



Administrative Report

H.7., File # 24-1126

Meeting Date: 7/9/2024

To: MAYOR AND CITY COUNCIL
From: ANDREW WINJE, PUBLIC WORKS DIRECTOR

TITLE

APPROVE PLANS AND SPECIFICATIONS FOR THE ARTESIA BOULEVARD SAFETY IMPROVEMENTS PROJECT, JOB NO. 41330, AND AUTHORIZE THE CITY CLERK TO ADVERTISE THE PROJECT FOR COMPETITIVE BIDDING

EXECUTIVE SUMMARY

The Artesia Boulevard Safety Improvements Project, Job No. 41330, (Project) is part of the City's Capital Improvement Program (CIP) budget and includes traffic signal upgrades at seven signalized intersections along Artesia Boulevard. The Project will replace outdated traffic signal equipment such as signal controllers, video detection systems, left-turn signals, pedestrian push buttons, street name signs, street lights, signal backplates, and pedestrian signal heads. Adding flashing yellow arrow (FYA), left-turn signal heads will allow for flexibility to program specific left-turn phasing schemes to improve safety and new signal controllers will allow for the installation of pedestrian leading intervals (LPI) at the intersections. The Project will also modify the median at Artesia Boulevard and Rindge Lane to improve left-turn visibility.

Plans and specifications for this Project have been prepared and are now ready to be advertised for competitive bidding. The plans and specifications are available for review in the Plans and Specifications Review Area located behind the Engineering Services Division counter at City Hall.

BACKGROUND

The scope of the project includes the work needed to perform upgrades at the following intersections along Aviation Boulevard:

- Artesia/Aviation Way
- Artesia/Green
- Artesia/Rindge
- Artesia/Slauson
- Artesia/Vail
- Artesia/Mackay
- Artesia/Felton

In 2022, AGA Engineers was contracted to provide conceptual design services and traffic analyses for the Project. In 2023 and 2024, construction plans, specifications, and estimates were prepared to address community concerns regarding traffic safety along the corridor, as well as to replace outdated and failing signal equipment. City staff coordinated with Los Angeles (LA) County on

specific signal equipment needs for the corridor, since LA County is responsible for the traffic signal timing along Artesia Boulevard.

At each intersection, the following upgrades will be performed:

- Replace aging signal controllers and conflict monitors with current LA County standard
- Replace aging and unreliable video detection systems
- Rewire traffic signal cabinets
- Replace older protected-permissive 5-section left-turn signal heads with modern 4-section FYA left-turn signal heads
- Replace all internally illuminated street name signs and traffic signal street lights.
- Replace existing U-turn signage
- Replace outdated pedestrian signal heads and push buttons with modern standards
- Add yellow retroreflective tape to all existing signal heads per current practice

At the intersection of Artesia Boulevard and Aviation Way, smaller 8-inch diameter signal heads will be replaced with 12-inch diameter signal heads, which are the current standard.

Additionally, at Artesia Boulevard and Rindge Lane, the Artesia Boulevard left-turn medians will be reduced in width to shift the left-turn lanes to the left, which improves sight lines and left-turn safety. New bicycle detection feedback lights will be added to face the Rindge Lane approaches to provide confirmation of detection for micromobility devices. This will help address red light running and sidewalk riding by micromobility users who may think they aren't recognized by the traffic signal. A striped bulbout will be added to the northeast corner to reduce pedestrian crossing distances and to reduce conflicts between westbound right-turns and the east leg crosswalk.

These upgrades will help address safety issues along the Artesia corridor by allowing the City and LA County to implement FYA operations and leading pedestrian intervals (LPIs) at each intersection. LPIs give a head start for pedestrians to reduce conflicts between turning vehicles and people crossing the street. In addition, FYAs allow the City and County to program time-of-day or demand-based functions. Where appropriate, (yielding) left-turns would be prohibited during heavier traffic times, and left-turns would be only allowed on a protected left arrow. This reduces conflicts between left-turning drivers, opposing through traffic, and pedestrians in the crosswalk.

The current cost estimate to construct this Project is approximately \$705,000. Funding for the Project is available in the following CIP projects, the Artesia Blvd Intersection Safety Improvements Project, the Artesia Blvd Improvements (Traffic Signal Head Replacement) Project, and the Traffic Signal Repair and Improvements Project. This single set of plans addresses the scope and objectives of all three of these CIP projects for Artesia Boulevard. Therefore, funding is expected to be available under the specified CIP projects to construct the Project. Staff anticipates advertising the Project in July 2024 with a construction award in September 2024. Construction is anticipated to begin in October 2024 and is estimated to take approximately 6-8 months to complete due to long lead times on traffic signal controllers and other equipment, however, non-signal related work, such as median modifications at Artesia/Rindge, can be completed sooner.

COORDINATION

The development of Project plans and specifications was coordinated by the Public Works Department, Engineering Services Division. Design requirements were also coordinated with LA

County Department of Public Works.

FISCAL IMPACT

The Project's estimated cost, including a 10% contingency, is \$705,000. The Project budget is funded through the current Capital Improvement Program as detailed in the table below.

<u>Funding</u>		<u>Estimated Expenditures</u>	
Artesia Blvd Intersection Safety Improvements Project #41330	\$ 286,297	Construction Cost	\$ 641,000
Artesia Blvd Improvements (Traffic Signal Head Replacement) #41080	\$ 158,858	Contingency (10%)	<u>\$ 64,000</u>
Traffic Signal Repair and Improvements #41200	<u>\$ 259,845</u>		
Total	\$ 705,000	Total	\$ 705,000

APPROVED BY:

Mike Witzansky, City Manager

ATTACHMENTS

- Map - Project Location Map