

DATE: February 14, 2024

TO: Urban Forestry Board

FROM: Ariel Morales, Senior Civil Engineer
Tina Tseng, Principal Civil Engineer
Lisa Au, Assistant Public Works Director

VIA: Edward Arango, Acting Public Works Director

SUBJECT: Downtown Utility Improvements, Project 22-41—Phase 1

RECOMMENDATION

Review the proposed Heritage tree mitigation for Phase 1 of the Downtown Utility Improvements, Project 22-41, and forward a recommendation to the City Council to approve the mitigation of one (1) Heritage tree at a 2:1 tree replacement ratio with the planting of two (2) 24" box trees near the removal area.

BACKGROUND

On [June 9, 2020](#), the City Council authorized the City Manager to execute a Cooperative Agreement with the Peninsula Corridor Joint Powers Board (Caltrain) and the Santa Clara Valley Transportation Authority (VTA) for final design of the Mountain View Transit Center Grade Separation and Access Project, now known as the Castro Street Grade Separation Project. The grade separation project includes closing the Castro Street crossing of the Caltrain tracks, building a pedestrian/bicycle undercrossing of the rail corridor and Central Expressway, and constructing a ramp to Shoreline Boulevard from Evelyn Avenue with a new pedestrian/bicycle path along Evelyn Avenue connecting to the west side of Shoreline Boulevard under the overpass. More information about the project can be found at [Castro Grade Separation and Access Project](#).

Impacted City utilities within the grade separation project footprint will need to be relocated to facilitate the project construction. Completing the utility work prior to the grade separation construction will minimize disruption of water services to the community and avoid delays to the grade separation project.

Downtown Utility Improvements, Project 22-41, was scoped to relocate City utilities within the footprint for the entire Castro Street Grade Separation project under the assumption that the project elements in the Castro/Train Tracks/Central Expressway area and the Evelyn Avenue

ramp and pedestrian/bicycle improvements will be built concurrently. However, due to significant increases in estimated costs, on [January 23, 2024](#), Council directed staff to reduce the grade separation project scope to the core bike/pedestrian undercrossing improvements and defer the Evelyn Avenue ramp and other pedestrian/bicycle improvements as future separate City projects. The City Council also supported staff's recommendation to proceed with relocating the City's utility out of the Central Expressway/Moffett Boulevard intersection to avoid continued cost escalation. Therefore, the Downtown Utility Improvements is also being divided into phases.

Phase 1 will relocate a water transmission main within the Central Expressway/Moffett Boulevard intersection and West Evelyn Avenue just west of Castro Street (see Figure 1).

