



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

DETAILS

Project:

North Stormont Arena Finch, ON

Project Size:

24 LED fixtures/ 1 fixture per 667 square feet, Lighting Controls

Lighting Specifier:

I. B. Storey

Lighting Sales Representative:

LAS – Local Area Services

Lighting Manufacturers:

Lithonia Lighting®, Acuity Controls

Products:

I-BEAM® IBH LED High Bay, XPoint™ Wireless Controls

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 one of the inaugural arena projects under the umbrella of LAS is the North Stormont Arena in Finch, 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 North Stormont, a rural community in Eastern Ontario, the recreational facility in the town of Finch 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 North Stormont 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 Service Provider I.B.Storey Inc., proposed a lighting design plan which included the I-BEAM® IBL LED high bay from Lithonia Lighting for the ice surface lighting and XPoint™ Wireless Controls to provide light level controls and dimming capabilities.



"We are getting lots of positive comments about the new lights. The hockey and broomball players say they notice a huge difference in the lighting: it is much brighter, there are no shadows and the lighting is even across the ice surface. During public skating, we typically dim the lights down to 3.9kw for ambiance (10.3kw is full power). We are also able to dim them to 2kw when the staff is doing work on the ice surface, or around the arena, to further save energy.

In the past, we had to turn the lights on thirty minutes before the start of an ice rental to allow for full start up. Now, we can wait until five minutes before. Prior to the retrofit, we would just leave the lights on if we had an opening in the ice use during the day. Now we are able to turn them off when not in use because they come back on right away; no waiting for them to warm up."

- John DeBoer, Arena Manager, Township of North Stormont.

The Results

The most significant results of the lighting upgrades at North Stormont Arena are increased light levels on the ice surface of approximately 50% (to an average of 30 foot candles) and an estimated energy savings of \$5,478 annually. With a luminaire lifespan of up to 100,000 hours, additional savings and benefits will be realized through an estimated maintenance savings of \$1,600 annually.

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. XPoint™ Wireless dimming allows the light level to be varied through seamless adjustment controls with minimal effort depending on the activity on the ice. The wireless dimming also allowed for a quick and easy install within one day which minimized down time for the facility.

