moderately low, to low. Considering the cultural importance of the market to the Latino community, an environmental justice population, visitors would have moderately high viewer sensitivity. However, the viewer sensitivity of visitors would not rise to the high level characteristic of residents who care deeply about the visual quality of their neighborhood or recreational trail users with scenic views. Motorists on Edison Highway would have moderately low viewer sensitivity in this largely industrial corridor. Based on the decline in visual quality and viewer sensitivity, visual impacts to the Mercado Latino Tianguis would be less than significant under CEQA. As discussed in Chapter 5 of this Draft Supplemental EIR/EIS, minority and low-income populations in the East Bakersfield Landscape Unit would bear a higher burden than the larger reference community experience from project-period aesthetic impacts.

The elevated viaduct over Edison Highway and ancillary F-B LGA facilities would be constructed in view of residential neighborhoods. Residents at a three-story apartment building located adjacent to and north of the UPRR would have unobstructed views of the elevated HSR guideway above Edison Highway (Figure 3.16-22). In addition, single-family residences on the north side of the UPRR also would have partially obstructed views of the alignment on Edison Highway. The visual quality of the vacant lot and the HSR alignment is low, in keeping with the overall industrial character of the East Bakersfield Landscape Unit. Although the F-B LGA would introduce industrial elements at the operations yard and the elevated viaduct, which may be visually incompatible with nearby residences, visual quality would remain low. With little change from existing visual quality, impacts to residents near Edison Highway would have a less than significant impact under CEQA.

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*KVP 11. Existing view to southeast on Sumner Street at Baker Street in east Bakersfield*



*KVP 11. Simulated view to southeast on Sumner Street at Baker Street in east Bakersfield*

**Figure 3.16-33 KVP 11 Existing and Simulated Views on Sumner Street at Baker Street in East Bakersfield**



*KVP 12. Existing view of the Mercado Latino Tianguis in east Bakersfield looking west from Edison Highway*



*KVP 12. Simulated view of Mercado Latino Tianguis in east Bakersfield looking west from Edison Highway*

**Figure 3.16-34 KVP 12 Existing and Simulated Views of the Mercado Latino Tianguis in East Bakersfield Looking West from Edison Highway**



**Impact AVR #5–Visual Quality Effects to Schools**

The following schools were identified within 0.25 mile of the F-B LGA. As discussed on page 3.16-135 in Section 3.16 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a), schools (or other sensitive receptors) within this 0.25-mile immediate foreground distance could be impacted by the F-B LGA. At distances greater than approximately 0.25 mile, even major project structures in urban areas where schools are located would likely cause little change to visual quality and have little visual impact. Within the 0.25-mile zone, potential impacts would depend highly on site-specific factors, which are discussed below for the individual schools relevant to the F-B LGA. School viewers are not presumed to have universally high viewer sensitivity. For example, students engaged in outdoor sports are assumed to be focused on the sports activity and not primarily concerned with scenic quality.

**Redwood Elementary School, Shafter**

This school is located 0.14 mile from the F-B LGA. The elevated viaduct could be visible to a limited extent over the top of intervening buildings to the northeast. Primary outdoor use areas are located, however, on the west side of the school, where the school buildings would obstruct views of the viaduct. Because viewer exposure is low from this site, the project would not substantially change the vividness, intactness, or unity of views from the school. With low viewer exposure and moderate viewer sensitivity, the viewer response would be moderately low. The F-B LGA would, therefore, have a less than significant impact under CEQA. Because of the distance of guideways from the primary outdoor use areas and the intervening school buildings, shadow impacts would not occur.

**Richland Junior High School, Shafter**

This school is located 0.14 mile from the F-B LGA. The elevated viaduct of the F-B LGA would be visible from the northeastern corner of the school grounds. The viaduct in this section would be elevated approximately 16.5 feet above ground level, with OCS poles and wires extending up to approximately 23 feet above the guideway. The exposed area with potential views is very limited, however, consisting of a small parking lot and portions of the school entrance. Views from primary outdoor use areas would be blocked by intervening structures. Because viewer exposure is low from this site and viewer sensitivity is moderate, viewer response would be moderately low. For that reason, and because the project would not change the vividness, intactness, or unity of views from the school, the impact would be less than significant under CEQA.

