

From: [Greg Minikel](#)
To: [Sonja Birr](#)
Cc: [Dan Koski](#)
Subject: FW: Rapids Road Street Lighting - Custer to Broadway Streets
Date: Monday, July 31, 2017 11:43:39 AM

Sonja,

Can you make this e-mail an attachment for Wednesday's PI Committee?? Thanks.

From: Steve Bacalzo
Sent: Friday, July 28, 2017 1:23 PM
To: Greg Minikel
Cc: Dan Koski; Justin Hoffmann
Subject: RE: Rapids Road Street Lighting - Custer to Broadway Streets

Greg,

You recently requested budgetary pricing for additional lighting options in the subject project area:
4. Install 100 Watt, coach light style lighting to illuminate the multi-use path on the east side of Rapids Road, approximately every 150 feet (28 coach lights). Under the existing MPU Security Lighting (non-roadway) tariff, the capital cost is \$0 and a monthly cost of \$12.35 per fixture (\$10.25 fixed charge plus \$2.10 energy), totaling \$346 per month, \$4,151 per year.

5. As a alternative to Option C in each of the segments in the attached email, remove existing HPS fixture and install LED fixtures on wood poles (vs fiberglass), with underground wiring, all on the east side of the street. One-time capital budgetary cost is estimated at \$152,000. MPU does not have an existing tariff for this type of lighting but estimates that monthly cost would be about \$15.75 per fixture, subject to PSCW tariff development and approval.

Steve

Steve Bacalzo P.E. | Distribution Operations Manager
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From: Steve Bacalzo
Sent: Wednesday, May 03, 2017 11:04 AM
To: Greg Minikel; Dan Koski
Subject: Rapids Road Street Lighting - Custer to Broadway Streets

Greg and Dan,

Following are street lighting options for three "segments" of the proposed, 4-lane road and offset pedestrian pathway:

1. The existing, 6 each, High Pressure Sodium (HPS) street lights between Custer Street and the railroad tracks **will be adequate.**

- A. **Option A: Do nothing and leave the existing HPS fixtures.** Capital cost \$0. Existing monthly cost is \$14.77 per fixture.
 - B. **Option B: Replace 6 existing HPS light fixtures with 6 LED fixtures on the existing wood utility poles.** One-time capital cost is estimated at \$4,200. MPU does not have an existing tariff for LED lighting but estimates that monthly cost would reduce to about \$13.24 per fixture, subject to PSCW tariff development and approval.
 - C. **Option C: Remove 6 existing HPS light fixtures and install 6 LED fixtures on ornamental poles, all on the east side of the street.** One-time capital cost is estimated at \$46,200. MPU does not have an existing tariff for LED lighting but estimates that monthly cost would be about \$15.75 per fixture, subject to PSCW tariff development and approval.
2. The existing, 13 each, HPS street lights between the railroad tracks and the river **will not be adequate.**
- A. **Option A: Add 12 HPS lights on new wood utility poles and remove 3 existing HPS lights (to achieve uniform spacing).** Capital cost is \$0. Existing monthly cost is \$14.77 per fixture.
 - B. **Option B: Replace 13 existing HPS light fixtures with 15 LED fixtures on wood utility poles.** One-time capital cost is estimated at \$40,000. MPU does not have an existing tariff for LED lighting but estimates that monthly cost would reduce to about \$13.24 per fixture, subject to PSCW tariff development and approval.
 - C. **Option C: Remove 13 existing HPS light fixtures and install 15 LED fixtures on ornamental poles, all on the east side of the street.** One-time capital cost is estimated at \$115,500. MPU does not have an existing tariff for LED lighting but estimates that monthly cost would be about \$15.75 per fixture, subject to PSCW tariff development and approval.
3. The existing, 3 each, HPS street lights between the river and Broadway Street **will not be not adequate.**
- A. **Option A: Add 1 HPS fixture to an existing wood utility pole.** Capital cost \$0. Existing monthly cost is \$14.77 per fixture.
 - B. **Option B: Replace 3 existing HPS light fixtures with 4 LED fixtures on the existing wood utility poles.** One-time capital cost is estimated at \$2,800. MPU does not have an existing tariff for LED lighting. MPU estimates that monthly cost would reduce to about \$13.24 per fixture, subject to PSCW tariff development and approval.
 - C. **Option C: Remove 3 existing HPS light fixtures and install 4 LED fixtures on ornamental poles, all on the east side of the street.** One-time capital cost is estimated at \$30,800. MPU does not have an existing tariff for LED lighting but estimates that monthly cost would be about \$15.75 per fixture, subject to PSCW tariff development and approval.

Options are based on street lighting standard ANSI/IES RP-8 with the right of way modelled as a major road class with low night-time pedestrian usage (low pedestrian density - suburban and rural). Please advise if you have questions or would modify this design criteria.

Steve

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