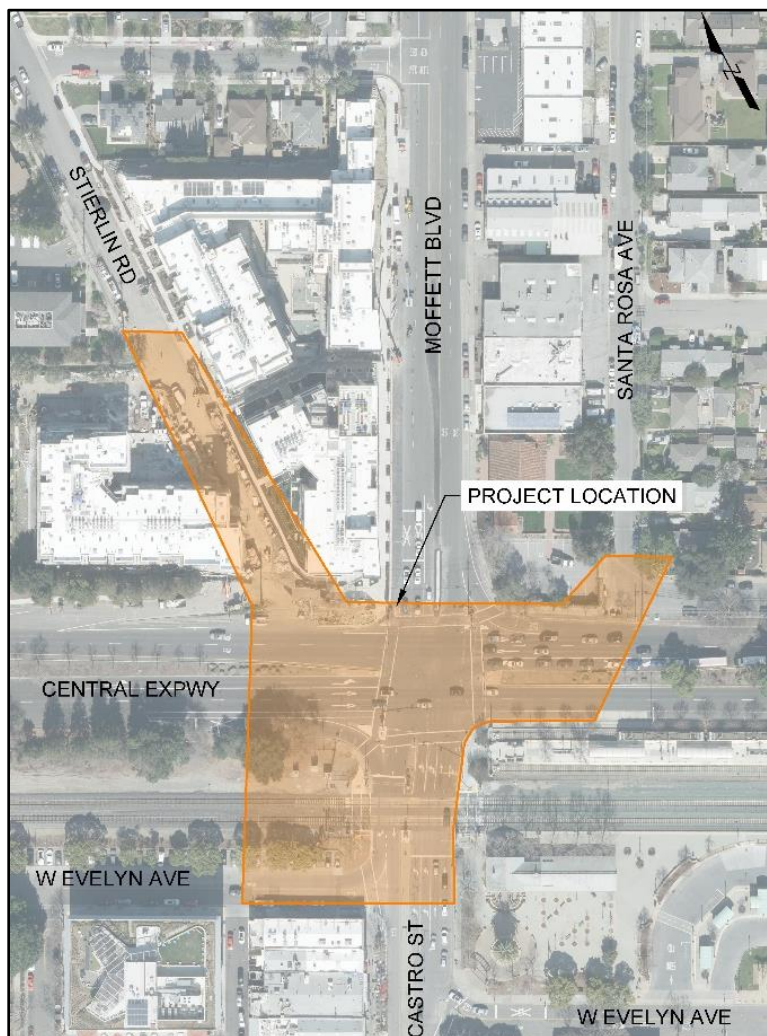


Figure 1: Castro Street Grade Separation Footprint

Phase 2 will relocate water, sewer, and storm drain mains on Evelyn Avenue west of Franklin Street for the Evelyn Avenue ramp and pedestrian/bicycle path. Staff will return to the Parks and Recreation Commission (PRC) with the tree impacts of Phase 2 and proposed mitigation when this element of the grade separation project is ready to proceed.

Phase 1 Utility Project Description and Tree Removal

Phase 1 of the Downtown Utility Improvements, Project 22-41 (Utility Project), will relocate an existing water transmission main which is within the Central Expressway/Moffett Boulevard intersection (see Figure 2). This utility relocation is essential to facilitate the construction of the proposed pedestrian tunnels which are in direct conflict with the existing main and to maintain water service. In addition to supporting the grade separation project, the new transmission main is designed to meet the City’s projected future growth and increase in water demand.