**Free Will Christian Academy,<sup>3</sup> Shafter**

Although located 0.11 mile from the F-B LGA in Shafter, the Free Will Christian Academy is in an area northeast of the ROW in which views of the alignment would be visible behind a foreground of industrial land uses and vacant lots with low visual quality. Viewer response in this area is considered less sensitive than in the downtown area, and moderate at this site due to lower expectations of viewers in the context of the prevailing industrial character of adjacent land uses. The elevated viaduct would result in a moderate decline in visual intactness, unity, and overall visual quality. Together with moderate viewer response, the impact would be less than significant under CEQA.

**Valley Oaks Charter School, Bakersfield**

This school is located 0.08 mile from the elevated viaduct for the proposed F-B LGA in central Bakersfield, across the UPRR tracks, and adjacent to a proposed roadway from the Bakersfield F Street Station to Chester Avenue near 34th Street. Construction of this roadway would entail demolition of a building on the southern part of the school property and part of an associated surface parking lot. To the immediate southwest of the school, the new roadway would cross the UPRR railway on an overpass. Primary outdoor use areas at the Valley Oaks Charter School would have direct exposure to the concrete columns and guideway of the elevated viaduct and to the new roadway. These are all urban elements that would result in a substantial decline in visual

<sup>3</sup> The name of Free Will Christian Academy was misspelled as Freewill Christian Academy on page 3.16-137 in the *Fresno to Bakersfield Section Final EIR/EIS* (Authority and FRA 2014).

intactness, unity, and overall visual quality. Considering the moderate viewer response onsite, the F-B LGA would have a significant impact under CEQA. The guideways would be a sufficient distance from the primary outdoor use areas at the Valley Oaks Charter School that substantial shadow impacts would not be anticipated.

#### **Bethel Christian School, Bakersfield**

Bethel Christian School would be located 0.10 mile southwest of the F-B LGA at its nearest point. The elevated viaduct in this section would be approximately 50 feet above-grade and could be partially visible in the distance. Views from the school playgrounds would be limited, however, by intervening structures and landscaping. The viaduct would have similar visual character to the transportation and commercial facilities viewed from the school. The project would not disrupt the unity of the existing views or reduce the intactness and vividness of the landscape as visual quality would remain moderately low. The F-B LGA would, therefore, have a less than significant impact under CEQA. The guideways would be a sufficient distance from the school playgrounds that substantial shadow impacts would not be anticipated.

#### **Ramon Garza Elementary School/Sierra Middle School, Bakersfield**

Ramon Garza Elementary and Sierra Middle schools are adjacent to each other in East Bakersfield and are about 0.12 mile north of the F-B LGA at their nearest point. The elevated viaduct would be visible from the school playfields, primarily behind a visual foreground of nearby single-story residences that would filter, but not completely block, views of the viaduct. At this distance, the viaduct would be prominent, remaining visible above the rooftops of intervening residences. The viaduct would represent an industrial structure of somewhat incompatible character, although it would not pass through the center of the neighborhood, and would be seen in the backdrop of an existing setting of low existing visual intactness and vividness and moderately low unity. Introduction of the viaduct would further lower visual unity. This would reduce visual quality from moderately low to low. Viewers engaged in active recreation are typically considered to be focused on their sports activities and not primarily concerned with scenic quality. Viewer sensitivity and response in the school playfields is thus considered moderate. The reduction in visual quality of one level combined with moderate viewer response would have a less than significant impact under CEQA. The guideways would be a sufficient distance from the schoolyard that substantial shadow impacts would not be anticipated.

### **3.16.5 Avoidance and Minimization Measures**

All of the avoidance and minimization measures for aesthetics and visual resources (referred to as project design features in Section 3.16.6 of the Fresno to Bakersfield Section Final EIR/EIS [Authority and FRA 2014]) are applicable to the F-B LGA. The applicable list is provided in Technical Appendix 2-G Mitigation Monitoring and Enforcement Plan. Technical Appendix 2-H describes how implementation of these measures would reduce adverse effects on visual resources and quality. The following avoidance and minimization measures would be applicable to the May 2014 Project as well as the F-B LGA:

- **AVR-IAMM#1: Design Standards:** This measure reduces the aesthetic and visual impacts of the HSR infrastructure components, including stations and elevated guideways, by applying design approaches to integrate structures in a community and to reduce the intrusiveness of large, elevated structures. It will also provide some consistency in the HSR design throughout the program. This action reduces the aesthetic and visual impacts of the HSR by providing urban design guidelines to be evaluated and applied, increasing the compatibility of the HSR infrastructure in an existing, specific local design context.

