



CITY OF NOVI CITY COUNCIL
SEPTEMBER 30, 2024

SUBJECT: Approval to award Great Lakes Power and Lighting the Fire Station #4 LED lighting replacement project in the amount of \$37,986.

SUBMITTING DEPARTMENT: Integrated Solutions, Facilities Management Division

KEY HIGHLIGHTS:

- Upgrading 239 lighting units from fluorescent/incandescent to LED.
- Retro-fitting most fixtures to accept new bulbs.
- Estimated operating savings of \$5,204.44 per 100 fixtures annually.
- Estimated energy savings of 47,304 kWh per 100 fixtures annually.
- Reduction of energy usage at Fire Station #4 by 25% - 35% on average.

FINANCIAL IMPACT

	FY 24/25	Total
EXPENDITURE REQUIRED	\$ 37,985.75	\$ 37,985.75
BUDGET		
<u>General Fund</u>		
1. LED Light Upgrade Fire Station #4 (101-265.00-976.119)	\$ 38,500	\$ 38,500
APPROPRIATION REQUIRED	\$ 0	\$ 0
FUND BALANCE IMPACT	\$ 0	\$ 0
• Total cost includes all wiring, bulbs, conduit, fittings, and labor. • This item is \$514 under budget		

BACKGROUND INFORMATION:

Fire Station #4 currently consists of 239 units in the training center, garage bays, and workspaces that contain fluorescent and incandescent lights. The current lights are not energy efficient and often burn out, leading to continuous replacements and increased costs. This project would replace the existing bulbs and fixtures with energy-efficient LED bulbs. Most fixtures will remain and be retrofitted to accept the new bulbs. Sixteen fixtures and eight track heads must be replaced since they can't be retrofitted. The operating impact of this project would be lower utility costs for Fire Station #4 with a reduction in electricity usage, increased efficiency, and improved longevity. Estimated operating savings converting to LED is \$5,204.44 per 100 fixtures annually, and estimated energy savings is 47,304 kWh per 100 fixtures annually. Overall, switching to LED lighting will reduce energy usage at Fire Station #4 by 25%-35% on average. The total cost includes all wiring, bulbs, conduits, fittings, and labor.

Fluorescent Operation (100 fixtures w/2 tubes per fixture)

Annual Energy Consumption: 75,336 kWh

Annual Operating Costs: \$8,286.96

LED Operation (100 fixtures w/2 tubes per fixture)

Annual Energy Consumption: 28,032 kWh

Annual Operating Costs: \$3,082.52

RECOMMENDED ACTION: Approval to award Great Lakes Power and Lighting the Fire Station #4 LED lighting replacement project in the amount of \$37,986.