

LED Streetlight Conversion Proposals RFP 2018-05  
Henniker Energy Committee Review and Recommendation  
Bruce J. Trivellini of behalf of  
Energy Committee Town of Henniker, NH

All bids reviewed in this report are public records. The public may view those records by  
contacting The Town Administrator for Henniker New Hampshire.

Henniker Town Administrator 18 Depot Hill Road Henniker, NH 03242

### Executive Summary

The Town of Henniker requested project proposals to upgrade the current sodium vapor streetlights to a more energy efficient LED fixture. The Request for Proposal was developed after the Henniker Energy Committee gathered detailed information that provided insight into LED industry quality standards for the electrical components contained inside a LED light fixture. The committee learned how those standards impact the operational capabilities of the LED streetlight system and contribute to the ease of future maintenance. The committee received help from New Hampshire Department of Transportation (NHDOT) Bureau of Turnpikes representative Mr. David Smith. He provided information to the committee regarding the standards NHDOT had established for their LED conversion of ~2,000 streetlights throughout the turnpike system.

The goal of this upgrade is to reduce energy consumption, operational cost of the street light system, improve visibility & safety on the roads and reduce light pollution.

On July 3, 2018, the Town of Henniker emailed RFP 2018-05 to five contractors. Confirmation of receipt of those emails was received by the Town Administrator. The town received two project proposals from contractors on the invitation list and one proposal from Green LED Supply, Inc., Columbus, Ohio, which was not on the list.

On July 18, 2018, the Henniker Energy committee thoroughly reviewed all three proposals. **The committee unanimously agreed that Affinity LED Lighting of Dover, NH was the only contractor that delivered a proposal that meets ALL critical quality standards set forth in RFP 2018-05 and recommends Affinity LED Lighting be awarded the LED Streetlight Conversion contract.**

*Keywords:* Henniker, LED Streetlights, Affinity LED Lighting and RFP 2018-05

## RFP 2018-05 BID REVIEW CHART

	Contractor Name		
	Affinity	Green	Efficient
RFP Components Included:			
ROI	✓	✓	
Payback	✓	✓	
Annual Cost Savings	✓	✓	
Warranty Procedure	✓		
GPS/GIS Data	✓	✓	✓
Local References	✓		✓
NH Based	✓		✓
NH DOT Qualified Contractor	✓		
Annual CO2 Reduction	✓		

***LED Streetlight Conversion Proposals RFP 2018-05******Henniker Energy Committee Review and Recommendation***

The Henniker Board of Selectmen (BOS) asked the Henniker Energy Committee (HEC) to review the three proposals and provide guidance and a recommendation as to which proposal best meets the goals stated in RFP 2018-05.

**Total Cost of LED conversion;**

1. Efficient LED Lighting:  $\$20,235.75 - (\text{Eversource LED rebate}) \$7900.00 = \$12,335.75$
2. Green LED Supply:  $\$24,143.52 - (\text{Eversource LED rebate}) \$7900.00 = \$16,243.52$
3. Affinity LED Lighting:  $\$24,575.00 - (\text{Eversource LED rebate}) \$7,825.00 = \$16,750.00$

The committee convened on Wednesday July 18, 2018 and reviewed the three proposals and evaluated those proposals considering the BOS's policy to select contractors based on the best overall value to the Town and,

- Operational cost reduction
- Reducing energy consumption
- Return on Investment (ROI) and payback period
- Warranty and Service

At this meeting the committee became aware that NHDOT Bureau of Turnpikes had sent out an RFP for the conversion of ~2,000 streetlights within their jurisdiction. The RFP was sent to five prequalified contactors and Affinity LED Lighting was awarded the contract.

**Operational cost reduction analysis:**

A detailed cost comparison for the proposed LED replacement fixtures was delivered by Affinity LED Lighting and Green LED Supply, Inc. Efficient LED Lighting provided no operational cost information for the proposed Phillips fixtures.

*Appendix A:* Affinity LED Lighting calculated an annual cost savings of \$8,678.00 (45.1% reduction from current operational cost) for their proposed LED fixtures. Green LED Supply calculated an annual cost savings of \$8,606.88 (44.8% reduction from current operational cost) for their proposed LED fixtures. Efficient LED Lighting's proposal did not include any cost reduction calculations.

**Energy consumption reduction:**

One of the stated goals of the LED streetlight conversion project is to lower the overall consumption of electrical energy. Appendix A: Affinity LED Lighting's proposal calculated an annual reduction of 47,425 kWh (kilowatt-hours) of energy for their proposed LED fixtures, while Green LED Supply's proposal calculated an annual reduction of 47,305 kWh for their proposed LED fixtures. Efficient LED Lighting provided no information regarding reduction of energy consumption for their proposed Philips LED fixtures.

**Return on Investment (ROI) and payback period:**

*Appendix B:* Affinity LED Lighting provided the most detailed calculations associated with their proposal. The cumulative ROI turns positive in year 2 (1.9-year payback) and is projected out over a 20-year period. Noting *the* Green LED Supply's inaccurate use of annual cost savings, the two proposals are almost identical. Thus, one can surmise that the cumulative ROI and payback period should be considered the same. Efficient LED Lighting provided no data or calculations regarding the ROI or payback period metric.

***Warrenty and Service: RFP 2018-05 Qualified Lighting Equipment Requirements******Section1: General Requirements (A-B-C);***

All three proposals contained the industry standard 10-year limited warranty with a one (1) year limited warranty, from the date of purchase which includes field labor and service charges related to repair or replacement of any product determined to be defective.

Affinity LED Lighting was the only proposal that detailed the warranty claim procedure policy required in RFP 2018-05: Section 1 General Requirements (C). The Town must notify Affinity LED within sixty (60) days of discovery of the defect. Upon notification Affinity will issue a Return Material Authorization (RMA) number and a prepaid freight label. The RMA number must be clearly marked on the return package. Failure to follow the RMA policy and procedure will void all warranty responsibilities.

***Services:***

The committee took note of the many services that Affinity LED Lighting will be providing to the town during this conversion project. Real time Geographic Information Service (GIS) mapping of the audit process and eventually delivering a GIS database and map which will interact with the Town's current GIS system is a feature the committee members saw as being very desirable.

Affinity's business model of being the "owners of the customer value chain," convinced the committee that the quality components mentioned in the RFP were being used.

The committee members were impressed with Affinity's commitment to making all aspects of this project environmentally friendly, including delivering the fixtures in reusable tote

containers, which eliminates the use of cardboard and other packing materials that would otherwise enter the waste stream.

### Conclusion

After reviewing all three proposals, the Henniker Energy Committee feels that Affinity LED Lighting of Dover, New Hampshire submitted a proposal that meets and exceeds all requirements of RFP 2018-05. Therefore, the committee voted unanimously to recommend that Affinity LED Lighting be awarded the LED Streetlight Conversion contract for the Town of Henniker.