



County of Santa Cruz Board of Supervisors

Agenda Item Submittal

From: DPW: Sanitation

(831) 454-2160

Subject: CZU Lightning Complex Fire: CSA 7, Boulder Creek Wastewater Treatment Plant

Meeting Date: October 20, 2020

Recommended Actions

- 1) Accept and file status update on emergency Contract No. 21D0524 with Anderson Pacific Engineering for emergency restoration at CSA No. 7 Boulder Creek wastewater treatment plant, effluent pump stations and leach pits;
- 2) Pursuant to Public Contract Code section 22050, find that there is a need to continue emergency action by four-fifths vote;
- 3) Pursuant to Public Contract Code section 22050, find that the nature of the emergency does not allow for competitive bidding by four-fifths vote; and
- 4) Direct Public Works to negotiate and return on November 10, 2020 with an Independent Contractor Agreement and a report on the status of the emergency work.

Executive Summary

Public Works is requesting findings, under Section 22050 of the Public Contract Code, that the repair work for CSA 7 Boulder Creek wastewater treatment plant, effluent pump stations and leach pits within the fire damaged area is necessary to respond to this emergency and the emergency will not permit a delay resulting from a competitive solicitation for bids. Direction to negotiate and return with an Independent Contractor Agreement is also requested as the nature of the emergency prohibited finalization of such an Agreement prior to start of work due to the urgent conditions of needed repairs at wastewater facilities.

Background

The Boulder Creek Wastewater Treatment Plant treats domestic water from the Boulder Creek Country Club and housing suburb with 263 service connections. Average dry weather flows are between 25,000 to 35,000 gallons per day. The treatment plant has four major processes, pre-aeration, aeration tank, clarifier tank and digester. An offsite pump station pumps the influent flow to the treatment plant, goes through a grinder and enters an equalization tank. The flow is then totalized before entering the pre-aeration outer ring of the treatment plant and then enters the aeration tank. Two blowers provide compressed oxygenated air to the bottom of the aeration tank for bacteria to thrive and remove organic materials and nutrients. The aeration tank effluent is gravity fed into the

clarifier where solids settle out to the bottom of the tank in the form of sludge. A circular mechanical rake arm removes floating material in the form of scum and pumps the scum back into the aeration tank. The clarified effluent spills over a weir and flows into the pump station effluent sump and flows into the onsite effluent pump station. The pump station transmits the effluent to an offsite pump station located in the Fallen Leaf neighborhood where it is then pumped up to a leach field located 1500 feet from the station.

In August 2020, the CZU Lightning Complex Fire severely damaged the wastewater treatment plant, effluent pump stations and leach pits. Control panels, electrical transformers, motor control center, blowers, generators, office building, piping, valves and equipment to remotely monitor the wastewater system were burned. Trees surrounding the treatment plant were burned and stressed due to the fire. Without electricity, control panels, blowers and operating effluent pump stations, the treatment plant could not be operated as designed and required wastewater to be hauled offsite.

Analysis

Damage sustained from the fire resulted in destroyed PG&E transformers, electrical power poles, electrical control panels, motor control center, blowers, generators, office building, piping, valves and equipment to remotely monitor the wastewater system. Without electricity, control panels, blowers, operating effluent pump stations, and leach pits, the treatment plant was left inoperable.

These impacts resulted in the inability to treat domestic water normally handled by this treatment plant on a daily basis creating dangerous conditions in the area from destroyed County facilities, which the Deputy CAO/Director of Public Works determined pursuant to delegated authority constituted an emergency within the definition of Public Contract Code section 1102 as this presented an imminent danger to the public requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services. Immediate restoration of treatment facilities was and remains necessary to prevent hazardous conditions within the fire area, and to provide healthy and safe conditions and facilities to multiple agencies working on fire recovery, members of the public, and residents returning home throughout the fire damaged County areas.

Restoration work includes removal of trees surrounding the plant, burned debris removal and hauling. Temporary power will be provided to control panels to restore operation of the wastewater treatment plant and discontinue hauling of wastewater, before a permanent building to house an onsite standby generator, motor control center, control panels is constructed.

Due to the imminent threat to life, health, property, and essential public services presented by this fire damage, it was necessary to engage a contractor to undertake the emergency restoration at CSA No. 7 Boulder Creek wastewater treatment plant, effluent pump stations and leach pits as quickly as possible and the Deputy CAO/Director of Public Works determined that the nature of the emergency did not allow for the delay that would result from competitive bidding.

Anderson Pacific Engineering has successfully completed numerous projects for Public Works in the past and was therefore engaged in August 2020 to begin performing the critical restoration work on a time and material basis under E-No. E-0028, 21D0524. The project scope of work for Anderson Pacific Engineering is attached for your Board's review and will be formally incorporated in an Independent Contractor Agreement prior to the next regularly scheduled meeting of your Board for review and approval by your Board.

At every regularly scheduled meeting hereafter, Public Works will return in accordance with Section 22050 of the Public Contract Code to your Board with status updates until the emergency repair work is terminated.

Financial Impact

Funding for the emergency project will be provided through a combination of insurance, FEMA, and Cal OES disaster recovery programs. The local match portion will be paid by the District. Emergency #E-0028 was issued for this work.

Strategic Plan Element

6.C (Operational Excellence: County Infrastructure)

The emergency Boulder Creek wastewater treatment plant restoration supports the goals of the County Strategic Plan focus area to restore sewer services to County Service Area No. 7 and responsibly maintain County assets in support of community goals.

Submitted by:

Matt Machado, District Engineer

Recommended by:

Carlos J. Palacios, County Administrative Officer

Attachments:

a Scope of Work – CZU Lightning Complex Fire CSA 7, Boulder Creek WWTP, E-0028, Anderson Pacific