



DATE: May 5, 2025

TO: Honorable Mayor and Members of the City Council through City Manager

FROM: Steve Worrell, PE – Deputy Director of Environmental Services, Water Resources & Utilities Department
Patrick Carter, Assistant to the City Manager
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SUBJECT: Resolution Accepting Completion of the Seismic Analysis City Facilities Assessment Project (E11202345)

RECOMMENDATION

It is recommended that the City Council adopt a Resolution Accepting Completion of the Seismic Analysis City Facilities Assessment Project (E11202345).

BACKGROUND

The Seismic Analysis City Facilities Assessment project (E11202345) was initiated to evaluate and prioritize seismic retrofit needs across City-owned buildings and drinking water infrastructure. These assets are essential to maintaining public safety and service continuity during and after a major earthquake. The project's primary objective was to identify structural and geotechnical vulnerabilities, assess existing conditions, and provide conceptual recommendations that would serve as a foundation for future resilience-focused capital planning.

Funding for this project was primarily provided through a Community Development Block Grant–Mitigation Planning & Public Services (CDBG MIT-PPS) from the U.S. Department of Housing and Urban Development (HUD), under which the City of Petaluma is a subrecipient. The grant agreement was executed on October 3, 2022, and specifically supports seismic evaluations of existing City-owned facilities to inform long-term infrastructure investment.

DISCUSSION

To carry out the Seismic Analysis City Facilities Assessment project, the City issued a Request for Proposals (RFP) and entered into professional services agreements with two consultants: ZFA Structural Engineers, selected to assess City buildings, and InfraTerra, Inc., chosen to evaluate

drinking water facilities and pipelines due to their respective technical expertise. The project officially launched in July 2024.

Over the course of the project, the scope was expanded to include additional facilities and more detailed retrofit planning and cost estimation. Specifically, ZFA’s contract was amended to incorporate the Keller Street Parking Garage and the Police Department Storage Building, and to provide expanded analysis for City Hall, the Petaluma Historical Library & Museum, and the Transit Center. Similarly, InfraTerra’s scope was amended to include La Cresta Tanks 1 and 2, which were originally excluded due to their anticipated replacement under a separate capital project. That project was ultimately deferred to take advantage of the opportunity to have the specialized consultant team assess the tanks as part of this seismic evaluation.

As a result of these changes, the total project cost increased from the original \$499,000 grant-funded amount to approximately \$544,000. The additional costs will be covered by the City’s Water and Wastewater Enterprise Funds, which are appropriate funding sources given the expansive project scope associated with drinking water storage tanks, pump stations, and production wells.

Facility selection was informed by engagement with City staff, facility managers, and departmental representatives, and prioritized facilities based on age, location near fault lines, and operational importance. The final scope included 14 City facilities and 20 drinking water infrastructure sites (listed in the tables below).

City Buildings
Harbormaster’s Building
City Hall
Corporation Yard
Fire Station 2
Fire Station 3
Police Station
Police Station Storage Bldg.
Water Field Office
Community Center
Senior Center
Teen Center
Transit Center
Petaluma Museum
Keller Street Parking Garage

Drinking Water Infrastructure Sites	
Facility Name	Facility Type
Washington Tank 1	Water Storage Tank
Washington Tank 2	Water Storage Tank
La Cresta Tank 1	Water Storage Tank
La Cresta Tank 2	Water Storage Tank
Country Club Tank	Water Storage Tank
Mountain View (Purrington) Tank	Water Storage Tank
Corona-Ely Booster	Pump Station
McNear Booster	Pump Station
Frates-Ely Booster	Pump Station
La Tercera Well	Production Well
McDowell Well	Production Well
Frates Well	Production Well
Cross Creek Well	Production Well
Prince Park South WL	Production Well
Prince Park North WL	Production Well

Park Place Well	Production Well
Station 9 Well	Production Well
Willow Brook Well	Production Well
Stony Point Well	Production Well
Lucchesi Well	Production Well

The project began with a review of historical record drawings and previous reports, followed by engagement meetings with City staff and facility operators. These conversations provided insight into building history, known concerns, and operational needs during a seismic emergency and during the subsequent recovery, which helped inform each consultant's approach to the evaluations.

Consultants conducted site visits and visual inspections to assess current conditions and identify potential vulnerabilities. ZFA applied ASCE 41-17 standards to evaluate structural performance, assigning risk categories and performance objectives based on each building's role in emergency response. ASCE 41-17 is a guidance document prepared by the American Society of Civil Engineers (ASCE) for use in evaluating existing buildings for seismic performance and is used to standardize the evaluation methodology. The findings will help the City better understand which facilities to prioritize with future seismic improvements.

