



THE CITY OF SAN DIEGO

MEMORANDUM

DATE: June 21, 2018

TO: Helene Deisher, Development Project Manager II, Development Services Department

FROM: Antoinette Gibbs, Associate Planner, Transportation & Storm Water Department

SUBJECT: City of San Diego Master Storm Water System Maintenance Program (MMP) – After-the-fact (ATF) Substantial Conformance Review (SCR) for San Carlos Creek Emergency Channel Maintenance Project MMP Map 54

REFERENCE: PTS No. 402253, San Carlos Channel Emergency Maintenance – Site Development Permit Submittal

The Transportation & Storm Water Department (TSWD) formally submits the enclosed information to your department to request a Substantial Conformance Review (SCR) for emergency maintenance that was completed within the San Carlos Creek storm water channel between November to December 2014. Email notification was provided to the Development Services Department (DSD) on November 1, 2014. Because the emergency flooding happened over a weekend and the channel work was necessary to protect against an imminent threat to life and property, application to DSD prior to starting work was not feasible.

The San Carlos Creek Channel was not included in the original Master Storm Water System Maintenance Program (MMP) and after the 2014 emergency maintenance that occurred between November 1 to December 1, 2014, TSWD submitted an application for an after-the-fact Site Development Permit (SDP/PTS #402253) to DSD. It was determined that portions of the channel (downstream of Cowles Mountain Boulevard and upstream of Lakes Badin Avenue) were not currently in the MMP but could be added to the MMP by amending the existing SDP approved under the original MMP. On February 26, 2018 the City Council approved by Ordinance, an amendment to the original SDP to add the additional segments of the San Carlos Creek Channel, Map 54 (PTS #528126) to the MMP.

Location

The maintenance area is located in the San Carlos Community, outside of the Multiple-Habitat Plan Area (MHPA). The maintenance area is characterized by three sections of a concrete-lined storm water channel. The first section, the Beaver Lake section, is located south of Beaver Lake Drive between Cowles Mountain Boulevard and Boulder Lake Avenue. The second section, the Golf Course section, is west of Cowles Mountain Boulevard and adjacent to the Mission Trails Golf Course. The third is the Lake Badin section, which occurs east of Lake Badin Avenue. San Carlos Creek is located within the San Diego Hydrologic Unit in the City of San Diego and is a tributary to Lake Murray reservoir.

Emergency Maintenance Description

In the early morning hours on Saturday, November 1, 2014, approximately 0.5 inches of rain fell in the San Carlos area, causing vegetation and debris within the San Carlos Channel (located south of Beaver Lake Drive, north of Lake Cayuga Drive, east of Cowles Mountain Blvd, and west of Lake Badin Ave) to wash downstream and clog a culvert that runs under Cowles Mountain Boulevard. As this clog occurred, flood waters rose and overtopped the banks of the channel. The storm damage, flooding, and additional forecasted rain caused a sudden, unexpected, and imminent threat to life and property requiring immediate action. With another storm forecasted (approximately another 0.5") to hit in the late afternoon on the same day, the T&SWD mobilized crews to take action to avoid further flooding.

The work primarily was removing vegetation and sediment blocking the upstream (east) end of the culvert beneath Cowles Mountain Boulevard. Nearly all the vegetation from within the upstream portions of the channel washed downstream during the storm. Crews removed approximately 158 tons of vegetation and debris from the concrete-lined channel, pipe, and adjacent access area November 1 through November 8, 2014. An initial estimate of the material was 145 tons; however, records of the material disposed of at the landfill confirmed the actual amount as 158 tons. This material was removed with a backhoe and front-end loader operating from above the headwall east of Cowles Mountain Boulevard. The vegetation and debris were loaded into a dump truck and hauled to an approved disposal site.

Vegetation and sediment were also removed at the downstream (west) end of the culvert under Cowles Mountain Boulevard where it discharges into the Mission Trails Golf Course. Loose vegetation was removed from inside the opening of the culvert. Sediment and cattails were removed from approximately 180 feet of concrete-lined channel downstream of the culvert to assure that runoff would not backup into the culvert and exacerbate flooding at the east end of the culvert.