### **3.16.6 Mitigation Measures**

#### **3.16.6.1 Mitigation Measures Identified in the Fresno to Bakersfield Section Final EIR/EIS**

The following mitigation measures were approved under the *Fresno to Bakersfield Section Mitigation and Monitoring Enforcement Plan* (Authority and FRA 2014:1-51 through 1-57). All of the mitigation measures listed in Table 3.16-3 are applicable to the F-B LGA.

**Table 3.16-3 Mitigation Measures Applicable to the F-B LGA**

Number	Description	Applicability to the F-B LGA
AVR-MM#1a	Minimize Visual Disruption from Construction Activities	Under the F-B LGA, this requirement would be implemented to minimize visual disruption during construction.
AVR-MM#1b	Minimize Light Disturbance during Construction	Under the F-B LGA, this requirement to minimize offsite spillover of light during construction would be implemented.
AVR-MM#2a	Incorporate Design Criteria for Elevated and Station Elements That Can Adapt to Local Context	Under the F-B LGA, these activities and actions would be applied to the proposed Bakersfield F Street Station design.
AVR-MM#2b	Integrate Elevated Guideway into Affected Cities, Parks, Trail, and Urban Core Designs	Under the F-B LGA, the Authority will work with the City of Shafter, Kern County, and the City of Bakersfield to develop a project site and landscape design plan for the area of disturbance.
AVR-MM#2c	Screen At-Grade and Elevated Guideways Adjacent to Residential Areas	Under the F-B LGA, these measures would be implemented to screen at-grade and elevated viaducts adjacent to residential areas.
AVR-MM#2d	Replant Unused Portions of Lands Acquired for the HSR	Under the F-B LGA, these standards for replanting of unused portions of land acquired for the HSR system would be implemented to minimize and avoid aesthetic effects.
AVR-MM#2e	Provide Offsite Landscape Screening Where Appropriate	Under the F-B LGA, offsite landscaping screening would be provided as appropriate.
AVR-MM#2f	Landscape Treatments along the HSR Project Overcrossings and Retained Fill Elements of the HSR	Under the F-B LGA, these landscape treatments would be implemented at HSR overcrossings and retained-fill elements.
AVR-MM#2g	Provide Sound Barrier Treatments	Under the F-B LGA, these sound barrier treatments would be implemented for visually sensitive areas.
AVR-MM#2h	Screen Traction Power Distribution Stations and Radio Communication Towers	Under the F-B LGA, these screening measures would be implemented at the traction power supply station and radio communication towers.

Mitigation Measure AVR-MM#1a is intended to minimize visual disruption from construction activities. The Authority will ensure that the project contractor will adhere to the construction requirements of local jurisdictions regarding visual/aesthetic disruption. Required actions include minimizing pre-construction clearing, limiting the removal of buildings, preserving existing vegetation where possible, revegetating disturbed areas after construction, and locating staging areas outside the immediate foreground distance of high-sensitivity viewers. These requirements will minimize changes to visual quality during construction, reducing potential impacts to less than significant under CEQA.

Mitigation Measure AVR-MM#1b addresses light disturbance during construction. Where construction lighting will be required during nighttime construction, the Authority will require the contractor to shield and direct downward light sources such that they are not visible offsite and light does not spill over offsite. This measure will avoid intrusive nighttime lighting during construction in rural and urban areas, resulting in less than significant impacts under CEQA from construction-period light and glare.

As discussed in Chapter 5 of this Draft Supplemental EIR/EIS, Mitigation Measures AVR-MM#1a and AVR-MM#1b also would minimize construction-period aesthetic impacts on all populations, including for environmental justice communities. Therefore, minorities and low-income populations would not experience disproportionately adverse impacts during construction.

