



**BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT**

375 - 11th Street, Oakland, CA 94607

Office of the Secretary: (510) 287-0440

Notice of Time and Location Change

PLANNING COMMITTEE MEETING

Tuesday, June 9, 2020

8:45 a.m.

*****Teleconference*****

Notice is hereby given that the Tuesday, June 9, 2020 Planning Committee Meeting of the Board of Directors has been rescheduled from 9:15 a.m. to 8:45 a.m.

Due to COVID-19 and in accordance with Alameda County Health Order 20-11 (issued May 18, 2020), and with the Governor's Executive Order N-29-20 which suspends portions of the Brown Act, **this meeting will be conducted via teleconference only**. In compliance with said orders, a physical location will not be provided for this meeting. These measures will only apply during the period in which state or local public health officials have imposed or recommended social distancing.

Dated: June 4, 2020

A handwritten signature in blue ink that reads 'Rischa S. Cole'.

Rischa S. Cole
Secretary of the District

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**BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT**

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**AGENDA
Planning Committee
Tuesday, June 9, 2020
8:45 a.m.**

Location

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Committee Members Doug Linney {Chair}, Lesa R. McIntosh and Frank Mellon will participate via teleconference

Public Participation

***Dial 855-369-0450 to participate via telephone;
Enter participant pin 49-281-364 # when prompted***

ROLL CALL:

PUBLIC COMMENT: The Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda. ***If you participate via telephone and wish to speak on agenda OR non-agenda items you will be asked to:***

- State your name, affiliation if applicable, and topic
- The Secretary will compile a list of those who wish to make public comment and will call each speaker in the order received
- The Secretary will keep track of time and inform each speaker when his/her allotted time has concluded
- Each speaker will be allotted 3 minutes to speak; the Committee Chair has the discretion to amend this time based on the number of speakers

DETERMINATION AND DISCUSSION:

1. Orinda Water Treatment Plant Disinfection Improvements Project Update (Yoloye)
and Announcement of the Availability of the Draft Supplemental Environmental
Impact Report
2. Raw Water Treatment Facilities Improvement Project Update (Yoloye)

ADJOURNMENT:

Disability Notice

If you require a disability-related modification or accommodation to participate in an EBMUD public meeting please call the Office of the Secretary (510) 287-0404. We will make reasonable arrangements to ensure accessibility. Some special equipment arrangements may require 48 hours advance notice.

Document Availability

Materials related to an item on this agenda that have been submitted to the EBMUD Board of Directors within 72 hours prior to this meeting are available for public inspection in EBMUD's Office of the Secretary at 375 11th Street, Oakland, California, during normal business hours, and can be viewed on our website at www.ebmud.com.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: June 4, 2020

MEMO TO: Board of Directors

THROUGH: Alexander R. Coate, General Manager *ARC*

FROM: Olujimi O. Yoloje, Director of Engineering and Construction *OY*

SUBJECT: Orinda Water Treatment Plant Disinfection Improvements Project Update and Announcement of the Availability of the Draft Supplemental Environmental Impact Report

SUMMARY

This memo provides an update on the Draft Supplemental Environmental Impact Report (EIR) for the Orinda Water Treatment Plant (WTP) Disinfection Improvements Project (Project) including an overview of the public outreach process completed to date and the Project schedule. The Draft Supplemental EIR will be published on July 1, 2020. Staff will provide a Project update at the June 9, 2020 Planning Committee meeting.

BACKGROUND

Staff presented to the Planning Committee on June 13, August 8, and October 10, 2017, on the District's efforts to improve disinfection reliability and reduce disinfection byproducts (DBPs), particularly trihalomethanes (THMs). On December 12, 2017 and February 13, 2018, staff recommended to the Planning Committee a new ultraviolet/chlorine contact basin (UV/CCB) disinfection facility at Orinda WTP. On February 13, 2018, the Board authorized agreements to Carollo Engineers and CDM Smith for design services. At the October 16, 2018 District Projects Tour, staff briefed the Board on ongoing pilot-scale testing of UV disinfection equipment and initial Project concepts. On July 9, 2019 and March 10, 2020, staff provided Project updates to the Planning Committee, which included a review of Project elements, steps taken to ensure District staff's engagement and knowledge transfer from the District's consultant team, California Environmental Quality Act (CEQA) efforts, construction cost, and schedule. On April 28, 2020, the Board authorized an agreement for the UV disinfection system equipment design, and amendments to the existing design services.

