

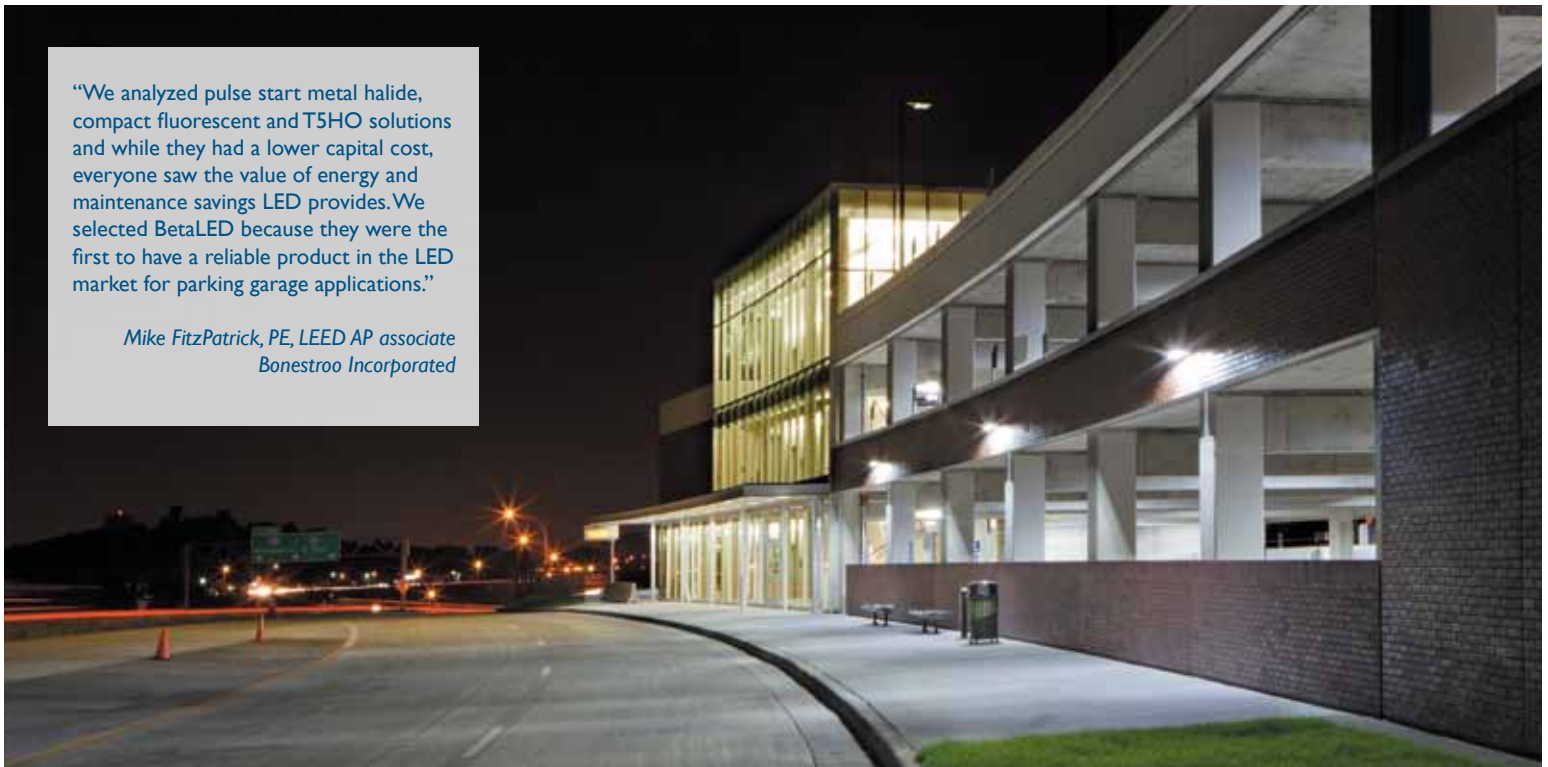
PROJECT OVERVIEW

I-35W Park & Ride Lots and Structures, Minneapolis, MN
MetroTransit, a service of the Metropolitan Council

LED APPLICATION: Park & Ride lighting

“We analyzed pulse start metal halide, compact fluorescent and T5HO solutions and while they had a lower capital cost, everyone saw the value of energy and maintenance savings LED provides. We selected BetaLED because they were the first to have a reliable product in the LED market for parking garage applications.”