Mitigation Measures AVR-MM#2a through AVR-MM#2h apply to project-period aesthetic impacts. Mitigation Measure AVR-MM#2a addresses design criteria for elevated HSR guideways and stations. During the final design phase for elevated guideways and the Bakersfield station, this measure requires that the Authority require the project contractor to coordinate with local jurisdictions on the design of these facilities so that they fit appropriately with the visual context of the areas near them. Actions taken to achieve appropriate design will include, but are not limited to, attractive architectural elements at the HSR station, parking structures at the station that integrate visually into the surrounding area, and attractive sculptural forms and decorative surfaces on elevation guideways and columns. These requirements will minimize impacts on visual quality from HSR structures.

Mitigation Measure AVR-MM#2b addresses the design and landscaping of areas disturbed by elevated guideways. During the final design phase, the Authority will work with local jurisdictions to develop a project site and landscape design plan for areas disturbed by the project. By following these plans, the design features identified in Mitigation Measure AVR-MM#2a and PK-MM#3 will be implemented. These requirements will minimize impacts on visual quality from at-grade and elevated HSR structures, road overcrossings, sound barriers, and other prominent features.

Mitigation Measure AVR-MM#2c addresses the screening of at-grade and elevated guideways adjacent to residential areas. Consistent with the design features developed under AVR-MM#2a, the Authority will ensure that the project contractor will plant trees along the edges of ROW in locations adjacent to residential areas during the construction phase. Trees will be continuously maintained in the post-construction phase with appropriate irrigated systems. As for Mitigation Measures AVR-MM#2e, AVR-MM#2f, and AVR-MM#2h, the contractor will be responsible for implementation until substantial completion of its scope of work, at which time the Authority will assume responsibility for landscaping. This measure will help reduce the visual contrast between the elevated guideway and residential areas. Mitigation Measure AVR-MM#2c would be amended for the F-B LGA to also apply to raised embankments adjacent to rural residences in the Rural San Joaquin Valley landscape unit.

Mitigation Measure AVR-MM#2d applies generally where lands are acquired for the HSR project, but would remain unused (e.g., shifting roadways). After construction is complete, the Authority will plant and continuously maintain vegetation on these unused lands. All street trees and other visually important vegetation removed in these areas during construction will be replaced with similar vegetation. This measure will minimize impacts on visual quality in areas where roadways are realigned by replacing roadside vegetation and screening prominent HSR features.

Mitigation Measure AVR-MM#2e will provide offsite landscape screening after construction is complete. This offsite screening will apply where onsite screening measures under AVR-MM#2c cannot provide effective screening to significantly affected high-sensitivity viewers, if desired by affected residential owners. This measure will minimize impacts on visual quality from prominent project features, especially in rural residential areas.

Mitigation Measure AVR-MM#2f will provide landscape treatments along HSR overcrossings and retained-fill elements. Upon the completion of construction, the Authority will ensure that the contractor will landscape areas supporting slope-fill overpasses and retained-fill elements with vegetation consistent with the surrounding landscape in terms of vegetative type, color, texture, and form. During final design, the Authority will consult with the affected local jurisdictions regarding this landscaping program. This measure will minimize impacts on visual quality in rural and urban areas from HSR overcrossings and retained fill elements.

Mitigation Measure AVR-MM#2g addresses the design of sound barriers. The Authority will ensure that the contractor will design a range of sound barrier treatments for visually sensitive areas, such as those where residential views of open landscape would change or in urban areas where sound barriers would adversely affect visual quality. The Authority will develop the treatments and integrate them into the final project design. Design features will minimize impacts on visual quality from sound barriers.

Mitigation Measure AVR-MM#2h addresses views of traction power supply stations and radio communication towers. Upon completion of these facilities, the Authority will ensure that the contractor will screen them from public view with context-sensitive landscaping or solid walls/fences. This measure will minimize impacts on visual quality from traction power supply stations and radio communication towers.

The above mitigation measures require the minimization of visual disruption and light spillover during construction, context-sensitive design of HSR structures, and landscape screening. These activities will result in negligible adverse impacts on the physical environment when the mitigation measures are in place. The secondary impacts of aesthetic mitigation measures would be less than significant under CEQA.

