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Public Works

City Transit

263-8152

MEMORANDUM

Equipment Maintenance

Roadway Maintenance

Collection & Drainage

Building & Grounds

Engineering

To: Gregg Mandsager, City Administrator;
Brian Stineman, Public Works Director
FROM: Jim Edgmond, City Engineer
DATE: May 25, 2017
RE: Summary of Lighting costs for the Miss. Drive Corridor

INTRODUCTION:

As planned, the current approved design of Mississippi Drive Corridor Project includes decorative lighting that ties into the decorative lighting on 2nd Street, the historic district, and helps create a gateway into downtown Muscatine. This lighting is more expensive than what MPW has defined as their standard lighting and as such, the City is responsible for the increase in cost.

BACKGROUND:

The attached cost summary from MPW shows the additional charge for the decorative poles and lights. The total MPW invoice for Phase I including the intersection of Mulberry Ave. and 2nd Street is \$199,893.42. MPW has defined their standard pole and light fixture as the same lighting that is present on Cedar Street.

The remainder of the corridor, from Broadway Street to Carver Corner is being evaluated for the scope of improvement to be implemented but the current staff thinking is that when additional lighting is installed on the corridor it will be the MPW standard lighting that will not cost the city anything additional. This lighting plan fits into the overall design plan and gateway features for the downtown area.

This project is funded from the Jurisdictional Transfer Funds set aside for the Mississippi Drive Corridor project.

RECOMMENDATION/RATIONALE:

Due to the current design being under construction and the decorative lighting on Mississippi Drive providing a visual tie to the downtown area of the city it is recommended that the City Council approve the expenditure of funds to provide decorative lighting for the Phase I construction and the intersection of Mulberry and 2nd Street. This cost is \$199,893.42.

BACKUP INFORMATION:

1. Attached: Estimate of cost from MPW for the costs above and beyond the cost of their standard pole and light fixture.

**"I remember Muscatine for its sunsets. I have never seen any
on either side of the ocean that equaled them" — Mark Twain**

Assumptions

1. I added two (2) black composite poles to the quantity for every Philip Lumec double pole.
2. Phase 1A is the work under construction, Phase 1B is from Carver Corner to Broadway and 2nd/Mulberry intersection, and Phase 2 is from Carver Corner to by-pass
3. Phase 1B includes 19 single arm poles & 4 double arm poles from Broadway to Carver corner, and 12 single arm poles at the 2nd/Mulberry roundabout
4. Phase 2 would require 80 single arm poles and 20 double arm poles.

Cost Analysis

Description	Black Composite	Black Composite Light on Traffic Signal Pole	Philips Lumec		Philips Single Light on Traffic Signal Pole
			Single	Double	
Pole	\$ 1,574.00		\$ 2,064.95	\$ 1,961.86	
Arm	\$ 256.00	\$ 256.00	\$ 886.60	\$ 1,588.66	\$ 886.60
50-LED	\$ 355.00	\$ 355.00	\$ 1,481.96	\$ 3,081.44	\$ 1,481.96
Total	\$ 2,185.00	\$ 611.00	\$ 4,433.51	\$ 6,631.96	\$ 2,368.56
Construction Year 2017					
Quantity - Phase 1A	73	12	61	6	12
Extended Cost - Phase 1A	\$ 159,505.00	\$ 7,332.00	\$ 270,443.81	\$ 39,791.76	\$ 28,422.72
Construction Year 2019 - Phase 1B					
Total (added 2% increase per year)	\$ 2,273.27	\$ 635.68	\$ 4,612.62	\$ 6,899.89	\$ 2,464.25
Quantity - 2nd/Mulberry	12		12		
Extended Cost - 2nd/Mulberry	\$ 27,279.29		\$ 55,351.42		
Quantity - Broadway/Carver Corner	27		19	4	
Extended Cost - Broadway/Carver Corner	\$ 61,378.40		\$ 87,639.75	\$ 27,599.56	
Construction Year 2020					
Total (added 2% increase per year)	\$ 2,318.74	\$ 648.40	\$ 4,704.87	\$ 7,037.89	\$ 2,513.53
Quantity - Phase 2	120		80	20	
Extended Cost - Phase 2	\$ 278,248.74		\$ 376,389.68	\$ 140,757.78	

Phase 1A Black Composite	\$ 166,837.00
Phase 1A Philips Lumec	\$ 338,658.29
City Contribution - Phase 1A	\$ 171,821.29

The City Contribution of both Phase 1A & 2nd/Mulberry is \$199,893.42 and covers the lighting from Mad Creek to Broadway.

2nd/Mulberry Black Composite	\$ 27,279.29
2nd/Mulberry Philips Lumec	\$ 55,351.42
City Contribution - 2nd/Mulberry	\$ 28,072.14

Broadway to Carver Corner Black Composite	\$ 61,378.40
Broadway to Carver Corner Philips Lumec	\$ 115,239.32
City Contribution - Broadway/Carver Corner	\$ 53,860.92

The City Contribution of \$53,860.92 covers the lighting from Broadway to Carver Corner.

Phase 2 Black Composite	\$ 278,248.74
Phase 2 Philips Lumec	\$ 517,147.46
City Contribution - Phase 2	\$ 238,898.72

The estimated City Contribution of \$238,898.72 covers the lighting from Carver Corner to the Bypass via Grandview. Quantities were estimated and may change with the engineering design.

Total Estimated City Contribution	\$ 438,792.14
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Project info

City:

Project name:

Document : Lumec - Domus - Median.doc

When the Domus Series debuted, it was a significant innovation for the market. The luminaire's timeless design has proven to be one of the most adaptable shapes we offer. Wherever it is installed, Domus creates harmony.

> Created by : byers casey

Date: October 10,
2016



Product Line : DMS55-LE3S-SMB-PR6-2-AMT8V-25-GFII-BAD20(2)-BKTX



Project info

City:

Project name:

Document : Lumec - Domus - Single.doc

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