



CITY OF
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ALTO**

Planning & Transportation Commission Staff Report

From: Planning and Development Services Director
Lead Department: Planning and Development Services

Meeting Date: February 28, 2024
Report #: 2312-2453

TITLE

2501 Embarcadero Way [22PLN-00367]: Recommendation to Council for Approval of a Site and Design Application and a Variance to Allow the Construction of a Local Advanced Water Purification System at the Regional Water Quality Control Plant (RWQCP). The Proposed Project Includes the Construction and Operation of a Membrane Filtration Recycled Water Facility and a Permeate Storage Tank at the City's RWQCP to Improve Recycled Water Quality and Increase its Use. A Variance to Allow for a Taller Screening Wall is Also Requested. Environmental Assessment: Council Previously Adopted an Addendum to the 2015 Environmental Impact Report (EIR) for the City of Palo Alto Recycled Water Project Which Evaluated the Environmental Impacts of the Proposed Project. Zone District: PF (D) (Public Facility with Site and Design Combining District). For More Information Contact the Project Planner, Claire Raybould, at Claire.Raybould@Cityofpaloalto.org.

RECOMMENDATION

Staff recommends the Planning and Transportation Commission (PTC) take the following action(s):

1. Recommend that City Council approve the draft Record of Land Use Action (RLUA) approving the request for Site and Design Review as well as the requested variance based on findings and subject to conditions of approval.

EXECUTIVE SUMMARY

The application is a request for Site and Design Review for a proposed local advanced water purification system (AWPS). The purpose of the project is to improve recycled water quality by reducing its average concentration of total dissolved solids (TDS) through the blending of reverse osmosis permeate with tertiary-treated recycled water. The project also includes a request for a variance to allow for a solid wall to provide screening and to serve as a sound barrier.

The project responds to Council's expressed goal, as set forth in the Recycled Water Salinity Reduction Policy adopted in 2010, to reduce the TDS level of recycled water to 600 parts per million. It also responds to mitigation measure HYD-3d set forth in the corresponding Environmental Impact Report adopted in 2015, which requires the City to consider treatment options, such as reverse osmosis, to reduce the salinity of its recycled water and thus make its recycled water useable for irrigation of salt-sensitive species.

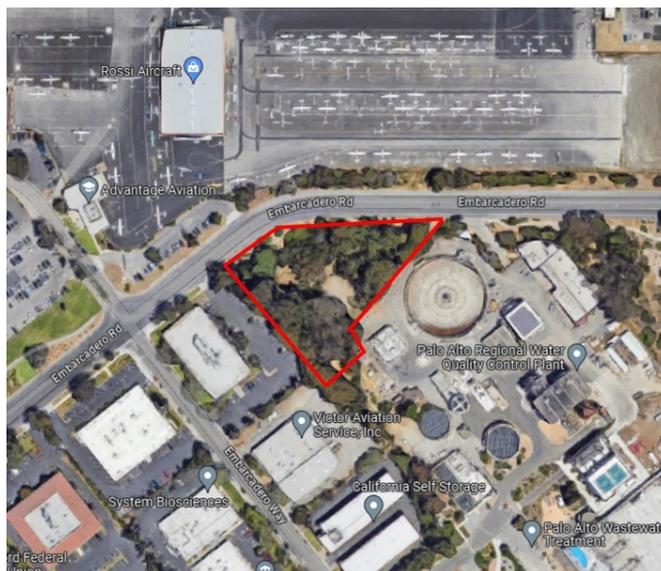
Following adoption of the EIR, the City coordinated with Valley Water and Mountain View to prepare a feasibility study and preliminary design report for a local advanced water purification system (AWPS), which was completed in 2017. The report was used as the basis for preparing preliminary plans for the proposed project. In 2019 the City Council approved an agreement with Valley Water to further the design of the project.

A location map for the proposed AWPS is included in Attachment A. A detailed project description is provided in Attachment D.