Remnant non-wetland vegetation in the concrete channel between Cowles Mountain Boulevard and Lake Badin Avenue (0.002 acre) was removed by hand to prevent another situation where channel vegetation becomes dislodged during a storm event and clogs the culvert under Cowles Mountain Boulevard.

To further protect against a problem at the Cowles Mountain Boulevard culvert, vegetation and sediment within the channel from a third section of the San Carlos Creek located directly south of Beaver Lake Drive, east of Lake Badin Avenue and west of Boulder Lake Avenue. Approximately 4-cubic yards of vegetation was removed on December 1, 2014. Less than one truck-full of material was removed and hauled to the Miramar Landfill.

Restoration of the concrete channel upstream of Cowles Mountain Boulevard is not proposed as any vegetation planted within the channel would undermine the capacity of the channel and may break loose again and cause a clog downstream. Restoration of the area downstream of Cowles Mountain Boulevard is not proposed because the cattails which were removed are expected to re-establish. A site visit to this area on May 5, 2015 revealed some regrowth of cattails on sediments that have begun to accumulate within the area where the cattails were removed. The presence of cobble in portions of the affected channel bottom is expected to continue to facilitate the deposition of sediment that will support the re-establishment of cattails. Thus, the cattails are expected to recover naturally.

ESL Impact

Based on biological surveys conducted by HELIX on November 3, 2014 and May 5, 2015, it was determined that the emergency maintenance impacted a total of 0.009 acres of vegetation. Wetland impacts were associated with the removal of cattails downstream of the culvert beneath Cowles Mountain Boulevard (180 square feet/0.004 acre) and additional patches of cattails within the segment upstream of Lake Badin Avenue (200 square feet/0.005). In addition, scattered non-native umbrella sedge plants were removed by hand within Map 54 (70 square feet/0.002 acre).

Mitigation

Mitigation will be provided at Stadium Mitigation Site located along the San Diego River that the Public Utilities Department (PUD) is implementing. TSWD is working with PUD to reserve 0.009 acre of wetlands rehabilitation and 0.027 acre of wetlands enhancement at the site to mitigate for impacts to 0.009 acre of freshwater marsh. Due to the emergency nature of the project, some abbreviated technical studies were conducted for the project including a Biological Assessment (IBA), Individual Historic Assessment (IHA), Individual Hydrologic and Hydraulic Assessment (IHHA), Individual Water Quality Assessment (IWQA), and Individual Noise Assessment (INA). A site-specific analysis for each assessment is summarized below.

Individual Maintenance Plan

The project was designed by City crews and the project biologist to conform to the MMP, while allowing the work to be conducted in an expeditious manner to address the immediate emergency. See Attachment 4/Appendix A for more detail.

Temporary construction-related BMPs were implemented to prevent/minimize impacts during performance of emergency maintenance activities such as access/staging, vegetation and sediment removal and post-maintenance clean-up of the project area. BMPs were implemented by trained personnel, and included: pumps to bypass the water around maintenance work areas, as needed; and a Vactor truck was staged at the downstream end of the work areas and utilized as necessary to prevent downstream flow of silt or sediment

from the project site. Additional BMPs/mitigation measures related to protection of water quality are described in the Water Quality Assessment section. No work occurred during the breeding or nesting season of any sensitive species.

Biological Assessment

An Individual Biological Assessment was prepared to determine potential mitigation requirements resulting from emergency maintenance work. An initial biological survey occurred during emergency work on November 3, 2014 and an additional biological survey and site assessment occurred on May 5, 2015 following emergency work. Data collected during surveys included comprehensive species lists, habitat suitability assessments for sensitive species. Mapping of vegetation communities present before maintenance occurred were determined by studying pre-maintenance photographs and aerial photography and maps. See Attachment 4/Appendix B for more detail.