DISCUSSION

Project Purpose and Description

Placed into service in 1935, and located at Camino Pablo and Manzanita Drive in Orinda, the Orinda WTP is an inline WTP (without a post-filter disinfection process commonly found in

newer water treatment plants) that treats up to 200 million gallons per day of high quality drinking water for over 800,000 customers on both sides of the Berkeley-Oakland hills (see Attachment 1). Historically, the Orinda WTP has met its disinfection needs by chlorinating water in the aqueducts that supply the Orinda WTP. This pre-chlorination process is effective when water quality is favorable. However, when organic material in the raw water sources increases, the pre-chlorination process can significantly increase the formation of DBPs including THMs. The purpose of the Project is to improve the disinfection process associated with the Orinda WTP, ensure continued compliance with water quality regulations, improve disinfection reliability, reduce the formation of DBPs, improve chemical dosing, and reduce disinfection complexity. The Project will make the Orinda WTP more adaptable to changes in source water quality due to climate change, fires in the watershed, and future droughts.

The Project includes demolition of an existing maintenance building and construction of a new disinfection facility comprised of a new above-ground two-story maintenance and UV electrical (MAUVE) building with a below-grade UV structure and a below-grade CCB, two electrical buildings, a standby generator, pipelines and vaults, and other supporting facilities. The MAUVE building with UV structure and the CCB would be adjacent and fully integrated facilities. Maintenance activities and associated uses previously housed in the existing maintenance building that will be demolished will be incorporated into the Project disinfection facility and grounds maintenance building, with associated parking at the Orinda WTP site. During construction, staff, equipment, and vehicles at the existing grounds maintenance building will be temporarily relocated to office trailers and a fenced parking area on District-owned property adjacent to the North Orinda Sports Field. The Project will also include vegetation removal, new landscaping, and the replacement of existing and installation of new security fencing at the site. Attachment 2 shows the proposed project components at the Orinda WTP site. This Project supports the District's Long Term Infrastructure Investment Strategic Plan goal.

Water Treatment and Transmission Improvements Program

The 2006 Water Treatment and Transmission Improvements Program (WTTIP) EIR identified improvements to water treatment processes at the Orinda WTP. Due to changes in the identified improvements and in conformance with CEQA, the Project includes preparation of a Supplemental EIR to the WTTIP EIR.

Review of Environmental Impacts

Pursuant to CEQA, staff is preparing a Draft Supplemental EIR to the WTTIP EIR that reviews environmental impacts and proposes mitigation measures to reduce any potentially significant impacts to less than significant, if possible. The adopted mitigation measures included in the WTTIP Mitigation Monitoring and Reporting Program (MMRP) for improvements at the Orinda WTP will be incorporated into the Project, or revised and included as Project mitigation measures. All environmental impacts have been identified as either less than significant or would be less than significant with mitigation. Key mitigation measures include:

- Enhancing the aesthetic appearance of the proposed facilities to integrate with the existing visual environment, and implementing a landscaping plan using native trees and plants to screen new facilities from public viewpoints;
- Implementing dust and exhaust control measures during construction;
- Conducting special-status species preconstruction surveys and implementing avoidance and protection measures during construction;
- Preparing documentation of all historic-age buildings, structures, objects, and sites that make up the Orinda WTP;
- Preparing and implementing a site-specific stormwater pollution prevention plan;
- Implementing best available noise control technologies on construction equipment and vehicles;
- Avoiding peak traffic periods by limiting soil and demolition off-haul and material heavy equipment delivery truck trips to Monday through Friday, 9:00 a.m. to 4:00 p.m.;
- Preparing and implementing a traffic management/traffic safety plan; and
- Providing flaggers and crossing guards at Manzanita Drive during periods when school children are walking to and from school, and when Project construction truck traffic is present.

Public Outreach

Staff hosted two in-person public outreach meetings in August and October 2019. During these meetings, staff described the Project need and purpose, presented the conceptual site and landscape plans, discussed the potential environmental factors to be addressed in the EIR, and received community input and feedback. The community members' primary issues and concerns were related to construction traffic, air quality, safety, construction and operational noise impacts, as well as cumulative impacts from other planned District construction projects in Orinda, the construction duration, and the overall community outreach process. In November 2019, staff met with Orinda Unified School District (OUSD) staff and an OUSD Board member to present and discuss the Project, and receive input and feedback on traffic and public safety impacts at Wagner Ranch Elementary School, located on Camino Pablo and Bear Creek Road. Staff hosted a virtual community meeting to provide additional information on construction air quality and traffic analysis on May 13, 2020. All issues and concerns noted will be addressed in the Draft Supplemental EIR.

