VISUAL IMPACT ASSESSMENT

Stratford Kings River Bridge Replacement

Minor Level VIA

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California Department of Transportation

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

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PURPOSE OF STUDY AND ASSESSMENT METHOD

The purpose of this visual impact assessment (VIA) is to document potential visual impacts caused by the proposed project and propose measures to lessen any detrimental impacts that are identified. Visual impacts are demonstrated by identifying visual resources in the project area, measuring the amount of change that would occur as a result of the project, and predicting how the affected public would respond to or perceive those changes. This visual impact assessment follows the guidance outlined in the publication *Visual Impact Assessment for Highway Projects* published by the Federal Highway Administration (FHWA) in January 2015.

PROJECT DESCRIPTION

The project proposes to replace the Kings River Bridge (No. 45-0007) with a new bridge. The alignment and centerline of the new bridge will match the existing bridge. The number and size of the supporting columns for the replacement bridge will differ from the existing bridge. A temporary trestle bridge will be built on the east side of the existing bridge for dismantling the existing bridge and installing the new bridge. The trestle bridge will be erected from the northeast bank of the Kings River and stop just before the southeast bank. Traffic on State Route 41 will be redirected onto State Route 198/Avenal-Cutoff/ Interstate 5 and back on State Route 41.

The bridge will feature a "see-through" bridge rail to enhance views to the river below. The project will also include planting with native or riparian vegetation and seed mixes to blend the new slopes and roadsides with the existing conditions. The project will ensure the safety and reliability of Route 41 by improving seismic deficiencies in the bridge. The improvements will not only ensure the safety of the bridge but will also improve the quality of the driving experience on this section of the highway.

PROJECT LOCATION AND SETTING

The project location and setting provides for the context for determining the type of changes to the existing visual environment. The proposed project is located on Route 41 between Madison Avenue and the community of Stratford in Kings County, California. The project is located in the San Joaquin Valley portion of California's Central Valley. The landscape is characterized by relatively flat terrain, except for the Kings River which bisects the project area. At the river, the topography gradually changes with gentle descents down to the river. The river itself is about 400-feet wide and is generally flowing year-round. This is a unique feature because most rivers in the San Joaquin River are dry during the summer months. The river is a popular fishing spot and the wide, flat river banks adjacent to and outside of the state right of way lend themselves to easy river access. The land use within the corridor or project corridor is primarily rural recreational and agricultural with more developed residential and commercial areas beyond the limits of the project to the north in the community of Stratford. The project corridor is defined as the area of land that is visible from, adjacent to, and outside the highway right-of-way, and is determined by topography, vegetation, and viewing distance.

Caltrans performs Scenic Resource Evaluations on projects located on State Scenic Highways to ensure that scenic resources are not impacted by highway projects. California Streets and Highway Code Division

1, Chapter 2, Article 2.5 identifies State Highways that make up the State Scenic Highway System. The proposed project is not listed as a State Scenic Highway. Therefore, a Scenic Resource Evaluation is not required for this project.

VISUAL RESOURCES AND RESOURCE CHANGE

Visual resources of the project setting are defined and identified below by assessing *visual character* and *visual quality* in the project corridor. *Resource change* is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed project.

Visual Character

The visual character of the proposed project will be compatible with the existing visual character of the corridor. Visual character includes attributes such as form, line, color, and texture, and is used to describe, not evaluate; that is, these attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer response to that change. Changes in visual character can be identified by how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator.

The Kings River is a key visual resource in the project area. The river is relatively wide and flows with water year-round. Most rivers in the San Joaquin Valley are small and flow only during the winter or spring months, if at all. Because of the large scale and perennial nature of the river, the visual quality that the river adds to the project corridor is high. The river creates a change in color and texture that contrasts sharply with the surrounding agricultural landscape. The line on the landscape created by the river is strong and is accentuated by dense riparian trees and shrubs. The trees and shrubs also add visual contrast to the project corridor. They are the only vertical elements surrounded by acres and acres of flat agricultural crops. The contrast in height is so sharp that the trees can be seen from several miles away on Route 41, before seeing the river. The proposed project will enhance the views to the river from the highway. Currently, the bridge rail is a solid 3-foot high concrete barrier. The new bridge rail will be a "see-through" type barrier with steel railing, allowing the highway user views of the river below. This new design will strengthen the visual character of the project corridor by increasing the visual relationship between the bridge and the river.

