



LAS Partners with Acuity Brands to Provide Turnkey LED Lighting Solutions for Municipal Recreational Facilities

DETAILS

Project:

PMD ArenaComplex Township of Mapleton, ON

Project Size:

30 LED fixtures/85'x185' ice surface

Lighting Specifier:

Conrad Lighting Solutions

Lighting Sales Representative:

LAS – Local Area Services

Lighting Manufacturers:

Lithonia Lighting®, Acuity Controls

Products:

I-BEAM® IBL LED High Bay, ZL1N LED Strip Light, nLight®

The Situation

LAS, part of the AMO (Association of Municipalities of Ontario) provides municipalities with competitively priced, sustainable business services. In 2015, recognizing the benefits of LED lighting technologies to dramatically improve light quality and provide immediate savings in the form of lowered maintenance and energy costs, LAS partnered with Acuity Brands to provide a one-stop, turnkey lighting solution for high bay applications including arenas and recreational facilities, as well as transit and public works garages.

An LED lighting systems package that included quality luminaires and controls from Acuity Brands, warranties, photometric design, installation

management and commissioning services was developed to offer municipal decision makers a simplified approach to a technologically complex process.

Given their visibility, lighting upgrades in recreational facilities are an excellent showcase of energy conservation and operational cost savings. Holding the distinction of the first of these arena projects under the umbrella of LAS is the PMD Arena Complex in the village of Drayton, Ontario.



The Challenges

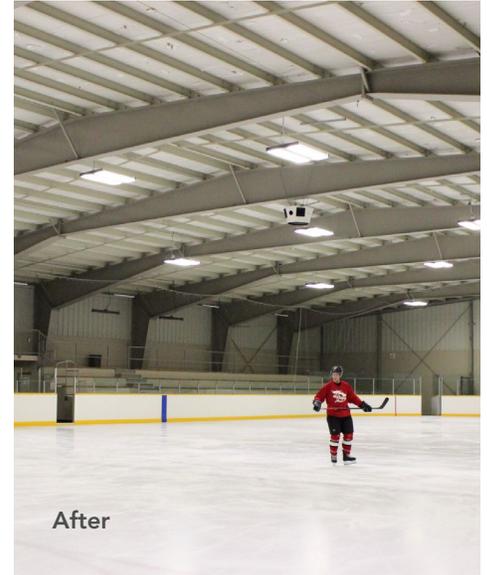
Throughout Ontario, in communities large and small, recreational facilities are among the most frequently visited buildings in the municipality, supporting the area’s sports and leisure activities and community events. Many of these facilities are still using fluorescent and/or HID light sources with inherent limitations of light quality, energy efficiency and controllability.

In the Township of Mapleton, a rural community in Southern Ontario, the recreational facility in the village of Drayton is the hub for services that bring cohesiveness to the community. Primarily a hockey arena, the facility, with its existing metal halide high bay luminaires, had a relatively poorly lit ice surface. Power issues caused fixtures to cycle off; this, as well as a slow start up speed, interrupted games. There were limitations to changing the light levels which precluded flexibility and adaptation of the space for other community functions. The metal halide lamps had a relatively short life cycle which proved difficult and expensive for maintenance.

The Solution

The Township of Mapleton turned to LAS to leverage the Recreational Facility LED Service to address their requirements: improve light quality, accommodate diverse light level requirements, reduce maintenance costs and benefit from significant reduction in energy usage and utility incentive programs.

Project consultant John Conrad of Conrad Lighting Solutions, along with lighting designer Steve Duff of Svenlumen Inc., proposed a lighting design plan which included the I-BEAM® LED high bay and ZL1N LED strip light from Lithonia Lighting for ice surface and arena seating area lighting.



“Facility users have told us they like the improved lighting level and we feel the dimming function will be useful for other events. The LAS program really made it easy for us as the design, product selection, and incentive work was all done for us so we could concentrate on take care of our facilities and offering our programming. We would recommend the program to any municipality interested in improving their lighting and saving money”

- Brad McRoberts CAO Clerk, Township of Mapleton.

The Results

The most significant results of the lighting upgrades at Drayton Arena are increased light levels on the ice surface (to an average of 64.83 FC) and an estimated energy savings of \$3,369 annually for the high bay lighting alone. With a luminaire lifespan of up to 100,000 hours, additional savings and benefits will be realized through an estimated maintenance savings of \$3,630 annually. Local utility energy incentives of \$3,320 were realized to further increase ROI.

The new LED lighting system, featuring instant on/off and dimming capabilities, and quiet operation provides increased user satisfaction, improved aesthetics and highlights the community’s commitment to environmental conservation and sustainability.

