



TO: Dustin Anderson, Town Manager

FROM: Stephen Gunty, Director of Public Works

SUBJECT: LED lighting upgrades

DATE: September 20, 2021

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### **Background**

Due to an increasing number of burned-out or flickering bulbs in Town Hall and the Police Department, an inspection revealed that the vast majority of the recessed can light fixtures scattered throughout each building are older style using either fluorescent, halogen or incandescent lamps. The key points of this inspection were as follows:

#### Town Hall 2-pin fixtures (bulbs not available)

- 34 of 102 fixtures (i.e. 33%) are DEFICIENT (with missing or burned bulb or broken ballast...also discontinued)

#### Town Hall 4-pin fixtures (bulbs scarce...difficult to find)

- 7 of 16 fixtures (i.e. 44%) are DEFICIENT (with missing or burned bulb or broken ballast...also discontinued)

#### Police Dept 2-pin fixtures (bulbs not available)

- 13 of 35 fixtures (i.e. 37%) are DEFICIENT (with missing or burned bulb or broken ballast...also discontinued)

### **Methodology**

In the recent past the approach was to replace each problem fixture as needed and in most cases to convert it to an LED bulb, especially in hallways. The advantage of LED replacement is energy savings, less labor/material to maintain as the bulbs last significantly longer and in most cases a brighter environment results. As an example, Public Works replaced its facility with LED bulbs a couple years ago and has only had 1 faulty bulb to deal with.

Should we replace only the 54 problem fixtures above, it would leave 99 other outdated recessed can light fixtures awaiting a similar fate. Besides these current deficiencies, there are an additional 1,129 long tube & U-lamp bulbs scattered throughout the 2 buildings (shown in the Midwestern Electric proposals). Bulb replacement alone while possible in some cases would involve a wild goose chase often searching 3-5 stores to find needed bulbs, which at this quantity would make the task all the more difficult

Besides energy savings and lighting enhancement, another advantage of a complete interior upgrade to LED is the reduction of fire risk from faulty ballasts. Total replacement also results in less interruption to staff (similar to the recent CAC system improvement) when the work can be scheduled to minimize interruption and inconvenience as it can be handled more efficiently at one bulk time within each Department and/or during off hours as needed.

The deficient fixtures identified above could lend themselves to a piecemeal LED upgrade approach as we've done in the past, but because of the large quantity involved and the larger quantity that would remain untouched "as is" left in place to fail, the timing is right for a complete upgrade throughout both facilities. Town Hall and Police Dept are the only facilities that have not been converted to LED.



An exterior lighting upgrade is also deemed a necessary improvement due to similar deficiencies and missing poles.

Attached are three proposals from Midwestern Electric that provide the needed upgrades, as follows:

Upgrade ALL INTERIOR LIGHTING with LED lights

- 1) Town Hall = \$41,064
- 2) Police Dept = \$19,635

Upgrade ALL EXTERIOR LIGHTING with LED lights

- 3) Town Hall / Police Dept / Fire Dept & all parking lots = \$93,182

TOTAL GROSS PROJECT COST (i.e. all 3 proposals prior to NIPSCO rebates) = \$153,881

Note: NIPSCO rebates are currently available and have been estimated by Midwestern Electric but the actual amounts and eligibility are subject to change based on final fixtures chosen and completion of post-project application. Therefore, the gross cost irrespective of rebate should be the approved project cost.

Estimated NIPSCO REBATES

Town Hall NIPSCO rebate = \$5,000.44 (if received Net Cost = \$36,063.56)

Police Dept NIPSCO rebate = \$2,579.54 = (if received Net Cost = \$17,055.46)

Exterior Lighting NIPSCO rebate = \$4,350.00 = (if received Net Cost = \$88,832.00)

TOTAL NET PROJECT COST (i.e. possible if \$11,929.98 received from NIPSCO rebates) = \$141,951.02

**Recommendation**

By motion and roll-call vote approve three Midwestern Electric proposals (at \$41,064, \$19,635 and \$93,182) for complete LED lighting upgrades to Town Hall & Police Department Interior Buildings and to the Exterior of the entire Town Hall, Police Department and Fire Department buildings and parking lots, for a total amount of \$153,881.