

APPENDIX D

2019 UPDATE MEMO TO THE BIOLOGICAL RESOURCES ASSESSMENT

MEMORANDUM

To: Daniel Gonzalez,
Town of Hillsborough

From: Élan Alford and Rei Scampavia
WRA, Inc.

Date: September 13, 2019

Subject: Update to Biological Resources Assessment, Sandra-Hayne Storm Drain Replacement and Creek Daylighting Project

In September of 2017, WRA, Inc. (WRA) submitted a Biological Resources Assessment (BRA) (WRA 2017) to Town of Hillsborough for the Sandra-Hayne Storm Drain Replacement and Creek Daylighting Project (Project, formerly called the “Sandra-Hayne Culvert Replacement Project”). Since the initial report was submitted, the Project has been updated to include a creek daylighting and restoration component along with temporary stream dewatering to construct the culvert replacement and restoration. This memorandum addresses the changes in Project footprint and biological community mapping changes necessary to achieve the full Project along with the Project Description changes for channel restoration and dewatering.

Project Area and Biological Community Updates. The Project Area has expanded by 0.13 acre to accommodate the increased Project footprint. On July 16, 2019, a WRA biologist surveyed newly-added portions of the Project Area to determine the plant communities present. During both the July 2017 and July 2019 site visits, Cherry Creek contained pooled but not flowing water. Therefore, we reclassified Cherry Creek from perennial stream to intermittent stream. This conclusion is supported by hydrological data collected by EKI and WRA (WRA 2019).

No additional biological communities occur in the new Project Area addition. The newly-added Project Area contains coast live oak woodland, developed/landscaped, riparian coast live oak woodland, and intermittent stream. Table 1 describes the changes to the existing biological resources assessment, and Figure 1 shows the updated map of biological communities located in the Project Area. Both the riparian coast live oak woodland and intermittent stream are sensitive biological community types. The coast live oak woodland and developed/landscaped communities are not considered sensitive types.

Project Description Update.

Creek Restoration. The replacement Cherry Creek culvert would be shorter than the existing culverts, resulting in daylighting of a 60-linear foot downstream section of Cherry Creek. The Project is designed to expand and enhance existing stream habitat downstream of the replacement culvert. Cherry Creek, upstream and downstream of the proposed daylight reach, is a steep step-pool channel, with areas of exposed bedrock.

Table 1. Summary of Biological Communities in the Project Area

Community Type	Original Area (acres)	Increase in Area (acres)	Updated Area (acres)
Non-sensitive biological communities			
Coast Live Oak Woodland	0.14	0.03	0.17
Developed/Landscaped	0.17	0.07	0.24
Sensitive Biological Community			
Riparian Coast Live Oak Woodland	0.15	0.02	0.17
Intermittent Stream	0.03	0.01	0.04
Total Project Area Size	0.49	0.13	0.62

The finished design of the channel restoration design would be a relatively chaotic, natural-looking assemblage of rock features, ranging in size from coarse sand to large boulders. The rocks would be assembled to form a rough step-pool sequence, with a rib-like formation, and would be planted with willows and other vegetation to encourage habitat creation and riparian vegetation establishment. Step-pools would be created by excavating approximately 890 cubic yards of soil. Existing sandbags currently stabilizing the west bank of Cherry Creek would be removed and replaced with rock toe, native soil, and branch layering to create a bioengineered soil lift.

Creek Dewatering. Temporary creek bypassing would be required to construct the Project. Similar approaches would be adopted for both Cherry Creek and the unnamed tributary. A gravity-fed system would be used to divert the creek and tributary flow using sandbags, plastic visquine, and pipes. A watertight sandbag cofferdam would be placed across the full channel width in the upstream portion of the channel to divert water roughly 400 feet of the Cherry Creek work area and 100 feet of the Tributary work areas, respectively. Sandbag cofferdams would be roughly 20 feet wide, 3 feet high, and 3 feet long with actual dimensions to be confirmed prior to construction. An appropriately sized flexible drain pipe would be used to convey Cherry Creek and tributary flows; this pipe is anticipated to be 4-inch diameter, with the actual diameter to be confirmed prior to construction. Cherry Creek and tributary flows are expected to be very low during the summer in-water work window, when precipitation events are extremely rare and summer base flows are less than 0.5 cfs. The drain pipe may be aligned on the ground surface or inserted through existing storm drains. All cofferdams, and dewatering measures if necessary, would be removed at the end of the Project, and the creek would be restored to its original conditions at the cofferdam locations.

