ADDENDUM TO THE WATER QUALITY ASSESSMENT REPORT

FOR THE INTERSTATE 80/GILMAN STREET INTERCHANGE IMPROVEMENT PROJECT

ALAMEDA COUNTY, CALIFORNIA
District 04 -ALA – 80 – POST MILE 6.38 / 6.95
EA 04-0A7700 / Project ID# 0400020155

NOVEMBER 2018

THE STATE OF CALIFORNIA
Department of Transportation
and Alameda County Transportation Commission

Prepared By: Analette Ochoa Date: 11/26/18
Analette Ochoa, P.E.
Senior Associate
(925) 941-0017 ext. 206
WRECO

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1.1 ADDENDUM SUMMARY OF CHANGES

This addendum updates and augments previous report findings for floodplains, the proposed separation device, the revised Project footprint, and the aquatic environment. One specific change addressed in this addendum is a Federal Emergency Management Agency (FEMA) update to delineated floodplain mapping within the project limits. A 2018 *Pending Flood Insurance Study* (FIS) and *Flood Insurance Rate Map* (FIRM) are expected to be adopted on December 21, 2018 that will change the way FEMA delineated the floodplains and water surface elevations within the Project area. This revision also includes areas of sediment excavation located at the Gilman Street outfall. This would result in an increase of approximately 0.21 acres of disturbed soil area (DSA) within the City of Berkeley's right-of-way (ROW). Increases of impervious areas due to this revised Project footprint are not anticipated.

1.2 Updates to August 2018 Water Quality Assessment Report

The following figure would replace Figure 2. Project Location in Section 1.2.1 Build Alternative – Roundabout Alternative:

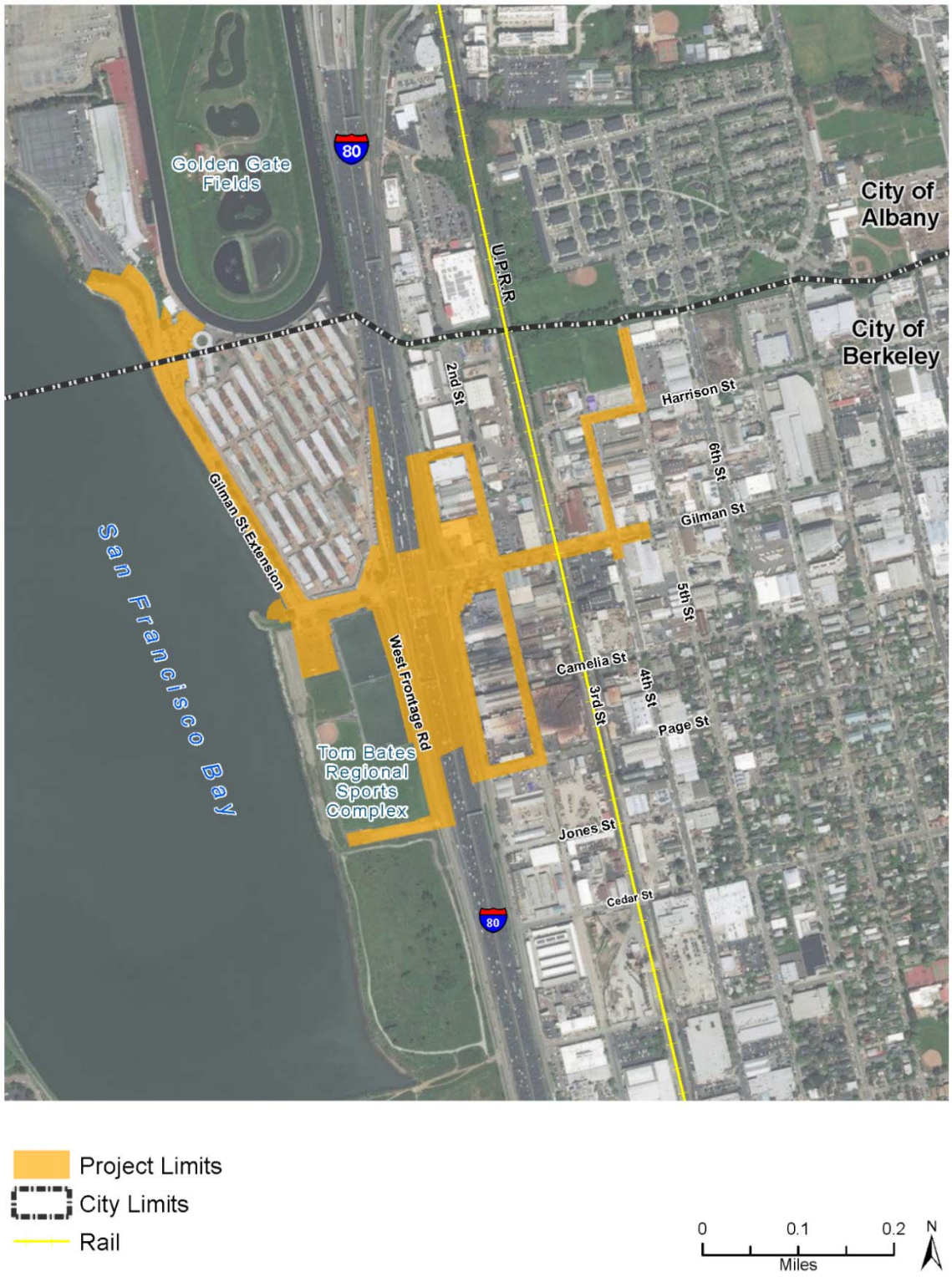

Figure 2. Project Location

Source: Parsons

The following figure would replace Figure 3. Roundabout Alternative Layout in Section 1.2 Build Alternative:

Figure 3. Roundabout Alternative Layout

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The following sections would replace sections in Section 3.1.3.2.3. Floodplains:

FEMA's FIRMs were researched for floodplain information. FEMA-delineated Special Flood Hazard Areas at the Project location include Zone VE, Zone AE, Zone AO, shaded Zone X, and unshaded Zone X.

Zone VE zones are coastal floodplains subject to flooding and velocity hazards (wave action) by the 1%-annual-chance flood. The outfall of the existing 60-inch storm drain system is identified as Zone VE within the Project Area.

Zone AE represents areas subject to inundation by the 1%-annual-chance flood event determined by detailed methods. Within the Project area, Zone AE represents areas inundated by stillwater flooding with minimal wave hazard effects. The parking lot for the Tom Bates Regional Sports Complex is identified as a Zone AE within the Project area, and the floodplain boundary is located at the point where the ground elevation equals the stillwater elevation, which is 10.2 feet NAVD 88 in the City of Berkeley. The limits of the Zone AE within the Project area do not extend to the proposed Gilman Street and Gilman Street Extension.

The area along 5th Street north of Harrison Street is adjacent to Zone AO, which represents areas subject to inundation by 1%-annual-chance shallow flooding (usually sheet flow on sloping terrain) where flood depths are between 1 foot to 3 feet, and where average depths have been determined. This Zone AO is associated with Codornices Creek.

A majority of the Project area east of I-80 is identified as being within a shaded Zone X, defined by FEMA's digital FIRM (No. NFHL_06001C) as an area within the 0.2%-annual-chance floodplain. The shaded Zone X area is likely attributed to Codornices Creek.

Project areas outside of Zones VE, AO, and shaded Zone X are within the unshaded Zone X, which is a zone that represents areas outside the SFHA and is above the elevation of the 0.2%-annual-chance flood (FEMA 2016). See the Project's *Location Hydraulic Study Report* and its addendum for further information (WRECO 2018a and 2018c).

The following sections would replace the third and fifth paragraphs in Section 3.1.5.1. Aquatic Habitat and Wetlands:

A wetland delineation addendum was prepared in 2018 that encompassed areas that have been added to the Project area since the original wetland delineation was performed in 2016 (Johnson Marigot Consulting 2018). The wetland delineation addendum did not identify any new wetlands within the BSA. The only jurisdictional feature delineated within the BSA was the San Francisco Bay. Field marks observed indicative of the high-tide line included: a line of algae along the shoreline protection, fine shell and debris along the beach, and deposition of floating debris near the algae colonization on rock slope protection (RSP). The mean high water mark was determined to be 5.79 feet (NAVD 88).