BACKGROUND

Adjacent Land Uses & Zoning:	North: Palo Alto Airport (PF Zoning)
	West: RWQCP (PF [D] Zoning)
	East: RWQCP (PF [D] Zoning)
	South: Office and Warehouse (ROLM [E][D][AD] and PC-3020)

Aerial View of Property:



Land Use Designation & Applicable Plans

Comp. Plan Designation: Major Institution/Special Facilities (MISP)

Zoning Designation: Public Facility (PF) with Site and Design Combining District (D)

	Yes		Yes		Yes
Baylands Master Plan/Guidelines (2008/2005)	<input checked="" type="checkbox"/>	El Camino Real Guidelines (1976)	<input type="checkbox"/>	Housing Development Project	<input type="checkbox"/>
Downtown Urban Design Guidelines (1993)	<input type="checkbox"/>	South El Camino Real Guidelines (2002)	<input type="checkbox"/>	Utilizes Chapter 18.24 - Objective Standards	<input type="checkbox"/>
Individual Review Guidelines (2005)	<input type="checkbox"/>	Within 150 feet of Residential Use or District	<input type="checkbox"/>	Context-Based Design Criteria applicable	<input type="checkbox"/>
SOFA Phase 1 (2000)	<input type="checkbox"/>	Within Airport Influence Area	<input checked="" type="checkbox"/>		<input type="checkbox"/>
SOFA Phase 2 (2003)	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Prior City Reviews & Action

City Council: See summary of Council actions below

PTC: None

HRB: None

ARB: The ARB provided feedback on the project November 2, 2023, in a public hearing. Key comments from the ARB are summarized below.

Previous Council Actions

In September 2015 the City of Palo Alto City Council certified an Environmental Impact Report (EIR) for the Palo Alto Recycled Water Project (SCH #2011062037). The EIR included Mitigation Measure HYD-3d, which requires the City to consider treatment options, such as reverse osmosis, to reduce the salinity of its recycled water and thus make its recycled water useable for irrigation of salt-sensitive species.

Since that time, staff has presented updates and components of this project to Council as follows:

- April 4, 2016, staff provided Council with an update on the recycled water EIR and collaboration work with Valley Water and Mountain View to expand the program and reduce TDS (CMR #6691).
- November 18, 2019 City Council approved Valley Water Agreement to move forward with the design of the Local AWPS. The EIR Addendum for the proposed AWPS was also adopted at this hearing (CMR #10627).

- March 8, 2021, Council approved design contract for the Local AWPS (CMR #11782)
- September 12, 2022 City Council held a study session to hear an update on, and discuss, the proposed project (CMR # 14650)
- The Parks and Recreation Commission (PRC) held two study sessions on May 24, 2022 and December 13, 2022 to provide feedback on the project. Their feedback focused on the landscaping component, path alignment and external screening. Commissioners were generally supportive of the proposed design at the study session in December.
- On September 19, 2023, the project was discussed at the Finance Committee with a recommendation to move forward with a Council recommendation (CMR#2305-1404).
- October 16, 2023, Council approved Staff to move forward with loan agreement and directed Staff to secure financing and solicit bids for a construction contract (CMR #2308-1863).

Architectural Review Board

On November 2, 2023 the Architectural Review Board held a hearing to provide feedback on the proposed project design. Key comments from board members included:

- A request for more information about the noise levels of proposed equipment
- Comments about the proposed lighting (better information on lighting levels and how it can be further reduced and/or shielded)
- A request for additional details relating to the design/materials of the perimeter wall
- More information about the facilities in the context of the surrounding RWQCP facilities (existing and other planned facilities)
- Interest in further information about the trees

PROJECT DESCRIPTION

A complete project description is included in Attachment D. In summary, the project consists of several structures and components, including:

- A reverse osmosis permeate storage tank.
- a small prefabricated electric building; and
- a pre-engineered open-air building.

