

**City of Alexandria, Virginia
 FY 2024 Proposed Operating Budget & CIP
 Budget Questions & Answers**

April 6, 2023

Question: Can staff estimate the cost of installing along Mount Vernon Avenue between Uhler Avenue and Windsor Avenue solar-powered street lighting/lamps to increase visibility and pedestrian safety?

Response:

The budgetary cost estimate to install solar streetlights along the east side of Mount Vernon Avenue between E. Windsor Avenue and E. Uhler Avenue is approximately \$505,000. There are no streetlights on the east side of the street, and Dominion Energy owns the streetlights on the west side; removing and replacing the existing Dominion lights would need to be evaluated in consultation with Dominion and would significantly increase the cost of the project.

The estimate below only includes the streetlight installation on the east side and does not consider the feasibility of the project, including whether there are trees that may need to be removed or trimmed to allow sunlight to reach the solar cells. Once installed, the City would maintain these lights, which would require additional budget. Staff estimates maintenance at approximately \$2,000 per light per year, but that could change as fixtures age and are replaced.

The detailed cost estimate is below:

Item	Unit	Quantity	Unit Cost	Item Cost
Engineering/Design	Lump Sum	1	\$100,000	\$100,000
Furnish Pole & Light	EA	16	\$10,000	\$160,000
Install Pole Foundation	EA	16	\$6,500	\$104,000
Install Pole & Light	EA	16	\$2,500	\$40,000
25% Contingency	Lump Sum	1	\$101,000	\$101,000
Maintenance	EA	16	\$2,000	\$32,000
Total				\$537,000

This estimate assumes the existing Dominion Power streetlights along the western curb will stay in place.