

Main Street Streetscape – Vermillion, SD
Submitted by: Stockwell Engineers

The Vermillion Main Street downtown streetscape project was a community-oriented event that made the downtown area a focused destination. As a result, the streetscape project included an enhanced Radigan Platz on Market Street with planters, cast iron benches, cast stone seat walls, and electrical receptacles. The Main Street corridor has multiple curb bump outs that include seating areas with tables and chairs, decorative monument pillars, flowerpots, and bike racks. The cast seat walls have a series of vertical relief accents that are sized and spaced to resemble to University of South Dakota Fight Song “South Dakota Victory” cadence rhythm.

The project used 1,898 yards of concrete in a multitude of ways. The concrete mixes varied based on use. SDDOT M6 was used for curb & gutter, planter curbs, sidewalk, colored concrete, column foundations, seat wall footings, and miscellaneous concrete. SDDOT A40 was used in all concrete pavement patches. Besides sidewalk and curb & gutter, 54 planter curb areas (totaling 2,625 linear feet), 38 cast seat walls, 19 storm sewer inlets, six street sign monuments, five colored sculpture pads, and two 16-foot-tall monument pillars were constructed using concrete. Midwest Ready Mix also supplied a flowable sand-cement mix that was used for trench backfill and as a free draining infill on abandoned coal rooms.

One challenging part for concrete crews were the concrete planter curbs, steps, and curb & gutter. Easy access to the planter curbs meant placing them before the curb & gutter, street, and sidewalk. However, the risk of having a slope or elevation mistake increased because the street was not installed. Without the teamwork of Stockwell Engineers, Schwartzle Construction, and Lombera Construcción, the project would not have progressed as quickly due to accessibility. The planter curb construction requires perfect timing to place the concrete, cure, and strip the forms, all at an appropriate time to ensure the curb shape is intact while still being finished once the face is exposed.

Concrete testing was provided by GeoTek Engineering & Testing Services in accordance with the 2015 SDDOT Standard Specifications for Roads and Bridges.

From the cast flower bowls, seat walls, and masonry components, to the colored sidewalk and reinforced slabs, concrete was used for its durability and beauty. It allowed the City of Vermillion to revive the downtown Main Street corridor in a special way. The project used concrete and other cementitious materials as a form of art & craftsmanship that will be durable for decades to come.