The circular tank would be 50 ft in diameter with a sidewall height of 30 feet and a capacity of 350,000 gallons. It would be erected on a reinforced concrete mat type foundation supported by deep pile foundation. The open-air building covers a membrane filtration system, chemical storage/feed system components, and other ancillary components essential to the purification system. The facility would have a building footprint of approximately 15,544 sf. The open-air building will be constructed over a concrete deck in order to raise the equipment up out of the flood zone per FEMA requirements. The project will also include a blending station located in the basement of the RWQCP administration building and installation of yard piping inside the RWQCP. The project will be located on the northwest side of the RWQCP, abutting Embarcadero Road, partially outside the existing fence line but within the defined boundaries of the plant. The project also includes new landscaping, a new concrete screening wall, and

revisions to the chain link fence surrounding the RWQCP to incorporate the area of the new AWPS (which would be inside the screening wall).

Requested Entitlements, Findings and Purview:

The applicant requests the following discretionary application:

- **Site and Design Review:** The process for evaluating this type of application is set forth in PAMC 18.30(G). Site and Design applications are reviewed by the PTC and ARB, and recommendations are forward to the City Council for final action. Site and Design projects are evaluated against specific findings that include both the ARB findings (ARB purview) and Site and design findings (PTC purview). All findings must be made in the affirmative to approve the project. Failure to make any one of the findings requires project redesign or denial. Draft findings for PTC to approve a site and design application are provided in Attachment B.
- **Variance:** The process for evaluating this type of application is set forth in PAMC 18.76.030. Variance applications are reviewed by staff and recommendations are forwarded to the Director of Planning and Development Services for final action. Variance projects are evaluated against specific findings. All findings must be made in the affirmative to approve the project. Failure to make any one of the findings requires project redesign or denial. Draft findings for approval of the proposed variance are provided in Attachment B.

Although the applicant has requested a variance to permit a 10-foot tall fence, staff have also identified the Design Enhancement Exception as a possible mechanism to approve this feature in the event the PTC recommends that variance findings cannot be made. Design Enhancement Exceptions are not within the purview of the PTC; they are acted on by the Director following recommendation by the ARB.

ANALYSIS¹

Minor refinements to the plans are still anticipated to address feedback from various departments, and further modifications may be incorporated based on feedback through the public process. However, overall, the project is consistent with the Comprehensive Plan, Zoning Ordinance and other applicable goals and policies of the City.

Consistency with the Comprehensive Plan, Area Plans and Guidelines²

The Comprehensive Plan includes Goals, Policies, and Programs that guide the physical form of the City. The Comprehensive Plan provides the basis for the City's development regulations and is used by City staff to regulate building and development and make recommendations on projects. Further, ARB Finding #1 requires that the design be consistent and compatible with

¹ The information provided in this section is based on analysis prepared by the report author prior to the public hearing. Planning and Transportation Commission in its review of the administrative record and based on public testimony may reach a different conclusion from that presented in this report and may choose to take an alternative action from the recommended action.

²

applicable elements of the Palo Alto Comprehensive Plan. The Comprehensive Plan land use designation for the project site is major Institution/Special Facility which includes governmental and community service uses and lands that are publicly owned such as the subject property. The proposed AWPS within the area of the RWQCP boundaries is consistent with the Comprehensive Plan Land Use. Staff is still completing a thorough analysis of the project's consistency with the Comprehensive Plan. Generally, the project is consistent with several goals of the Comprehensive Plan, including Policy N-4.17 of the Natural Element, which states "Improve source control, treatment, and distribution of recycled water, including reducing the salinity of recycled water, to maximize its use."

Baylands Design Guidelines

The project is located within the Boundaries of the Baylands Nature Preserve. However, because it's within the RWQCP boundaries, it is not located on land that is dedicated as parkland. Nevertheless, the project is subject to the Baylands Design Guidelines. Generally, the project appears consistent with the guidelines to the extent that they are applicable. Based on feedback from the Architectural Review Board at a study session in November 2023, the project has been revised to improve consistency with the guidelines. Specifically, red roofs have been revised to match the standard Sandy Grey color that is recommended in the design guidelines, to comply with the "muted, natural colors" requirement set forth in the guidelines. Alternative options are also shown and will be provided as options to the ARB when the project returns to the board for a formal recommendation. The plans show the general location of interactive signage, but the details of the signage will be reviewed separately from the current application. Any future signage will be required to comply with the Baylands Design Guidelines.