Visual Quality

The visual quality of the existing corridor will be strengthened by the proposed project. Visual quality is evaluated by identifying the vividness, intactness, and unity present in the project corridor. Public attitudes validate the assessed level of quality and predict how changes to the project corridor can affect these attitudes. This process helps identify specific methods for addressing each visual impact that may occur as a result of the project.

The views both at the Kings River as well as leading up to the river rate moderate or moderately high in vividness, or memorability. While the views to the river are not striking, the change in topography and landcover at the river are very unique to the valley. For this reason, the river becomes memorable. The river also helps to integrate with the agricultural landscape and creates a pastoral view. There is little to no visual encroachment in the project corridor at this location. The design of the new bridge will strengthen the visual quality by adding a bridge that architecturally harmonizes with the rural setting. The "see-through" bridge rail will use materials and patterns that integrate with the river and the adjacent recreational uses at the river.

Resource Change

Resource Change (changes to visual resources as measured by changes in visual character and visual quality) will be moderate. The moderate change will improve the visual resources at the Kings River.

VIEWERS AND VIEWER RESPONSE

Neighbors (people with views *to* the road) and *highway users* (people with views *from* the road) will be affected by the proposed project. Each viewer group has their own particular level of *viewer exposure* and *viewer sensitivity*, resulting in distinct and predictable visual concerns for each group which help to predict their responses to visual changes.

Viewer Exposure

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. Location relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more exposure. Quantity refers to how many people see the object. The more people who can see an object or the greater frequency an object is seen, the more exposure the object has to viewers. Duration refers to how long a viewer can keep an object in view. The longer an object can be kept in view, the more exposure. High viewer exposure helps predict that viewers will have a high response to a visual change.

Viewer Sensitivity

Viewer sensitivity is a measure of the viewer's recognition of a particular object. It has three attributes: activity, awareness, and local values. Activity relates to the preoccupation of viewers—are they preoccupied, thinking of something else, or are they truly engaged in observing their surroundings. The more they are actually observing their surroundings, the more sensitivity viewers will have of changes to visual resources. Awareness relates to the focus of view—the focus is wide and the view general or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change. Local values and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, state, or national designation, it is likely that viewers will be more sensitive to visible changes. High viewer sensitivity helps predict that viewers will have a high concern for any visual change.

Viewer Response - Neighbors

The neighbors in the proposed project area are mainly recreational users at the Kings River. Because of the nature of the use, viewer exposure and viewer sensitivity are high. While recreational use within the state right of way under the bridge is not allowed, the recreational areas are adjacent to the right of way. Views of the bridge are very near at the recreational access points to the river outside of the state right of way. The duration of these views is extended as people using the river spend long periods of time throughout the day at the river. The daily number of people using the recreational site is not known but is estimated to be moderate.

The Kings River is identified as a recreational area of importance in both the Kings County General Plan and the Stratford Community Plan. The Resource Conservation Element of the General Plan states:

> "RC Policy A2.1.1: Recognize the Kings River Conservation District's responsibility to maintain the Kings River channels and levees for flood control purposes. On land within the floodway, allow farming and other uses that are consistent with the designated floodway regulations and any requirements of the Central Valley Flood Protection Board."

"RC Policy D3.1.2: Encourage the Kings River Conservation District to avoid substantial alteration of the Kings River channel and its riparian vegetation, consistent with their flood control responsibilities."

"RC Policy F1.1.1: Encourage design of public and private projects to occur in a manner which will minimize damage to the Kings River."

"RC Policy F1.1.2: Support the Kings River Fisheries Management Program, jointly sponsored by the Kings River Conservation District, Kings River Water Association, and the Department of Fish and Game, and similar efforts to enhance and monitor fish habitat."

The Land Use Element of the Genera Plan states:
"LU Objective A1.2: Protect natural waterways to ensure continued water delivery and recharge to surrounding agricultural uses and related homesites, while maintaining the natural aesthetic appeal of the Kings River and Cross Creek waterway channels."

The Stratford Community Plan states:
"Along the southern outskirts of town, Stratford also has open waterways along the Kings River and the recreational area known as 'Empire Pool'.

