Addendum to
Natural Environment Study
Broadway Bridge Project
Federal Project No.: TGR2DGL 5447(043)

December 22, 2020

Prepared By: John Howe, Jeff Kozlowski, and Lisa Webber
Wildlife, Fish, and Plant Biologists
ICF, Sacramento Office

Submitted to: Brooks Taylor, Biologist
North Region Environmental Planning M-1
Laura Loeffler, Branch Chief
North Region Environmental Planning M-1

Purpose of Addendum

This addendum to the February 2020 Natural Environment Study (NES) prepared for the Broadway Bridge Project updates some details of the impacts of each build alternative that were refined since preparation of the original study.

Document Changes

Figures

Updated Figure 6 and Updated Figure 7, attached to this addendum, reflect the changes in impact areas of each build alternative from revised rock slope protection areas provided by the project engineering team and from a more accurate representation of the impact area for the installation of the proposed underground fiber optic communications line. These figures supersede Figures 6 and 7 in Appendix A of the February 2020 NES and match those included in the December 2020 Biological Assessment prepared for the initiation of consultation under Section 7 of the Endangered Species Act.

Impacts on Land Cover Type

The quantification of impacts on land cover types included in the February 2020 NES is updated by this addendum. Updated Table 4-1, below, reflects the updated permanent and temporary impacts, in acres, on land cover types in the biological study area.
Updated Table 4-1. Permanent and Temporary Impacts on Land Cover Types in the Biological Study Area

<table>
<thead>
<tr>
<th>Impacts by Alternative</th>
<th>Land Cover Type</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cottonwood Riparian Forest $^a$</td>
<td>Perennial Stream $^a$</td>
<td>Ruderal</td>
<td>Landscaped</td>
</tr>
<tr>
<td>Alternative B, Interim Year</td>
<td>Permanent impact (acres)</td>
<td>1.112</td>
<td>0.432</td>
<td>2.655</td>
</tr>
<tr>
<td></td>
<td>Temporary impact (acres)</td>
<td>0.786</td>
<td>4.729</td>
<td>1.035</td>
</tr>
<tr>
<td>Alternative B, Design Year</td>
<td>Permanent impact (acres)</td>
<td>1.112</td>
<td>0.432</td>
<td>2.661</td>
</tr>
<tr>
<td></td>
<td>Temporary impact (acres)</td>
<td>0.786</td>
<td>4.729</td>
<td>1.030</td>
</tr>
<tr>
<td>Alternative C, Interim Year</td>
<td>Permanent impact (acres)</td>
<td>1.176</td>
<td>0.482</td>
<td>1.838</td>
</tr>
<tr>
<td></td>
<td>Temporary impact (acres)</td>
<td>1.149</td>
<td>4.969</td>
<td>0.822</td>
</tr>
<tr>
<td>Alternative C, Design Year</td>
<td>Permanent impact (acres)</td>
<td>1.176</td>
<td>0.482</td>
<td>1.843</td>
</tr>
<tr>
<td></td>
<td>Temporary impact (acres)</td>
<td>1.149</td>
<td>4.969</td>
<td>0.871</td>
</tr>
</tbody>
</table>

$^a$ These are sensitive natural communities. If the project is constructed in two phases, impacts on sensitive natural communities would occur in the first phase of construction; no additional impact would occur for construction of the second phase.

Impacts on Special-Status Wildlife Species

The type and intensity of impacts described in the February 2020 NES, the avoidance and minimization efforts, and the compensatory mitigation measures are not changed by the updated permanent and temporary impacts on land cover type.

Only the quantification of the area of land cover type that provides suitable habitat for the special-status species described in the February 2020 NES is replaced by the data provided in Updated Table 4-1 in this addendum.

Species Lists

Species lists from the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) were obtained in September and October 2020 for the Biological Assessment (December 2020). The lists do not include any species not already addressed in the February 2020 NES and there is no change to the protected status of species. Updated species lists will be obtained and included in the environmental impact report/environmental assessment prepared for the project.

Addendum Attachments:

Updated Figure 6
Updated Figure 7
Updated Figure 6
Alternative B Land Cover and Project Impacts
Updated Figure 6
Alternative B Land Cover and Project Impacts

- **Biological Study Area**
- **Fiber Optic Line**

**Project Footprint**
- Permanent Impacts
- Temporary Impacts

**Land Cover**
- Developed
- Landscaped
- Perennial Stream
- Riparian
- Riparian (Below OHWM)
- Ruderal
- Elderberry Shrub Location

**Tree Locations**
- Black Locust
- Black Walnut
- Box Elder
- Fremont’s Cottonwood
- Goodding’s Black Willow
- Oregon Ash
- Sycamore
- Valley Oak
- White Alder
- Other

*Tree locations are approximate*
Updated Figure 6
Alternative B Land Cover and Project Impacts
Updated Figure 6
Alternative B Land Cover and Project Impacts
Updated Figure 7
Alternative C Land Cover and Project Impacts
Updated Figure 7
Alternative C Land Cover and Project Impacts
Alternative C Land Cover and Project Impacts

Updated Figure 7

Tree locations are approximate