

Rapid City BID - Downtown Lighting



The Business Improvement District of Rapid City implemented new street lighting on both Main Street and St. Joseph Street from West Blvd. to East Blvd. in downtown Rapid City. This will attract more visitors and reinforce the downtown area as an after dark safe place to gather. The project consisted of approximately 20 city blocks, defining the downtown business district. Skyline Engineering led the project from concept through preliminary design and to the securing of project funding. Over 300 street and pedestrian-scale poles were installed, capitalizing on every bit of existing infrastructure.

Project Data

Owner

City of Rapid City
Business Improvement District

Location

Rapid City, SD

Project Type

Street and Pedestrian Lighting

Project Size

20 Downtown City Blocks

Electrical Systems / Features

Ceramic Metal Halide Lamps
70 Teardrop Streetlights
60 14 ft Acorn Pedestrian Poles
156 10 ft Acorn Pedestrian Poles
60 Replacement Heads @Traffic
Signal
Receptacles
Banner Arms

Construction Cost

\$4,500,000 est.

Completion Date

2020

Electrical Engineering

This project fulfills a long overdue need in downtown Rapid City. In 1990 the city designers planned for pedestrian scale poles to be added to the Business Improvement District. As such, much of the infrastructure required was installed, thus minimizing the surface disturbances, not to mention the disturbance to the businesses. With the majority of the conduit and wiring available, our design engineer provided solution options which could capitalize on the infrastructure – keeping most of the investment dollars above grade and visible.

The solution specifies new ceramic metal-halide fixtures and 30 ft. poles on top of the existing footings and calls for new ceramic metal-halide acorn style fixtures on 14 ft poles with new foundations opposite of the existing poles. All of which utilize the existing underground infrastructure. At traffic signal poles, the cobra heads with high pressure sodium lamping were replaced by full cutoff ceramic metal halides. Lighting at each intersection was complimented with eight acorn style fixtures on 10 ft poles with new foundations and wiring extensions. New receptacles and banner arms are being installed on all inner-block poles.

