

Property History

St Peter's Church, located in Plattsburgh, New York, was chartered in 1853 under Reverend Jean-Pierre Bernard to create a Catholic church for French-speaking residents. Today, Saint Peter's is the largest Roman Catholic Church congregation in the Ogdensburg Catholic Diocese.

Project Description

The goal of this project was to take the existing luminaires and design a LED specific core retrofit system enhancing the performance of the fixture while significantly decreasing its energy consumption and maintenance.

After significant product tests, calculations, and mock-ups; a custom LED luminaire retrofit assembly was designed for installation in the existing fixtures. The system incorporates Nichia Series157 Power LEDs for up lighting and a custom tailor made ENERGY STAR certified down light utilizing the specified CCT.

This custom designed assembly, which was to replace the existing assemblies on both luminaire types, included three up lights, three body lights, and one down light with concentric ring louver. Each assembly was sized appropriately for the size of the housing. The larger pendants were retrofitted with a 42W down light providing 3431 lumens and a 57W core providing 3960 lumens. The smaller pendants were retrofitted with 14W down light providing 1238 lumens and a 35W core providing 2470 lumens. The original lamplng assembly for the large fixtures used 1580W, which is reduced to 99W total with the new LED assembly. The smaller fixtures originally used 905W which were reduced to 49W total using the new LED assembly. Not only was energy consumption reduced but the life rating was significantly improved from 1,200 hours to 50,000 hours.

The assembly is designed to drop into the fixture housing, utilizing all original mounting points and chain connections. The original luminaires are not structurally compromised or modified in any way. All assemblies were installed by Grand Light and all lead wires were supplied as specified by the electrical contractor making installation the matter of plug and play.

The down lights were installed with a custom matching color trim, which took the place of existing louvers allowing maximum spread and lumen output.

Client

St. Peter's Church

Client Project Managers

Brian Baker, Baker Liturgical Art, LLC

Date Awarded

2016

Completion Date

2016

Project Webpage

<https://grandlight.com/portfolio/st-peters-church-led-retrofit/>