The primary deliverable from each consultant is a comprehensive seismic evaluation report documenting the condition of each facility, with general recommendations for improving resilience. The evaluations provide a clearer understanding of how key City buildings and water infrastructure are likely to perform during an earthquake.

Overall, the buildings and water infrastructure were found to be in functional condition for day-to-day use, but many showed potential vulnerabilities that could impact their performance during a significant seismic event. Some of the City's most critical facilities — including fire stations, City Hall, the Police Station, and some water storage tanks and pipelines — were flagged for potential structural or geotechnical weaknesses. These issues do not pose immediate safety concerns under normal conditions but could limit the buildings' ability to remain operational or safe following a major earthquake.

The report recommends a range of improvements to strengthen structural systems and improve seismic resilience. The consultant recommendations are conceptual and include preliminary cost estimates for various retrofit options. These findings will support long-term planning and help the City prioritize future investments through the Capital Improvement Program (CIP).

It is important to note that the resolution associated with this item pertains only to the completion of the feasibility and evaluation phase of the project, a step necessary for CDBG grant compliance. It does not commit the City to undertake any specific retrofits or construction work at this time. Any decisions to proceed with design or construction will return to Council as part of the CIP or other funding pathways and will be subject to further review, including CEQA compliance where applicable.

The project was completed in April 2025, with no outstanding issues or claims. Acceptance of the completed work is required for grant closeout under the terms of the CDBG-DR program.

PUBLIC OUTREACH

The RFP for professional consulting services was publicly advertised in the Argus-Courier on March 22 and March 29, 2024, in accordance with the City's standard procurement procedures.

Because this project focused on planning and feasibility and did not involve construction, no formal community outreach was conducted during the evaluation phase. However, should any future retrofit or construction projects be initiated based on the findings of this assessment, appropriate community engagement and outreach will be conducted to inform stakeholders of potential impacts and timelines.

This agenda item appeared on the City's tentative agenda document on April 21, 2025 which was a publicly noticed meeting.

COUNCIL GOAL ALIGNMENT

The Capital Improvement Program serves as a comprehensive catalog of community needs. Each year, the Council adopts a budget for the fiscal year that allocates funds and resources to priority projects. The Seismic Analysis City Facilities Assessment project (E11202345) is included in the FY2024-2025 Adopted Budget under CIP-22. The full FY2024-2025 Adopted Operating and Capital Improvement Program Budget can be found here: <https://cityofpetaluma.org/documents/fiscal-year-2025-adopted-budget/>.

CLIMATE ACTION/SUSTAINABILITY EFFORTS

This project does not have a direct impact on greenhouse gas emissions or climate mitigation goals. However, by evaluating the seismic resilience of critical City buildings and water infrastructure, the project supports broader efforts to improve the safety and reliability of essential public facilities in the event of a natural disaster.

Ensuring that these facilities can continue operating during and after a major earthquake contributes to the City's ability to respond to emergencies, including those that may be compounded by climate-related events. Future retrofit or reconstruction projects informed by this evaluation may also present opportunities to incorporate energy efficiency, electrification, or other sustainability measures during design and implementation.

ENVIRONMENTAL REVIEW

This project involved professional consulting services to evaluate the seismic safety of selected City buildings and critical utility infrastructure. As it included no construction or physical improvements, it does not constitute a "project" under CEQA (CEQA Guidelines §15378(b)(5)). In addition, planning and feasibility studies for potential future actions are exempt under CEQA

Guidelines §15262. Therefore, no environmental review was required. However, any future projects due to the seismic assessments will have their own analysis under CEQA.

FINANCIAL IMPACTS

The Seismic Analysis of City Facilities Assessment Project (E11202345) was primarily funded through a \$499,000 Community Development Block Grant–Disaster Recovery (CDBG-DR) from the U.S. Department of Housing and Urban Development, administered by the California Department of Housing and Community Development.

During the course of the project, the scope of work was expanded to include additional sites and more detailed evaluation and planning services. As a result, the total project cost increased to approximately \$544,000.

The portion of the project cost that exceeds the grant amount will be funded through the City's Water and Wastewater Enterprise Funds. These funds are an appropriate source given that a significant component of the project involved the assessment of water storage tanks, pump stations, and production wells that are part of the City's water and wastewater infrastructure.

There is no impact to the City's General Fund, and sufficient funds are available to cover all project costs.

ALTERNATIVES

The consultants have satisfactorily completed the project, and adoption of a resolution accepting completion is necessary to meet the grantor's closeout requirements. Failure to adopt the resolution could put the City at risk of noncompliance with the grant conditions and may jeopardize full reimbursement.

ATTACHMENTS

1. Resolution