



Advisian

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26 October 2018

Proj. No.: 797074-01070-Pre-Proposal-WT

Gregory Harris
Herwit Engineering
6200 Center Street, Suite 310
Clayton, CA 945117

Dear Mr. Harris:

**Re: Permit Requirements for Option 4 - Sanitary Outfall Diffuser
Upgrades for the Town of Discovery Bay**

1. Introduction / Project Understanding

Herwit Engineering (Herwit), on behalf of the Town of Discovery Bay California (TDBC), has requested Advisian (consulting arm of WorleyParsons) to provide an assessment and cost estimate for obtaining the regulatory permits required to implement upgrades to TDBC's sanitary sewage outfall diffuser structure, located on the thalweg of the Old River in Contra Costa County, California. This assessment includes a list of regulatory agencies with jurisdiction over the project, required permits, and the time requirements and cost estimates to obtain the permits.

Advisian has a strong understanding of the hydrodynamics of the Sacramento-San Joaquin Delta and vast experience working with the regulator agencies involved in this project, these allow us to assist the TDBC with all their permitting needs in a quick and effective matter.

Advisian submitted a report, dated June 8, 2018, which described the existing condition of the outfall structure and provided an evaluation of four optional proposed approaches to restore functionality to the system. TDBC chose to pursue "Option 4", which entails removing the 10-inch and 6-inch diameter HDPE pipe segments from the existing outfall diffuser structure and replacing them with a single 18-inch segment of the same combined length. The resulting structure would then consist of a continuous 18-inch diameter pipe body throughout its entire length, with same number of ports (36) as included in the original design. Since Option 4 involves in-river construction, some state and federal government regulatory agencies will need to be contacted for obtaining permits or amending previously-issued permits.

The purpose of this proposal is to provide a plan, schedule, budget and to obtain the permits from the affected government regulatory agencies with exception of the NPDES Permit – Regional Water Quality Control Board, Region 5, Central Valley (RWQCB5). The assumption of the hours for this proposal will be that Advisian will submit the permit applications, and complete one round of edits from comments provided by



regulator agencies and a final submittal. The permit affected by this project (Option 4) are provided in Section 3 below.

2. Background Information

The original outfall diffuser structure was designed to meet the effluent dilution requirements included in TDBC's National Pollution Discharge Elimination System (NPDES) permit. Over time, system performance degraded due to biotic build-up and sediment accumulation inside the outfall pipe body. The smaller diameter pipe sections were found to be susceptible to clogging and the upward-pointing tideflex valve diffuser ports were vulnerable to damage from boat operators setting anchors down near the structure. Also, the ports are susceptible to breaking off due to collisions with debris driven by elevated seasonal river flows. An underwater visual inspection on May 15, 2013 revealed that out of the 36 diffuser ports, two were missing and no flow was observed from any of the ports within the 16.5-ft long 6-in diameter segment.

3. Proposed Workplan

As stated in the June 8, 2018 report, the following permits are affected by Option 4:

- Lease – California State Lands Commission
- Nationwide Permit 3 Maintenance – U. S. Army Corps of Engineers
- Nationwide Permit 7 Outfall Structures – U. S. Army Corps of Engineers
- Nationwide Permit 19 Minor Dredging – U. S. Army Corps of Engineers
- Lake and Streambed Alteration Permit – California Dept. of Fish & Wildlife
- CEQA Mitigated Negative Declaration – California Dept. of Fish & Wildlife

The NPDES Permit – Regional Water Quality Control Board, Region 5, Central Valley (RWQCB5) will be completed by others. A description of the permit requirements and time to amend the permit from notice to proceed (NTP) by the TDBC is included below.

Lease – California State Lands Commission

Option 4 requires installation of an articulated concrete block mat (ACBM) and steel cage above the diffuser pipe structure. The modified diffuser pipe will occupy the same space as the existing structure. Depending on the size and configuration of the ACBM and steel cage, Advisian recommends verifying lease requirement with the Commission to make sure that the new structures and footprint do not exceed the lease boundaries or violate lease conditions. Advisian believes that there will be minimal, if any, work required to amend the lease to accommodate the ACBM and steel cage.

Time to amend permit: up to 2 weeks from NTP



Nationwide Permits 3, 7, and 19 – U. S. Army Corps of Engineers (USACE)

TDBC applied for a Nationwide permit but did not receive any response from the USACE during the original permitting process. Advisian recommends applying to USACE for the NWP19 and NWP7 to cover the minor dredging and installation of the upgraded outfall pipe. Concurrent with these permit applications, Advisian recommends obtaining the NWP3 to facilitate future periodic maintenance, including language to permit maintenance flushing with discharge into the river using recirculated river water. The USACE permitting process may take up to one year due to the backlog of applications currently in process with the USACE's Regulatory Division. By statute, the USACE has 45 days to respond to an NWP application. If the applicant receives no response, it can be assumed that the USACE has no objection to the work proposed in the NWP applications. However, Advisian recommends seeing this permit process through fruition in order to facilitate future maintenance or repair work without the need to go through the USACE permitting process again.

Time to amend permit: up to 52 weeks from NTP

Lake and Streambed Alteration (LSA) Permit – California Dept. of Fish & Wildlife (CDFW)

The LSA permit would need to be amended, since Option 4 involves excavation trenching, placement of granular backfill material in the trench, and placement of the ACBM and steel cage. The amendment process would be done concurrently with the application for NWP19.

Time to amend permit: up to 3 weeks from NTP

CEQA Mitigated Negative Declaration (MND) – California Dept. of Fish & Wildlife

While in consultation with CDFW regarding the LSA, there is a small chance that CDFW may require revision and recirculation of the Mitigated Negative Declaration if the Department deems the project significantly changed from the previous MND document. If this is the case, most likely an Initial Study would be conducted in conjunction with the refreshed Mitigated Negative Declaration. Advisian believes this to be unlikely since the work planned consists of repairs and maintenance to an existing structure. However, if revision and recirculation to the MND is required, it could be accomplished in approximately six weeks.

Time to amend permit: up to 6 weeks from NTP

4. Cost

Advisian's professional service fees to complete the scope of work specified in this proposal is provided on a lump sum not-to-exceed basis of \$34,735 (tax exclusive). Any work outside the current scope will be communicated to the client as a change of scope and, upon approval, will be executed at the standard rates set out in the contract with Herwit Engineering.



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5. Closure

We trust that this letter proposal covers the full range of permitting requirements for implementation of the Option 4 outfall diffuser upgrade project. This work plan is based on our current understanding of your intent to restore functionality to the TDBC's outfall diffuser. If you have any questions or require further details, please contact the undersigned at any time.

Sincerely,

A handwritten signature in cursive script that reads "Len Marino".

Len Marino, P.E.
Senior Consultant

Senior Reviewed by

A handwritten signature in cursive script that reads "Efrain Giron".

Efrain Giron, Ph.D., P.Eng.
Senior Water Resources Engineer

Advisian, Americas



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Confidentiality

This document has been prepared for the sole purpose of documenting our tender for consultancy services associated with the Permit Requirements for Option 4 - Sanitary Outfall Diffuser Upgrades for the Town of Discovery Bay.

It is expected that this document and its contents, including work scope, methodology and commercial terms will be treated in strict confidence by Herwit Engineering and that the contents will be used by Herwit Engineering only for the purpose of selecting a consultant for the project.