Airport Influence Area

The project is located within the Airport Influence Area. Specifically, the Comprehensive Land Use Plan for the Palo Alto Airport shows that the project area, and all of the RWQCP, is within the Turning Safety Zone. In the Turning Safety Zone, typically lower density uses are encouraged. Hazardous materials uses such as gas stations are discouraged. The project includes some hazardous materials in relatively small quantities for the treatment of water, similar to the existing RWQCP. These materials are not combustible and do not pose a concern within the Turning Safety Zone. The project does not conflict with any height restrictions in the plan.

Zoning Code Compliance

The project is located within the Public Facilities (PF) Zone District as well as the Site and Design (D) Review combining district. The proposed facilities for the treatment of recycled water is considered a public facility and is an appropriate use within the PF zone district and especially within the boundaries of the existing Regional Water Quality Control Plant.

Because the project includes a new building within the Site and Design Review Combining District, Site and Design review is required. A detailed review of the proposed project's consistency with applicable zoning standards is provided in Attachment C. The project is consistent with the PF Zone District and D Combining District requirements or is otherwise requesting to deviate from the code in a manner that is consistent with the zoning ordinance.

More specifically, a variance is requested to allow for an approximately 10-foot-tall wall where an 8-foot-tall wall is allowed in accordance with Chapter 16.24 of the code. Draft findings for the approval of a variance are included in the Draft RLUA in Attachment B.

Title 8 Compliance

The proposed project includes the removal of 35 trees, 12 of which are protected due to their size. These trees are varying species of Eucalyptus, Myoporum laetum, and Casuarina glauca trees which are primarily non-native, invasive species. All of these are within the proposed project footprint. At the Parks and Recreation Commission's request, the project was refined in its early design phases (prior to formal application submittal) to prioritize retention of some of the larger trees along the Embarcadero frontage. The project refinements retained eleven additional trees. However, five of those trees have since died/fallen in storms. The project includes planting 36 trees along the project frontage along with other large and smaller shrubs to provide an attractive landscape buffer between the pedestrian pathway and the RWQCP as well as between the pedestrian path and Embarcadero Road.

Title 21 Subdivision Map Compliance

The existing property lines for the site do not follow the existing boundaries of the RWQCP. Therefore, under existing conditions the new facility would be constructed over an existing property line. A certificate of compliance is required to revise the boundary between the two City parcels (APN 008-05-005; and APN 008-06-001). The new proposed boundary is shown in the project plans. Recordation of the certificate of compliance is required as a condition of approval prior to building permit issuance.

FISCAL/RESOURCE IMPACT

Funding for the Local Salt Removal Facility is projected to come from several sources. Prior to allocation of the \$63.6 million total project cost for the Preliminary Finance Plan, external funding sources were subtracted from the total to reduce the overall cost to each agency. External funding sources include the \$16.3 million from the 2019 Agreement with Valley Water and a \$12.9 million US Bureau of Reclamation grant, leaving a remaining funding requirement of \$34.4 million which will be covered by Mountain View. Palo Alto currently has no plans to expand its existing recycled water system and Palo Alto does not currently have a customer base requesting this higher quality water. Therefore, Palo Alto and Mountain View staff agreed that Mountain View would pay the remainder of the capital costs associated with this project. Mountain View staff recommended this project and Mountain View's City Council approved it on June 27, 2023.

On September 19, 2023 the finance committee recommended that Council approve the Financing Plan for the project and authorize staff to amend the Recycled Water Agreement with the City of Mountain View. Council approved the financing plan on October 16, 2023.

STAKEHOLDER ENGAGEMENT

The Palo Alto Municipal Code requires notice of this public hearing be published in a local paper and mailed to owners and occupants of property within 600 feet of the subject property at least ten days in advance. Notice of a public hearing for this project was published in the Daily

Post on February 16, which is 12 days in advance of the meeting. Postcard mailing occurred on February 15, which is 13 days in advance of the meeting.