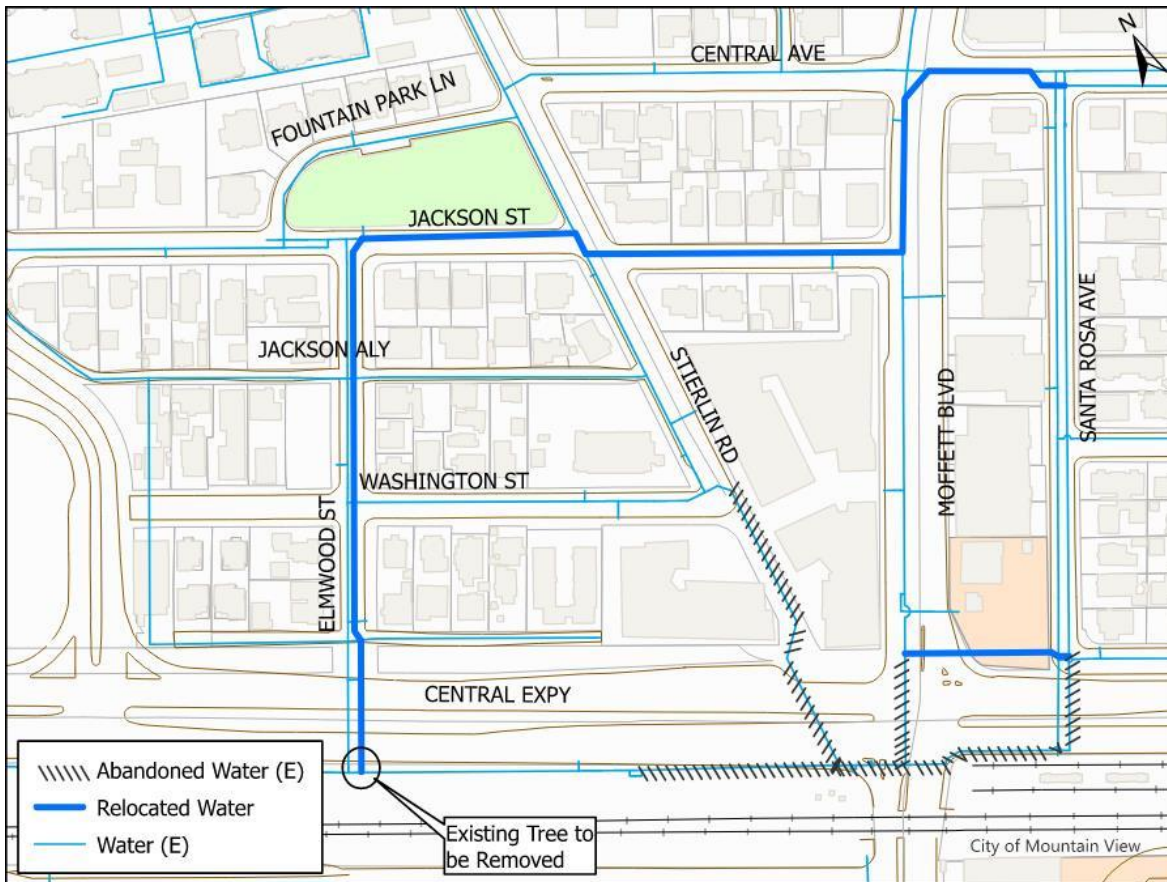


Figure 2: Phase 1—Water Transmission Main Relocation Alignment

The Phase 1 Utility Project will require removal of one (1) Heritage tree on Central Expressway and Elmwood Street, adjacent to the Caltrain right-of-way (Figure 2). Staff requests that the Urban Forestry Board (UFB) provide a recommendation to the City Council for the number, size,

and location of replacement trees, which is the focus of the UFB’s purview, as defined in the following Municipal Code Section 32.33, City Capital Improvement Projects:

“City capital improvement projects which propose the removal of any heritage tree shall be submitted by the city project staff to the city’s arborist for review and recommendation of appropriate mitigation measures. The arborist’s recommendations shall be forwarded by city project staff to the urban forestry board for their recommendation on the number, size, and location of replacement trees. The recommendation of the urban forestry board shall be forwarded by city project staff to the city council for their consideration with the approval of the project.”

ANALYSIS

In November 2023, an arborist from Woodreeve Consulting, LLC (Woodreeve), evaluated and identified the impacted tree as a Chinese elm with Heritage status (Figure 3 and Attachment 1).



Figure 3: Impacted Heritage Tree—Chinese Elm on Central Expressway, South View

Woodreeve also assessed the tree for potential transplanting. Key factors considered to ensure the success and health after transplanting include the following:

- Species and Age Suitability: Different tree species have varying degrees of transplant success.
- Size and Health: Smaller and healthy trees transplant more successfully.
- Root Ball Size: Some trees are intolerant of significant root loss and disturbance.
- Characteristics of New Site: Transplant location must be conducive to tree's needs.

The City's Urban Forest Supervisor reviewed Woodreeve's findings and conducted a follow-up site visit. After careful consideration, staff recommends replacement over transplant for the impacted Chinese elm for the following reasons:

- The excavation required to complete the utility work will result in excessive root loss resulting in a structurally compromised tree with increased risk of tree failure or death.
- The impacted tree, with a large size exceeding 10" in diameter, poses challenges for transplanting. Larger trees in this magnitude are likely to have more extensive root systems and require a larger root ball to preserve. The impacted tree is near aboveground and underground utilities, limiting the ability to capture a sufficient portion of the large root ball and making successful transplantation unlikely.
- The impacted tree has poor structural branch taper and has experienced the loss of multiple large limbs throughout the canopy, and this has created decay pockets. New trees, once established and matured, will develop a more stable canopy structure.

Native oak trees will adapt better to local environmental conditions over time, and their long-term development is expected to eventually surpass the existing canopy of the Chinese elm. Therefore, staff recommends mitigation for the non-California native Heritage tree at a 2:1 tree replacement ratio with two (2) 24" box Coast live oak (*Quercus agrifolia*, California native) near the removal location but away from the City's utilities (Figure 4). Tree plantings and necessary irrigation lines will be installed as part of the Utility Project.