Staff continues to meet quarterly with City of Orinda staff to provide updates on the Project and other ongoing and future projects in Orinda. On June 16, 2020, staff will attend an Orinda City Council meeting to provide an update on District projects in Orinda.

NEXT STEPS

The Draft Supplemental EIR will be published on July 1, 2020 with a 45-day public comment period ending on August 19, 2020. A public meeting will be scheduled in August 2020 to solicit comments on the Draft Supplemental EIR. The Final Supplemental EIR, which will respond to any comments received during the public comment period, will be scheduled for Board consideration in December 2020. If the Board approves the Final Supplemental EIR in December 2020, design will be completed in early 2021, and construction of the Project is scheduled from mid-2021 through 2025.

ARC:DJR:bf

Attachments: 1 – Project Location
2 – Proposed Project Components on the Orinda WTP site

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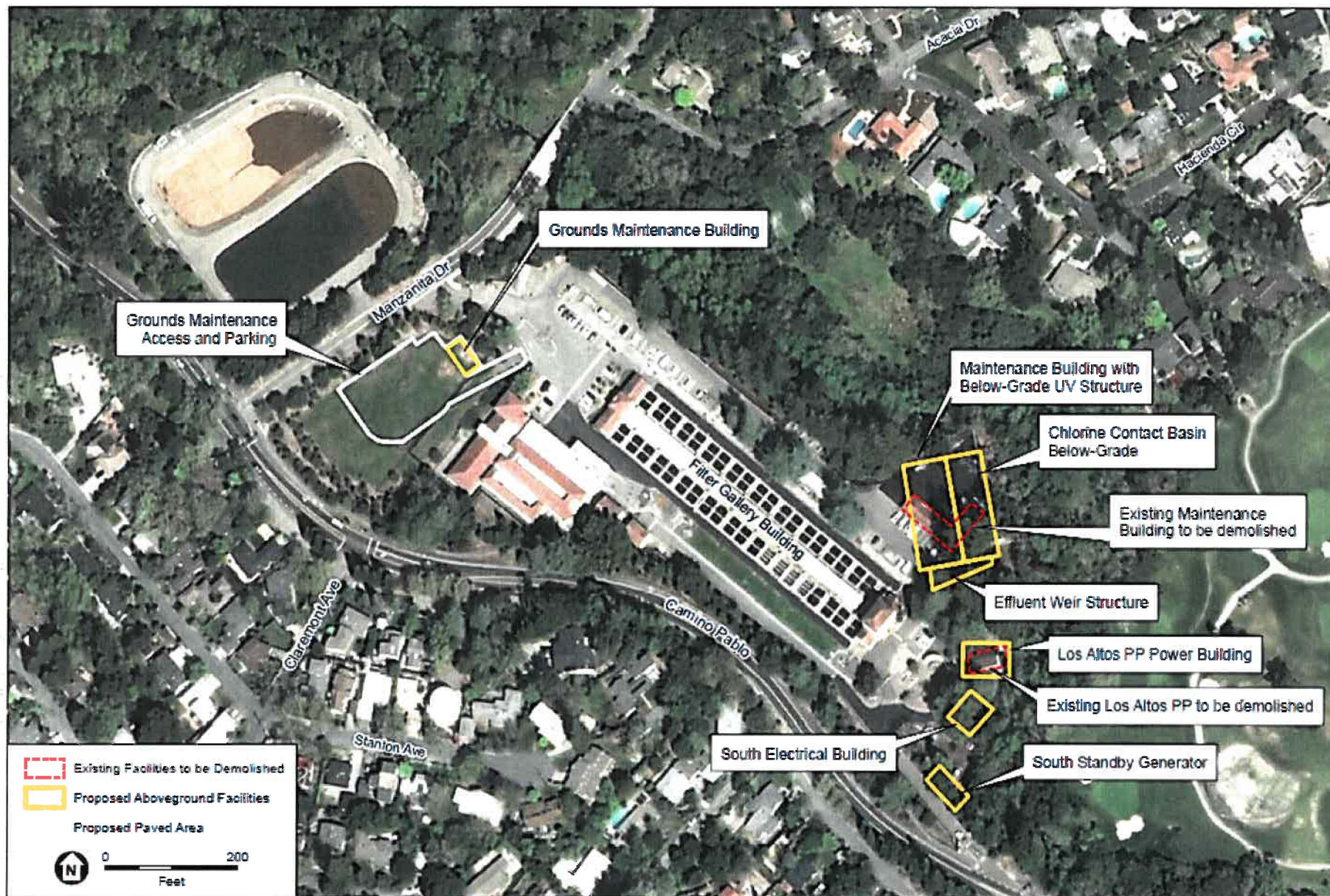
Attachment 1: Project Location



SOURCE: ESA, 2019; ESRI, 2019.