City Outreach and Coordination

The City's Public Works, Environmental Services Division has worked diligently on this project since Council's adoption of the EIR for the Recycled Water Program. In addition to the study sessions with Council and the PRC, as noted above, they held the following meetings to obtain stakeholder feedback throughout the process.

- Kickoff meeting for the feasibility study was held June 2016 with Mountain View and Valley Water. The City, in coordination with Valley Water and Mountain View, held workshops at 50% completion (September 2016), 80% completion (December 2016), and 95% completion (January 2017).
- Preliminary Design workshop with Mountain View and Valley Water (October 2017)
- Quarterly Joint Recycled Water Meetings with Palo Alto Council Members, Mountain View Council Members and Valley Water Board Members

- Palo Alto hosted a community meeting on October 23, 2019 to inform the community and answer questions about the components of the funding Agreement between Palo Alto, Valley Water, and Mountain View, including partial funding for the AWPS/Local Plant. Members of the public approached staff during break-out sessions to get direct answers to questions. Most comments were focused on the Agreement terms and were overall supportive of the AWPS facility. With respect to Palo Alto itself, the open meetings on the budget process serve as the main vehicle for engaging the community on both new projects such as this and associated rate impacts. EIR Addendum was covered in this session.
- 30% Design workshop December 2021, 60% Design workshop January 2022 and 90% design workshop November 2022. Valley Water and Mountain View staff attended these workshops
- September 19, 2023 – Finance Committee Meeting to discuss Local AWPS project. Committee approved and recommended moving forward. Public Comments As of the writing of this report, no project-related public comments were received.

Public Comments

There were no public comments at the ARB hearing on the proposed project. However, staff met with Midpeninsula Open Space to discuss the project on November 20, 2023. Midpeninsula Open Space provided the following key comments on the project:

- Consider egrets and herons in your planning. These nesting birds tend to return to the same nests year after year so the loss of trees with these nests can be impactful beyond the direct impact during nesting season if their nests are present in the trees planned for removal.

- Consider the trees being selected and whether any trees would serve as perching areas for raptors that may impact adjacent wetland areas.
- Consider additional measures to better protect from spread of invasive species, especially species such as eucalyptus, when removing. Protect from plant pathogens (e.g. those that cause sudden oak tree death).
- Make sure that the plant species being planted in the landscaping are appropriate for the environment in the baylands

The trees proposed for removal do not have any egret or heron nests that these species may return to. In clarifying the location of the proposed tree plantings, staff and Midpeninsula open space agreed that trees in this location would not pose a concern for raptor predation. Midpen has agreed to send a list of standard best management practices to protect from the spread of invasive species that the city can review and incorporate as applicable. The planting plan was designed to include native, low water use species appropriate for planting in the baylands. The planting plan is shown on sheet L-00-200 and L-00-201 of the plans.

ENVIRONMENTAL REVIEW

The subject project has been assessed in accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the environmental regulations of the City. In 2015 Council adopted an EIR for the City of Palo Alto Recycled Water Project. The EIR included mitigation Measure MM HYD-3d, which required the City to consider treatment options, such as reverse osmosis, to reduce the salinity of its recycled water and thus make its recycled water useable for irrigation of salt-sensitive species. On November 18, 2019, in taking discretionary actions to further pursue this project, council adopted an EIR addendum that included more site-specific details associated with the proposed development. The adopted CEQA addendum is included in Attachment E.

ALTERNATIVE ACTIONS

In addition to the recommended action, the PTC may:

1. Approve the project with modified findings or conditions; or
2. Continue the project to a date (un)certain;

ATTACHMENTS

Attachment A: Location Map

Attachment B: Draft Record of Land Use Action

Attachment C: Zoning Consistency Analysis

Attachment D: Project Description

Attachment E: Project Plans and CEQA Addendum

AUTHOR/TITLE:

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