Individual Hydrologic and Hydraulic Assessment

A hydrologic and hydraulic analysis was started for this site but was not completed because the emergency occurred. Instead, flooding as reported by adjacent private residences and observed by City staff required immediate action. This information, in lieu of an IHHA, was presented to the U.S. Army Corps of Engineers (ACOE) and Regional Water Quality Control Board (RWQCB) to supplement the application for use of Regional General Permit (RGP) 63 to conduct emergency channel maintenance to remove the immediate threat to property. The ACOE, with RWQCB concurrence, indicated that the work did not require permits.

Historical Assessment

The entire length of the emergency maintenance section of the San Carlos Channel is concrete-lined; therefore, the potential for historical resources was very low and no technical historical records search or monitoring was conducted prior to or after the work. This is consistent with the requirements of the MMP PEIR, which does not require historical assessments for concrete-lined channels. See Attachment 4/Appendix C for more detail.

Individual Water Quality Assessment

Due to the emergency nature of the maintenance activities, a comprehensive water quality assessment was not conducted prior to work. The MMP provides a quantitative framework for assessing maintenance-related water quality impacts by evaluating the potential pollutant removal capacity of a channel (in the pre-maintenance condition) with the potential benefits or impacts resulting from channel maintenance (i.e., removal of sediment and vegetation). This quantitative framework however was subject to legal challenge, and can no longer be utilized to evaluate maintenance impacts. See Attachment 4/Appendix D for more detail.

Noise Assessment

A noise assessment was not conducted for the San Carlos Channel. The PEIR identifies sensitive avian species as the only sensitive noise receptors for channel maintenance activities. The emergency maintenance work was conducted outside of the breeding season of any sensitive avian species; therefore, impacts from noise were not expected and no

technical studies for noise impacts from maintenance were conducted. See Attachment 4/Appendix E for more detail.

In conformance with the City's MMP, SDP No. 1134892 amended by SDP No. 2034245 and PEIR Project No. 42891/SCH No. 2004101032, the following documents have been included for your review related to the emergency channel maintenance for San Carlos Creek:

- General Application (DS 3032) (**Attachment 1**)
- Storm Water Requirements Checklist (DS 560) (**Attachment 2**)
- Supplemental Discretionary Project Application (DS-3035) (**Attachment 3**)
- Substantial Conformance Review Checklist with Appendices A-E (**Attachment 4**)
- Individual Technical Assessments
 - Individual Maintenance Plan (Including Map Reference Material and Maintenance Methodology Table) (**Appendix A**)
 - Individual Biological Assessment (**Appendix B**)
 - Individual Historical Assessment (**Appendix C**)
 - Individual Water Quality Assessment (**Appendix D**)
 - Individual Noise Assessment (**Appendix E**)
- Climate Action Plan Consistency Checklist Submittal Application (**Attachment 5**)
- Agency Determinations (emails from USACE, RWQCB, and CDFW) (**Attachment 6**)

In addition, a CD (**Attachment 7**) containing the following documents are attached for your reference:

- Public Noticing Package
- MMP
- Final PEIR for the MMP
- Master SDP
- Stadium Wetland Mitigation Plan

- Photographs (**Attachment 8**)

Should you have any comments or questions, please contact me at 619-527-54155 or agibbs@sandiego.gov.

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Helene Deisher
June 21, 2018

Sincerely,



Antoinette Gibbs
Associate Planner

- Attachments:
1. Application (DS-3032)
 2. Storm Water Checklist (DS-560)
 3. Supplemental Discretionary Project Application (DS-3035)
 4. Substantial Conformance Checklist with appendices A-C, E & F
 5. Climate Action Plan Consistency Checklist
 6. Agency Determinations (emails from USACE, RWQCB, and CDFW)
 7. CD Containing the following documents:
 - Public Notice Package
 - MMP
 - Final PEIR for the MMP
 - Master SDP
 - Stadium Wetland Mitigation Plan
 8. Photographs

cc: Roger Wammack, Assistant Deputy Director, Transportation & Storm Water
Department
Christine Rothman, Development Project Manager III, Transportation & Storm Water
Department
Chris Gascon, Senior Civil Engineer, Transportation & Storm Water Department
Ed Celaya, Superintendent, Transportation & Storm Water
Stephanie Bracci, Senior Planner, Transportation & Storm Water Department