EBMUD Orinda Water Treatment Plant Disinfection Improvements Project

Attachment 2: Proposed Project Components on the Orinda WTP Site



SOURCE: ESA, 2019; ESRI, 2019.

EBMUD Orinda Water Treatment Plant Disinfection Improvements Project

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: June 4, 2020

MEMO TO: Board of Directors

THROUGH: Alexander R. Coate, General Manager *ARC*

FROM: Olujimi O. Yoloje, Director of Engineering and Construction *OY*

SUBJECT: Raw Water Treatment Facilities Improvement Project Update

SUMMARY

This memo provides an update on the Raw Water Treatment Facilities Improvement Project (Project), which will construct improvements at the District's Pardee Chemical Plant and Inline Water Treatment Plants (WTPs) at Walnut Creek, Lafayette and Orinda. The Project, previously mentioned at the Long-Term Infrastructure Investment Workshops in November 2018 and November 2019, will improve corrosion protection and extend the useful life of the raw water transmission system. Staff will provide a Project update at the June 9, 2020 Planning Committee meeting.

BACKGROUND

Water from Pardee Reservoir is transported over 90 miles through the Mokelumne Aqueducts before entering the District's treatment plants. The low-alkalinity water from the Pardee Reservoir contributes to the degradation of cement mortar lining in the aqueducts. In 2014, the District conducted the Mokelumne Aqueducts Corrosion Optimization Study (MACOS) to evaluate the condition of the raw water aqueducts and evaluate options for prolonging the useful life of the aqueducts. The study analyzed the life cycle costs of rehabilitation and relining methods and corrosion treatment alternatives, and recommended changes to the raw water quality to reduce corrosion of the new and existing cement-mortar linings in the aqueducts.

DISCUSSION

The 2014 MACOS study concluded that increasing the alkalinity of the raw water as it enters the Mokelumne Aqueducts will help reduce the corrosion of the linings, and recommended the Project, which will be implemented in three phases. Two phases involve constructing improvements to the existing Pardee Chemical Plant such that lime and carbonic acid can be added for corrosion control. The third phase includes constructing improvements at the Inline WTPs such that carbonic acid can be added to reduce pH for treatment optimization. These

improvements are scheduled to be completed over the next four years in the sequence outlined below:

- **Phase 1 – Raw Water Shaft Construction:** Under Specification 2158, the Pardee Chemical Plant Chemical Feed Shafts Project was awarded on May 12, 2020. Construction for the two chemical shafts needed for chemical dosing and injection into Pardee Tunnel is scheduled to begin summer 2020.
- **Phase 2 – Inline WTPs Carbonic Acid Addition:** Under Specification 2137, carbonic acid feed and control systems will be constructed at each of the Inline WTPs. This phase is currently in design and is anticipated to start construction in Fiscal Year (FY) 2021.
- **Phase 3 – Pardee Chemical Plant Improvements:** Under Specification 2142, modern lime storage and slaking equipment, carbonic acid feed and control systems and a new operations and maintenance building will be constructed. This phase is also currently in design and anticipated to begin construction in FY22.

To facilitate final design of the Inline WTPs Carbonic Acid Addition and the Pardee Chemical Plant Improvements Projects, staff recommends pre-purchasing the carbonic acid dissolution, feed and pH control systems and the lime batch slaking equipment. Pre-purchase of this equipment is needed due to the long lead times required for complex submittals, fabrication, testing, and delivery of this equipment. The equipment will be assigned to the construction contractor for installation under Specifications 2137 and 2142.

FISCAL IMPACT

The estimated combined construction cost of the Project is approximately \$50 million. Funding for this item is available in the FY20 budget for the Mokelumne Aqueducts No. 2 and 3 Relining Project. The Project supports the District's Long-Term Infrastructure Investment Strategic Plan goal.

NEXT STEPS

Pre-purchase of material and equipment for the carbonic acid and the lime batch slaking systems are scheduled for Board consideration at the June 9, 2020 and September 8, 2020 meetings, respectively. In addition, an agreement for architectural support services for the Pardee Chemical Plant Improvements Project is also scheduled for Board consideration on September 8, 2020.

ARC:SVT:mjh