**3.16.6.2 Mitigation Measures Specific to the F-B LGA**

In addition to mitigation measures approved for the May 2014 Project that would apply as written to the F-B LGA, the scope of Mitigation Measure AVR-MM#2c would be expanded to ensure screening of raised embankments adjacent to rural residences in the Rural San Joaquin Valley landscape unit. Mitigation Measure AVR-MM#2i also would be required to minimize project-period impacts to visual quality at the Kern River Parkway Bike Trail. This mitigation measure has been developed for consistency with the *Urban Design Guidelines: California High-Speed Train Project* (Authority 2011b) and the *Aesthetic Guidelines for Non-Station Structures* (Authority 2011a). Table 3.16-4 lists the mitigation measures that are specific to the F-B LGA, with new additional language underlined.

**Table 3.16-4 Mitigation Measures Specific to the F-B LGA**

Number	Description
AVR-MM#2c	Screen At-Grade, <u>Raised Embankments</u> , and Elevated Guideways Adjacent to Residential Areas. Consistent with the design features developed under AVR-MM#2a, the contractor will plant trees along the edges of the rights-of-way in locations adjacent to residential areas. This will help reduce the visual contrast between the elevated guideway <u>or raised embankment</u> and the residential area. The species of trees to be installed will be selected on the basis of their mature size and shape, growth rate, hardiness, and drought tolerance. No species that is listed on the Invasive Species Council of California’s list of invasive species will be planted. The crowns of trees used should ultimately be tall enough so that upon maturity they will partially, or fully, block or screen views of the elevated guideway <u>or raised embankment</u> from adjacent at-grade areas. Trees should allow ground-level views under the crowns (with pruning if necessary) while not interfering with the 15-foot clearance requirement for the guideway. The trees will be continuously maintained and appropriate irrigation systems will be installed within the tree planting areas.
<u>AVR-MM#2i</u>	<u>Install Decorative Parapet Design at Kern River Crossing. Consistent with Mitigation Measure AVR-MM#2a. During final design of the elevated viaduct over the Kern River and the Kern River Parkway Bike Trail, the Authority will consult with the City of Bakersfield to design a decorative parapet that fits with the viaduct’s visual context. Reveals or recessed surfaces and motifs reflecting the natural environment of the Kern River shall be used on the outside surface of the parapet. The parapet and box girder shall be designed as a unified visual composition.</u>

Mitigation Measure AVR-MM#2c, as amended, is intended to minimize changes to visual quality from the introduction of raised embankments as well as from elevated viaducts adjacent to residences. As discussed with respect to KVPs 2 and 3 in Section 3.16.4.2, the embankment fill profile with its elevated berm, security fencing, and OCS poles and wires would degrade visual quality in the flat agricultural landscape between Shafter and northern Bakersfield. Rural residences in this area would be located as close as approximately 130 feet away from HSR facilities and 340 feet from the centerline of raised embankments. Landscape screening would reduce the exposure of nearby rural residents to these prominent industrial structures. Offsite

landscape screening would further minimize exposure to HSR structures. However, it is uncertain if screening would completely obstruct residential views of embankments, viaducts, and associated structures. Trees planted for screening purposes could also obstruct desired residential views of existing features in the natural or cultural environment. Therefore, landscape screening would not necessarily ensure that residual impacts after mitigation would be less than significant under CEQA.

Mitigation Measure AVR-MM#2i is appropriate at the Kern River Parkway Bike Trail because it would soften the industrial character of the prominent elevated viaduct without further obstructing trail users' scenic views of the natural environment. Alternatively, landscape screening could minimize views of the viaduct where it crosses the trail, but such mitigation would have the unintended effect of blocking scenic views of riparian habitat. While decorative parapets would be the most feasible option for mitigation at KVP 7, they would not fully compensate for the introduction of a dominant urban structure in a natural riparian area or for the obstruction of views of scenic elements from the recreational trail. The viaduct would still cause a decline in visual quality resulting in a significant impact under CEQA.