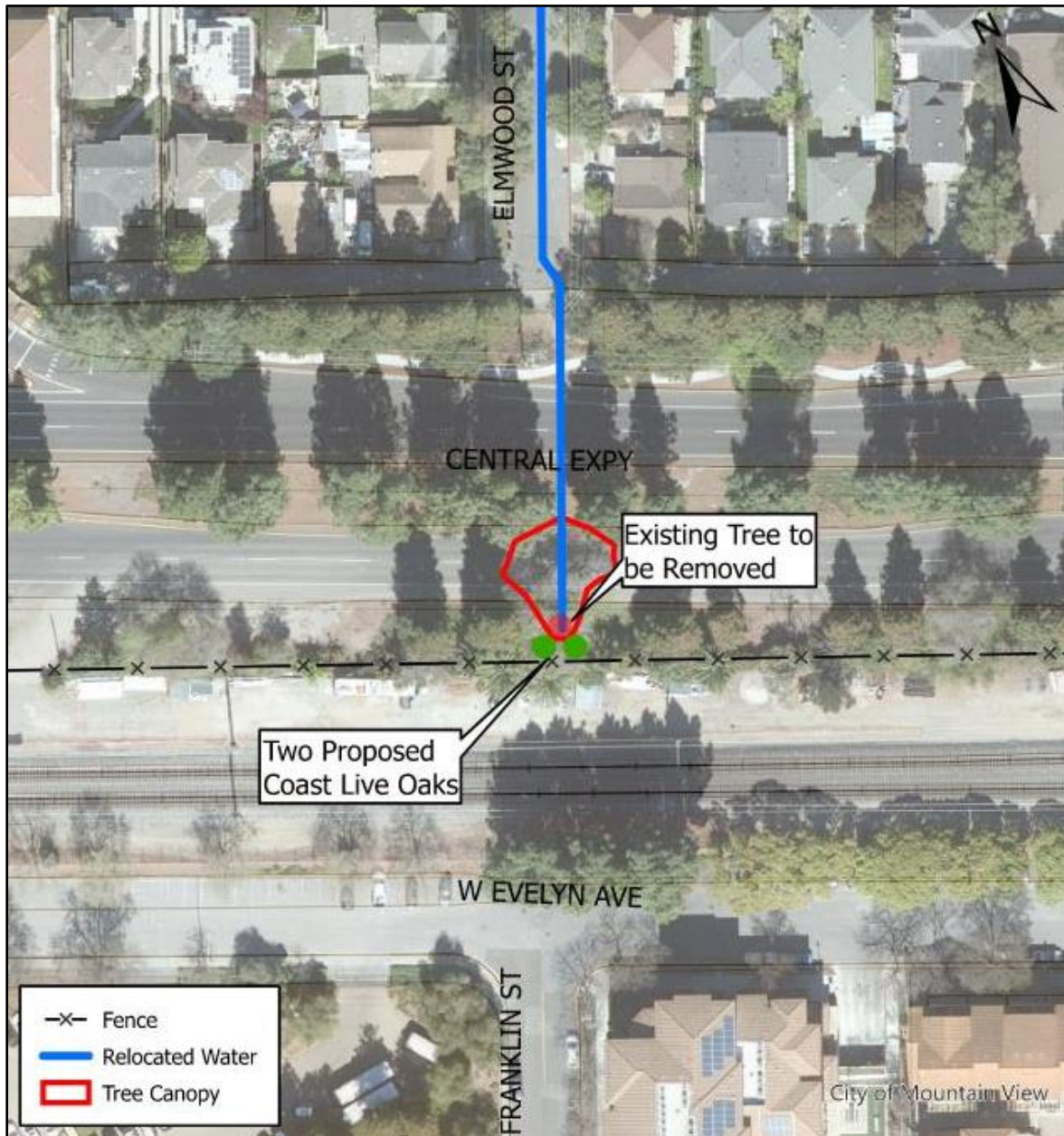


Figure 4: Heritage Removal and Replanting Plan

FISCAL IMPACT

Downtown Utility Improvements, Project 22-41, is funded with \$549,000 from the Transportation Reserve Fund, \$6,361,000 from the Construction and Conveyance Tax, \$2,725,000 from the Water Fund, \$2,052,000 from the Wastewater Fund, and \$673,000 from the Wastewater Development Impact Fee Fund for a total budget of \$12,360,000. There are sufficient funds for the recommended tree mitigation.

PUBLIC NOTICING

In addition to the standard agenda posting, staff posted a notice on the tree identifying it for removal and provided information for attending this UFB meeting. Notices were mailed to occupants and property owners within 750' of Central Expressway, adjacent to the project site.

AM-TT-LA/AF/6/CSD

224-02-14-24M

203888

Attachment: 1. Tree Assessment (Tree No. 271)

cc: PWD, APWD—Au, FC, PCE—Tseng, SCE—Morales, F/c