*Mike FitzPatrick, PE, LEED AP associate
Bonestroo Incorporated*



LED PRODUCTS



Kenrick Avenue Park & Ride 16775 Kenrick Avenue, Lakeville, MN

239 BetaLED® luminaires include:

- 172 THE EDGE parking luminaires with Type V optics
- 49 THE EDGE area luminaires with Type III optics
- 18 THE EDGE security luminaires with Type III optics



I-35W & County Road C Park & Ride

2000 Iona Lane, Roseville, MN

183 BetaLED luminaires include:

- 141 THE EDGE parking luminaires with Type V optics
- 7 THE EDGE area luminaires with Type III optics
- 21 THE EDGE area luminaires with Type IV optics
- 14 THE EDGE security luminaires with Type III optics



I-35W & 95th Avenue Park & Ride

9643 Naples Street, Blaine, MN

216 BetaLED luminaires include:

- 152 THE EDGE parking luminaires with Type V optics
- 49 THE EDGE area luminaires with Type IV optics; 19 with backlight control
- 10 THE EDGE security luminaires with Type III optics
- 5 THE EDGE security luminaires with Type IV optics with backlight control

Cedar Grove Park & Ride

4035 Nicols Road, Eagan, MN

31 BetaLED luminaires include:

- 24 THE EDGE area round luminaires with Type III optics
- 6 THE EDGE area round luminaires with Type III optics with backlight control
- 1 THE EDGE area round luminaires with Type V optics

Lakeville Cedar Surface Parking Lot

18040 Cedar Avenue, Lakeville, MN

8 BetaLED luminaires include:

- 3 THE EDGE area luminaires with Type IV optics with backlight control
- 1 THE EDGE area luminaires with Type IV optics with backlight control and two-level option
- 2 THE EDGE area luminaires with Type V optics and two-level option
- 2 THE EDGE area luminaires with Type V optics



PROJECT OVERVIEW

I-35W Park & Ride Lots and Structures, Minneapolis, MN
MetroTransit, a service of the Metropolitan Council

Mass transit parking solutions

Development of new park and ride structures in outlying Minneapolis areas to serve rapid transit and arterial bus systems is the result of a 2030 Transportation Policy Plan in which MetroTransit projects bus ridership is doubling with transportation investments and land development. Operated by MetroTransit, I-35W Park & Ride parking lots and structures are a joint effort of the Minnesota Department of Transportation (MDOT) and the Metropolitan Council.

The Twin Cities metropolitan area was one of only five regions nationwide to win competitive funding from a U.S. Department of Transportation program aimed at reducing congestion. The federal Urban Partnership Agreement (UPA) is a collaboration of federal, state and local entities working to improve traffic by reducing congestion on Interstate 35W, Highway 77/Cedar Avenue and in downtown Minneapolis. Of the \$133 million UPA federal grant, about \$86 million is allocated to transit projects.

Construction of nearly 2,700 parking spaces at six new or expanded park and ride facilities along the Highway 77/Cedar Avenue and I-35W corridors north and south of downtown Minneapolis was completed in the fall of 2010. MetroTransit installed BetaLED luminaires in park and ride ramps located in Lakeville, Roseville, Blaine and Cedar Grove. Each architecturally-unique structure has over 600 parking garage luminaires illuminating interior, perimeter and surface parking spaces.

Bonestroo Inc. provided engineering design services for the Lakeville and Roseville parking structures. LED luminaires were selected for the value that energy efficient lighting products provide and the importance of using a sustainable light source.

"We analyzed pulse start metal halide, compact fluorescent and T5HO solutions and while they had a lower capital cost, everyone saw the value of energy and maintenance savings that LED provides. We took advantage of the photocell option that maximizes energy savings by allowing each fixture to turn off if the natural ambient lighting is high enough," explained Mike FitzPatrick, PE, LEED AP associate for Bonestroo. "This is a better solution than the standard zone-controlled systems used on other projects. The LED fixtures allow us to do this because of the instant-on startup as compared to pulse start metal halide fixtures."

FitzPatrick noted additional advantages to using LED technology in unheated parking ramps. "Cold weather does not adversely affect LED fixtures as compared to the fluorescent lamps. The impressive lumen maintenance and controllability of the BetaLED product provided us with a very maintenance-friendly project that is uniformly illuminated. Controlled illumination provided the BetaLED luminaire with an advantage over induction which is sometimes considered to be a life-long solution. We selected BetaLED because they were the first to have a reliable product in the LED market for parking garage applications," he elaborated.



Kenrick Avenue Park & Ride

The Kenrick Avenue park and ride at Lakeville is a 750-space, three-level facility that was formerly a truck weigh station/park and pool lot. The Lakeville structure is adjacent to a highway which required city officials and the MDOT to meet local regulations for controlling light spill.

I-35W & County Road C Park & Ride

The I-35W and County Road C park and ride at Roseville is a 460-space, four-level parking ramp.

I-35W & 95th Avenue Park & Ride

The 95th Avenue park and ride at Blaine combines a new \$8.5-million three-level parking structure and adjacent parking lot to accommodate more than 1,400 vehicles. Metal halide fixtures in the existing lot were retrofit with BetaLED area luminaires. The 470-space structure is illuminated with BetaLED parking and security luminaires.

Cedar Grove Park & Ride

Located in the Cedar Grove community of Eagan, Minn., a 164-space park and ride opened in October 2010 and serves as a hub for the Minnesota Valley Transit Authority. The green build site occupies a former brownfield that was once the Cedarvale shopping area.

Lakeville Cedar Surface Parking Lot

The Lakeville Cedar Avenue park and ride lot provides parking for 191 vehicles.