With implementation of Mitigation Measures AVR-MM#1a through AVR-MM#2i, adverse effects associated with construction activities and the introduction of prominent HSR structures would be mitigated to the extent feasible. These mitigation measures identify responsible parties (the project contractor and the Authority) for each phase of the project (pre-construction, construction, and post-construction/operation) to ensure that the requirements are appropriately implemented. Nevertheless, mitigation measures for context-sensitive design of HSR structures, landscape screening, and decorative treatments would not substantially minimize adverse project-period impacts to visual quality from the introduction of permanent physical infrastructure, particularly HSR guideways with elevated structures, raised embankments, and retaining walls, and associated overpasses. Even after the implementation of project-period mitigation measures, changes to visual quality at certain sensitive viewpoints from the introduction of prominent infrastructure would result in significant impacts under CEQA. As discussed in Chapter 5 of this Draft Supplemental EIR/EIS, because these mitigation measures do not eliminate adverse impacts in areas containing minority and low-income populations, and because these communities would bear a higher burden from these impacts when compared to the larger reference community, project operation would have disproportionately high and adverse effects on minority and low-income populations in the Shafter Town, Kern River, and East Bakersfield landscape units.

Table 3.16-5 summarizes construction-period and project-period impacts before mitigation and after mitigation, and lists the specific mitigation measures that would apply to each significant impact.

**Table 3.16-5 Summary of Visual Resources Impacts after Mitigation**

Location	KVP #	Level of Significance Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<b>Construction-Period Impacts</b>				
<b>Impact AVR #1. Construction Impacts on Scenic Vistas</b>				
All	All	Less than Significant	n/a	Less than Significant
<b>Impact AVR #2. Construction Impacts on Existing Visual Quality</b>				
All	All	Potentially Significant	AVR-MM#1a	Less than Significant
<b>Impact AVR #3. Construction Impacts from Light and Glare</b>				
All	All	Potentially Significant	AVR-MM#1b	Less than Significant

Location	KVP #	Level of Significance Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
<b>Project-Period Impacts</b>				
<b>Impact AVR #4. Change to Visual Quality</b>				
<i>Shafter Town Landscape Unit</i>				
Shafter Depot Museum	KVP 1	Potentially Significant	AVR-MM#2f AVR-MM#2g	Significant and Unavoidable
<i>Rural San Joaquin Valley Landscape Unit</i>				
Burbank Street	KVP 2	Potentially Significant	AVR-MM#2a AVR-MM#2b AVR-MM#2c AVR-MM#2e	Significant and Unavoidable
Verdugo Lane	KVP 3	Potentially Significant	AVR-MM#2e	Significant and Unavoidable
<i>North Bakersfield Landscape Unit</i>				
Coffee Road	KVP 4	Less than Significant	n/a	Less than Significant
Snow Road at Creemore Street	KVP 5	Less than Significant	n/a	Less than Significant
Norris Road west of SR 99	N/A	Potentially Significant	AVR-MM#2a AVR-MM#2b AVR-MM#2c AVR-MM#2e AVR-MM#2g	Significant and Unavoidable
Olive Drive at Knudsen Drive	KVP 6	Less than Significant	n/a	Less than Significant
<i>Kern River Landscape Unit</i>				
Kern River Parkway Bike Trail	KVP 7	Potentially Significant	AVR-MM#2a AVR-MM#2b AVR-MM#2g AVR-MM#2i	Significant and Unavoidable
<i>Central Bakersfield Landscape Unit</i>				
SR 204 South Frontage Road, looking toward F Street Station Site	KVP 8	No Impact	n/a	No Impact
Garces Circle	KVP 9	Less than Significant	n/a	Less than Significant
San Dimas Street at Homaker Place	KVP 10	Less than Significant	n/a	Less than Significant
<i>East Bakersfield Landscape Unit</i>				
Sumner Street at Baker Street	KVP 11	Potentially Significant	AVR-MM#2a AVR-MM#2b AVR-MM#2g	Significant and Unavoidable
Mercado Latino Tianguis	KVP 12	Less than Significant	n/a	Less than Significant
<b>Impact AVR #5. Visual Quality Effects to Schools</b>				

Location	KVP #	Level of Significance Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Richland Junior High School	n/a	Less than Significant	n/a	Less than Significant
Free Will Christian Academy	n/a	Less than Significant	n/a	Less than Significant
Valley Oaks Charter School	n/a	Potentially Significant	AVR-MM#2a AVR-MM#2b AVR-MM#2e AVR-MM#2f AVR-MM#2g	Significant and Unavoidable
Bethel Christian School	n/a	Less than Significant	n/a	Less than Significant
Ramon Garza Elementary School/Sierra Middle School	n/a	Less than Significant	n/a	Less than Significant