

DATE: February 18, 2025

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Adopt a Resolution Approving Plans and Specifications, and Call for Bids for the Tennyson Road and Winton Avenue Signal Coordination Project, Project No. 05342

RECOMMENDATION

That the City Council adopts a resolution (Attachment II) approving the plans, specifications, and call for bids to be received on March 6, 2025 for the construction of the Tennyson Road and Winton Avenue Signal Coordination Project No. 05342.

SUMMARY

The construction documents are completed, and staff seeks City Council approval of the plans and specifications and to proceed to the call for bids.

BACKGROUND

In August of 2023, City staff applied for Transportation Fund for Clean Air (TFCA) funding for an amount of \$515,000 with a local contribution of \$297,000 for a total of \$812,000. The project scope includes adaptive signal control systems, fiber communications, and video detection technology on Winton Avenue/D Street from Santa Clara Street to Atherton Street and Tennyson Road from Sleepy Hollow Road to Dixon Street. This project, along with the TFCA 2023-24 program, was recommended and approved by the Alameda County Transportation Commission (Alameda CTC) on December 7, 2023. On December 12, 2023¹, City Council adopted a resolution to execute a funding agreement between the City and Alameda CTC.

DISCUSSION

The project includes the installation of an adaptive signal timing system on both the Winton Avenue/D Street and Tennyson Road Corridors. Adaptive signal timing optimizes

¹https://hayward.legistar.com/LegislationDetail.aspx?ID=6448361&GUID=B59E9DC5-130D-4037-A00A-4440CF1CD42E&Options=&Search=

traffic signal timing dynamically in response to variations in traffic volume. Most traffic signals without adaptive timing need to have timing plans manually set, requiring additional staff and maintenance costs. Optimized timing plans reduce congestion, pollution, and greenhouse gas emissions.

Adaptive timing system requires up-to-date infrastructure to run optimally. The project includes infrastructure improvements necessary for the adaptive timing system to function. This includes fiber optic communications that connect traffic signals back to city hall, video detection cameras at key intersections to accurately determine the real-time traffic volume, and new controllers inside the traffic signal cabinets.

Implementation of this project has been done incrementally, with several project elements implemented by staff or using existing contracts. The scope of work in the construction documents referenced in this staff report is for construction of the fiber optic system on Winton Road only, including an optional task for additional fiber work at Winton Avenue and D Street. Other work that is part of this project, but is being implemented through staff or existing contracts, includes video detection and signal controllers for both Tennyson Road and Winton Avenue intersections. All other work will be completed before implementing adaptive timing on the two corridors.

ECONOMIC IMPACT

Residents, employers, and employees in the City will benefit from the funding received through safety benefits and travel time reductions from the dynamically optimized signal timing. A more orderly and controlled coordination of traffic reduces the risk of collisions, which can have a significant societal and economic cost. Excessive congestion negatively affects mobility, job growth, and worker productivity. Reducing congestion will aid in maintaining the region's economic competitiveness, while also reducing pollution and greenhouse gas emissions, which are related to negative health and environmental consequences.

STRATEGIC ROADMAP

This agenda item supports the Strategic Priority of Confront Climate Crisis & Champion Environmental Justice. This item specifically relates to the following Project:

Project C1: Implement Year 1 Programs from adopted GHG Roadmap (Climate Action Plan)

FISCAL IMPACT

There is no impact on the General Fund. The main portion of the funding for this project is associated with TFCA grant funding Project No. 05342, and will use Measure BB Local Transportation Fund 212, and Transportation System Improvement Fund 460. Separate work under this project will also be billed to Project No. 05187, Fund 210. The estimated project costs are as follows:

	Fund Source	Estimated Costs
Construction	212 & 460	\$177,700
Construction Contingency	212 & 460	\$44,300
Winton Avenue & D Street	210	\$48,700
Construction (Optional)		
Winton Avenue & D Street	210	\$12,100
Construction Contingency		
(Optional)		
	Total	\$283,000

SUSTAINABILITY FEATURES

This construction will result in upgrades to the fiber optic communication system for the traffic signals on the Winton Avenue/D Street corridor, which will allow the implementation of an adaptive signal timing system. These actions are aligned with the adopted Climate Action Plan, as the adaptive timing system will help reduce greenhouse gas emissions by reducing vehicle idle times.

PUBLIC CONTACT

No public contract has been made related to this agenda item.

NEXT STEPS

Approval of plans and specifications would allow staff to release a call for bids on March 6, 2025. Staff will then select a contractor and return to City Council with the recommendation for award of the construction contract. Construction would start in early April and would last about a month.

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Recommended by: Alex Ameri, Director of Public Works

Approved by:

Vallee

Dr. Ana M. Alvarez, City Manager