

ERTH



CORPORATION



Zorra LED Conversion

About The Township of Zorra

The Township of Zorra is a rural municipality located at the north-west corner of Oxford County. The Township is comprised of several rural clusters and two serviced villages. The Township of Zorra is one of ERTH Corporation's municipal shareholders and was the first municipality to participate in this program.

Township of Zorra

Population: 8,125

Land Area: 529 km²

Why LED conversion?

As a shareholder in ERTH Corporation, the Township of Zorra chose to support ERTH's latest initiative that was both environmentally friendly and cost effective. ERTH's LED Street Light Upgrade Program promises many benefits, including over 50% savings in municipal street light electricity bills. Aside from the energy cost savings the program provides a 10 year photocell and fixture warranty and pay back strictly through savings before the warranty expires. The LED lights also provide a brighter and cleaner illumination which can help increase safety in a municipality's neighbourhoods.

The process

After several meetings between ERTH and the Township of Zorra's council, it was concluded that the LED Street Light Conversion program would be approved for the municipality. ERTH was able to provide the council real data based on Zorra's own street light energy costs to show not only how much money would be saved each year, but how quickly the investment would be paid off.

The Township of Zorra was able to select the exact style of fixtures they preferred from a wide selection. ERTH began the installation in May 2012 and received pre-approval of the OPA retrofit incentive application at the same time. 100% of the old street lights and fixtures were recycled. 43% of the street lights required rewiring. The project was complete in June 2012.

Highlights

- Projected savings of 56% of the municipal street light energy costs.
- Actual savings of 62.62% in total energy usage for the month of March.
- Received a one-time OPA retrofit rebate of \$10,953.
- Estimated savings of over \$9,000 in maintenance costs in the first year alone.
- Projected total savings of \$1.49 million dollars over the asset lifetime.
- LED lights use 56% less wattage than old lights helping to reach municipal CDM targets.
- Pay back is achieved strictly through savings before warranty expires.
- 100% of the old materials were recycled





The results

During the initial meetings and presentations, ERTH projected that the Township of Zorra would have their investment in the LED Street Light Upgrade Program completely paid off through energy savings before the warranty expired. ERTH also projected that the total savings in energy costs and maintenance after the first year would be \$55,423. This would save the Township of Zorra 56% on the operating costs of their street lights.

In addition to the cost savings from reduced energy usage and maintenance, ERTH would be able to assist Zorra in receiving financial assistance from the Ontario Power Authority (OPA). This one-time rebate was expected to amount to \$10,953.

Several months after installation, the Township of Zorra provided actual data showing savings to the municipality through their street light energy and operating costs. In March 2012 (prior to installation), Zorra's total street light energy usage was 28,739 kilowatt hours (kWh). In March 2013, the total street light energy usage was down to 10,742 kWh showing a decrease of 62.62% in street light energy usage for the month of March. On average, Zorra is experiencing approximately 60% energy savings each month which exceeds ERTH's original projection of 56%. This is especially beneficial because at the beginning of 2013, the Ontario government significantly increased the price of street light electricity. Zorra was able to reduce the impact of this price increase having participated in the LED Street Light Upgrade Program in 2012.

Customer testimonials

Don MacLeod, Chief Administrative Officer of the Township of Zorra, has been a great supporter of the LED Street Light Upgrade Program since its inception. Zorra not only embraced the program but became a leader in Ontario being the first municipality to participate in ERTH's program.

In reference to the LED Street Light Program offered by ERTH, Mr. MacLeod said, "based on the cost savings that were projected by CRU and ERTH, council felt it was a no-brainer to go this route because of the energy savings and the cost savings that we'd realize over the term of the lights. By cutting our energy costs in half, council felt it was the responsible thing to do and it led the way for our ratepayers

"Any costs that are increasing over the next couple of years are going to be minimized on the township's behalf and our rate payers will benefit from that."

to show that the Township is being environmentally responsible. Our maintenance costs are going to drop substantially just because the lights are much more energy efficient, they don't have the burn out that the traditional street lights have and even if you do lose one or two LEDs the light is still good. Our risks are going to be reduced by half because our energy costs are going to be reduced by half so any costs that are increasing over the next couple of years especially through the Drummond Report, are going to be minimized on the township's behalf and our rate payers will benefit from that."

About ERTH Corporation

ERTH Corporation provides an array of products and services within the utility and energy industry. These services include street lighting and traffic signal programs, an award winning LED Street Light Upgrade program, water and electric meter services, powerline construction and engineering services. ERTH represents the former companies of Coulter Water Meter Services, CRU Solutions, and ECALIBER.

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