"SCP Policy 3B.1.4: Community accessibility along 20 ½ Avenue south of 6th Street should be enhanced to increase safe pedestrian and bicyclist connection to the Empire Pool."

The above local policies and goals illustrate the elevated level of sensitivity of the viewers to the recreational area along the project corridor. Overall viewer response for this group of viewers is expected to be moderately high.

Viewer Response - Highway Users

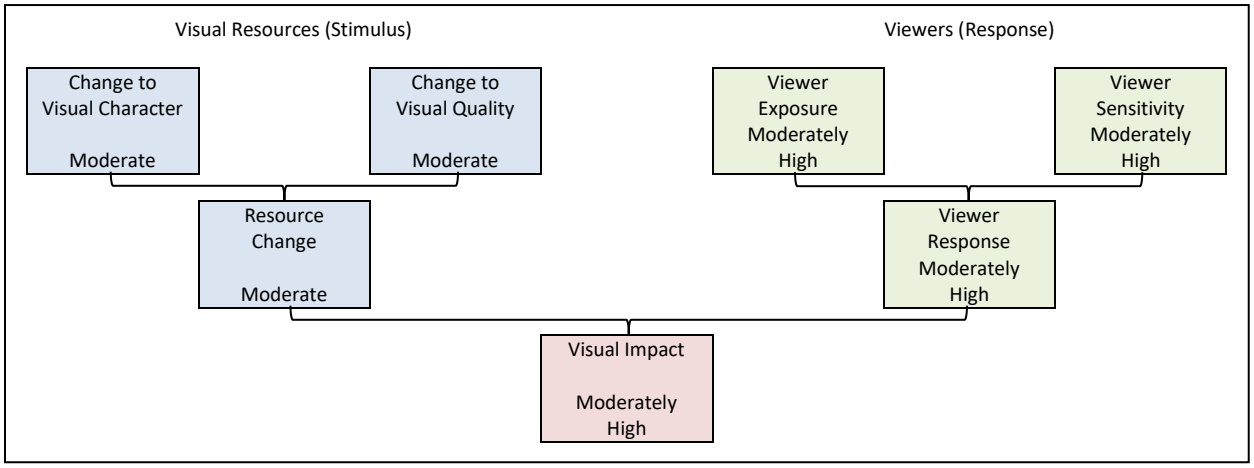
The highway users along this area of Route 41 are car drivers, truck drivers, tourists, commuters, and passengers. Because of the nature of the highway environment, the duration of views at the project site for this group of viewers will be brief (about 5 seconds while traveling at the posted speed of 55 miles per hour). The average daily traffic at the proposed project location is 7,600 vehicles per day according to the Project Report for the proposed project. Comparatively, this is a moderately low quantity of vehicles when compared to other state highways.

Because the project is in a setting of agricultural use, the highway users are not particularly focused on any views within the project corridor. The attention of drivers and passengers is likely not on the bridge and the Kings River at the time of crossing the bridge. However, upon crossing the bridge, the change in land cover is very noticeable and attracts the attention of the highway user. The user becomes very aware of the river and the surrounding dense vegetation along the river. The overall viewer response for highway users is expected to be moderately high.

It is anticipated that the average response of all viewer groups will be moderately high.

VISUAL IMPACT

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes.



The visual impacts expected because of this proposed project are expected to be moderately high. The new bridge will enhance the visual quality and visual character of the project corridor. The new bridge rail will be a "see-through" type barrier with steel railing, allowing the highway user views of the river below. This new design will strengthen the visual character and visual quality of the project corridor by increasing the visual relationship between the bridge and the river. The new steel railing barrier will also allow people with views of the bridge to have less obstructed views of the river through the bridge. The new bridge design will enhance the visual experience for the recreational users adjacent to the bridge.

Temporary visual impacts may occur during the construction of the project. Any trees and shrubs required to be removed for the reconstruction of the new bridge will be replaced. Any graded or otherwise disturbed slopes for construction staging will be treated with a native or drought tolerant seed mix following construction.

The project will have no impact on scenic vistas.

The project will have no impacts on scenic resources within a state scenic highway.

The project will have a less than significant impact on the existing visual character of the site and its surroundings.

The project will have no impact on the creation of a new source of light or glare.