



Rapid City Sixth Street Lighting

The project scope involved replacement of the existing street lighting for Sixth Street in downtown Rapid City, SD from its intersections with Kansas City Street to Omaha. The streetlighting objective was to provide enhanced downtown lighting and businesses facades by replacing existing and underperforming high-pressure sodium street lighting. Light fixture selections were made in collaboration with the City of Rapid City. The design included new street and intersection lighting with computer renderings of exterior lighting performance. The design coordinated locations of poles, footings, electric metering, UG utilities, and signal controllers.

Project Data

Owner

City of Rapid City

Location

Rapid City, SD

Lighting Types and Objectives

Decorative Performance Fixtures

Project Magnitude

5 Blocks
18 Luminaries
50 UG Junction Boxes

Electrical Systems / Features

City of RC Design Standards
Site Services Panels per RC Standards
Acorn Metal Halide Luminaries
Receptacles for Decorations

Construction Cost

\$2,930,000
\$250,000 Electrical

Completion Date

2012

Electrical Engineering Details

In conjunction with major streetscape renovations, the design objectives for streetlighting was to enhanced downtown lighting and businesses facades by removing the pole-top circuits, installing more appealing luminaries, and improving the color rendering of sixth street and associated storefronts. Electrical and Lighting design for this streetlighting project replaced existing and underperforming high-pressure sodium lighting in the downtown Rapid City with decorative poles and decorative metal halide luminaries.

The replacement was required to also consider existing conditions, including fixtures removal, OH circuiting, OH lighting circuits and business services, roadway signage, pole placements, existing UG utilities including fiber optics, and businesses signages. The utilities and services were carefully coordinated with the simultaneous construction of the Main Street Square, which 6th street serves.

The design utilized Bid Items drawings to minimize the impact of minor revisions of the plans.