There are no special aquatic sites within the BSA. Near the Gilman Street outfall, the intertidal zone is not considered to be a mudflat. Additionally, there are no vegetated shallows, which include eelgrass (*Zostera marina*) beds, within the BSA. However, eelgrass beds are located just beyond the western boundary of the BSA in the waters of San Francisco Bay near Golden Gate Fields (NOAA Fisheries 2014).

The following section would replace the paragraph in Section 3.1.5.4 Fish Passage:

Habitat connectivity within the BSA and in the vicinity of the BSA is limited due to the presence of the built environment. The riparian and aquatic habitat associated with Codornices Creek provides a mostly uninterrupted east-west dispersal corridor for wildlife, including fish, though several culverts may impede or limit connectivity. The Gilman Street watershed consists entirely of underground drainage culverts. Although fish or other aquatic species may incidentally enter these underground culverts, they do not provide connectivity to any upstream aquatic habitat of ecological value.

The following revisions in Table 3 of Section 4.1 Environmental Consequences are highlighted:

Table 1. Project DSA and Impervious Areas

Project Right-of-Way	DSA (acres)	Existing Impervious Area (acres)	Added Impervious Area (acres)	Removed Impervious Area (acres)	RIS (acres)	NIS (acres)
Caltrans	5.59	3.73	0.44	0.66	3.10	2.88
City of Berkeley	3.18	7.90	0.25	0.09	2.55	2.80*
City of Albany (Golden Gate Fields)	0.27	5.13	0.002	0.14	0.13	0.13*
Total	9.04	16.76	0.69	0.89	5.78	5.81

* The MRP quantifies added and replaced impervious areas for treatment goals and does not take into account removed impervious areas.

The fourth paragraph has been revised in in Section 4.2.1.3 Oil, Grease, and Chemical Pollutants:

The Project would implement trash control measures to comply with the trash TMDL at the San Francisco Bay Central. The Project is considering a separation device to separate trash, mercury, and PCBs. The design of the separation device would be completed during the PS&E phase.

The following sections would replace the first and second paragraphs in Section 4.2.2.1 Aquatic Habitat:

As described in Section 3.1.5.1, there are no special aquatic sites within the Project area.

As described in Section 3.1.5.4, the Gilman Street watershed consists of underground drainage culverts that are not hydraulically connected to natural creeks. Therefore, the installation of the flap gate on the outfall of the 60-inch culvert would not impede fish passage at the Gilman Street outfall. No work within the Codornices Creek riparian corridor is proposed; therefore, the Project would not impede fish passage at the creek. See the Project's *Natural Environment Study* for further information (WRECO 2018b).

The following sections would replace the fourth sentence in Section 4.2.4.3 Biological Characteristics of the Aquatic Environment:

Installation and removal of the cofferdam would occur during low tide to address potential issues of fish stranding in the work area and subsequently attracting birds that may forage on stranded fish per regulatory requirements.

The following references are added in Section 6 References. The second to fifth references supersede FEMA 2009a b, c, and d:

Federal Emergency Management Agency. (2016). "Flood Zones" webpage. http://www.fema.gov/flood-zones

Federal Emergency Management Agency. (2018a). *Flood Insurance Rate Map* for Alameda County, California and Incorporated Areas. Map Number 06001C0018G. Panel 18 of 725.

Federal Emergency Management Agency. (2018b). *Flood Insurance Rate Map* for Alameda County, California and Incorporated Areas. Map Number 06001C0014G. Panel 14 of 725.

Federal Emergency Management Agency. (2018c). *Flood Insurance Rate Map* for Alameda County, California and Incorporated Areas. Map Number 06001C0056G. Panel 56 of 725.

