CITY OF NORMAN, OK

STAFF REPORT

MEETING DATE: 06/25/2024

REQUESTER: Katherine Coffin

PRESENTER: David Riesland, Transportation Engineer

ITEM TITLE: CONSIDERATION OF ADOPTION, REJECTION, AMENDMENT, AND/OR POSTPONEMENT OF R-2324-155: RESOLUTION OF THE COUNCIL OF THE CITY OF NORMAN, OKLAHOMA, FOR THE TRANSFER OF $15,950.88 FROM THE 12TH AVENUE NE AND HIGH MEADOWS DRIVE INTERSECTION PROJECT FOR THE PURCHASE OF PILOT TRAFFIC CONTROL DEVICES FOR TRAFFIC CONTROL DIVISION.

BACKGROUND:

Solar street lighting is an emerging technology that has yet to be tried in the City of Norman. The technology has been available for several years, but the available products have been fine-tuned over the years. It is now that the time seems right to evaluate the use of this technology in Norman. Two locations have been identified that would serve as test sites for evaluation of this technology for further implementation. The potential savings, in electrical service cost, of course, are too great to ignore. The purpose of the test evaluations is to observe the light levels and the expected life of the fixtures.

The first location that came on the radar was at the end of the new cul-de-sac on Daws Street just west of Porter Avenue. This cul-de-sac was created with the Porter Avenue intersection project at Acres Street. The need to establish a cul-de-sac on Daws Street was identified in the engineering study citing the lack of spacing between potential intersections with Porter Avenue at Acres Street and at Daws Street. Following completion of the project and substantial completion of the Porter Avenue Streetscape Project, complaints began to be received about confusion with the new cul-de-sac. Lighting was thought to be a means of alleviating these concerns. The traditional electrical supplier in the area, OG&E, was contacted about the need to light this cul-de-sac. The response was that a significant bore would be required to power the new light at a cost approaching $20,000. At this point, staff began looking into solar options.

The second location came from a citizen requesting a mid-block street light on Tonhawa Street between Porter Avenue and Crawford Avenue. Again, OG&E was contacted about the need for this light, and, again, the response was that a significant bore would be required to power the new light at a cost approaching $20,000. Given the location of these potential lights with respect to one another, a pilot involving both locations began to make sense.

DISCUSSION:

The identification of these two locations is not the first time that staff has looked into the possibility of using solar powered street lights. However, it is the first time that the idea of a pilot project to observe the operation of this technology in the field was considered. In fact, prior research uncovered two options for this technology that are located fairly close to Norman. One, is Fonroche Lighting with an office in Texas, and the other is Gridshift Solutions with offices in Oklahoma.

Prior research between the two suggested two primary differences. One is that Gridshift Solutions offers installation services whereas Fonroche Lighting does not. With a Fonroche Lighting product, staff would need to solicit contractor assistance with installation. The other difference is that the Gridshift Solutions cost is lower that the Fonroche Lighting without considering contractor installation costs for the Fonroche Lighting product. The cost for two installed decorative poles from Gridshift Solutions is approximately $9,400. Using the Fonroche Lighting product would result in project costs exceeding $10,000.

Recently, the 12th Avenue NE and High Meadows Drive intersection project was completed. Following the payment of all bills for the project, a balance of $15,950.88 remains in the construction account for that project. Staff has discussed the possibility of using that balance to fund these two solar street lights for evaluation purposes.

RECOMMENDATION:

Staff recommends approval of R-2324-155 along with the transfers identified below, totaling $15,950.88, to fund the purchase of two solar street lights from Gridshift Solutions as part of a solar street lighting pilot evaluation project.

Losing Account					Gaining Account				
Description	Project #	Org	Object	Transfer Amount	Description	Project #	Org	Object	Transfer Amount
12th AveNE& Highmeadows Dr	TR0051	50590079	46101	-15,950.88	Experimental Traffic Devices	TC0160	50596688	46301	+$15,950.88