Potential Impacts

Despite the additional Project Area, the existing biological communities remain the same and the type of potential impacts remain generally the same as were assessed in the 2017 BRA. Additional impact assessment information beyond the 2017 BRA documentation is described below for sensitive habitats only. No other impact assessments were found to warrant modification.

Riparian Habitat and Intermittent Stream

Any disturbance to Cherry Creek or its adjacent riparian coast live oak woodland habitat may be considered significant under CEQA. Disturbance may include but is not limited to temporary

dewatering, culvert replacement, creek daylighting, removal of riparian vegetation, placement of fill or excavation within Cherry Creek, or the alteration of the bed-and-bank.

The Proposed Project has the potential to permanently impact up to 0.01 acre of intermittent stream (Cherry Creek) and permanently impact 0.03 acre of riparian coast live oak woodland. The replacement tributary culvert would result in permanent impacts to 5 linear feet (LF) (<0.001 acre) of the intermittent stream and the creek daylighting would result in the permanent conversion of 60 LF (0.01 acre) of culverted intermittent stream to daylighted intermittent stream. Creation of restored step-pool channels would result in the permanent conversion of 86 LF (0.03 acre) of riparian coast live oak woodland to intermittent stream. Additionally, the Proposed Project has the potential to temporarily impact 0.06 acre of intermittent stream (Cherry Creek) and 0.04 acre of riparian coast live oak woodland. Replacement of existing storm drains and restoration activities would result in temporary impacts to 113 LF (0.03 acre) of intermittent stream below top-of-bank. Culvert replacement would result in temporary impacts to 256 LF (0.03 acre) of culverted intermittent stream, Restoration efforts would temporarily impact 65 LF (0.04 acre) of riparian coast live oak woodland, including the removal of three trees.

Upon completion, the Project would create 60 LF (0.05 acre) of intermittent stream and 0.06 acre of riparian coast live oak woodland, including the planting of over 200 riparian trees. An additional 0.02 acre of intermittent stream and 0.04 acre of riparian coast live oak woodland would also be restored. The Project includes on-site creation and enhancement at a ratio of >12:1 for intermittent stream permanent impact length and 2:1 for permanent impacts to riparian coast live oak woodland, as well as replacing removed trees at a ratio of >200:1.

Culvert replacement will result in less culverted creek length than in the existing condition. Additionally the creek daylighting will convert a portion of creek that was previously in culvert to open channel and will thus result stream channel enhancement and creation of additional riparian forest. With the Project stream enhancement design to daylight channel along with creating and enhancing riparian habitat, by following the 2017 BRA avoidance and minimization measures, and implementing the additional avoidance and minimization measures below, this impact to sensitive riparian habitat and intermittent stream is reduced to be considered less than significant.

Additional Avoidance and Minimization Measures

Creek work would take place between April 15th and October 15th. Completing work during the dry season, as planned, avoids and minimizes impacts to biological resources in and around the creek.

A bypass cofferdam constructed of sandbags will be installed to isolate the work area, and a qualified biologist will capture and relocate any native fish remaining in the work area prior to a full dry down.

References

WRA, Inc. [WRA] 2017. Biological Resources Assessment. Prepared for Prepared for the Town of Hillsborough. September.

WRA, Inc. [WRA] 2019. Sandra Hayne Storm Drain Replacement Project – Daylighting, Planting, and Modeling Report. May.

Figure 1. Updated Biological Communities in the Project Area



Figure 1. Updated Biological Communities in the Project Area

Sandra Hayne Storm Drain Replacement
and Creek Daylighting Project
Hillsborough, San Mateo County, California

This map may contain data from publicly available sources including, but not limited to, parcel boundaries. These data sources may be inaccurate. They are intended for reference purposes only and do not represent legal boundaries or absolute locations.

0 25 50 100 Feet



Map Prepared Date: 8/28/2019
Map Prepared By: mweidenbach
Base Source: San Mateo County Imagery 2017
Data Source(s): WRA

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