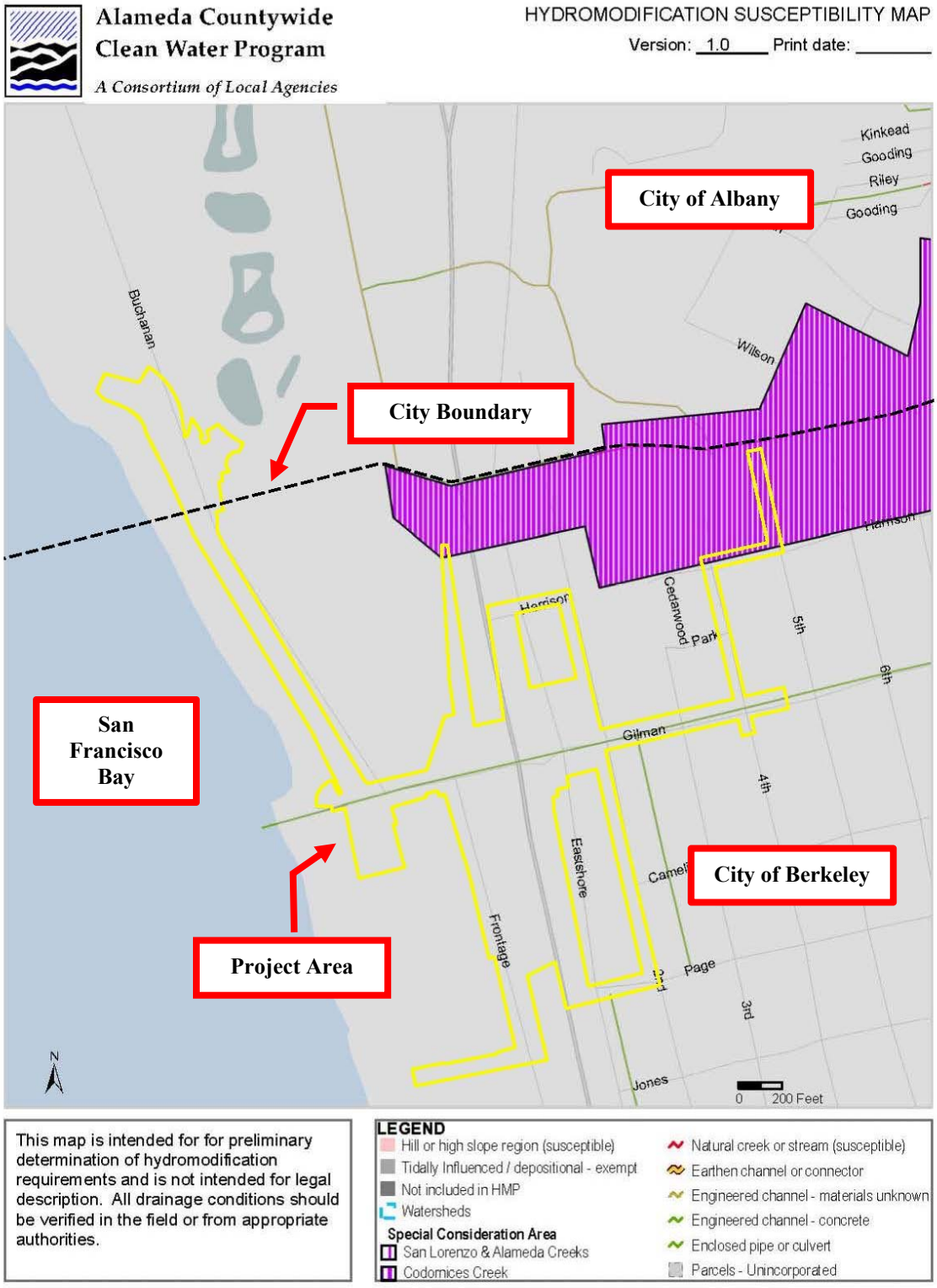
Federal Emergency Management Agency. (2018d). *Flood Insurance Study* for Alameda County, California and Incorporated Areas. Flood Insurance Study Number 06001CV002B.

WRECO. (2018c). *Addendum to the Location Hydraulic Study Report for the Interstate 80/Gilman Street Interchange Improvement Project.*

The following references are removed in Section 6 References:

Codornices Creek Watershed Council. (2011). *Codornices as a Resource and Asset.* <http://www.codornicescreekwatershed.org/watershed.htm>. (Last accessed: May 2018).

The following figure would replace the Hydromodification Susceptibility Map in Appendix C Hydromodification Susceptibility Map:



Source: ACCWP 2010 and overlay of Project area and city boundary by WRECO