



Council Bluffs, Iowa

duplex system of hot-dip galvanized steel over paint was chosen for the Council Bluffs Gateway project - galvanized steel for the corrosion protection, and paint for aesthetic reasons. The combination of paint over galvanizing is becoming more popular, as the cost of maintenance continues to go up year after year. By incorporating a duplex system in this design, the lowa West Foundation will extend the time needed before first maintenance. which reduces their overall life-cycle cost while enhancing the overall design and aesthetics.

The potential for the fabricated tubes to warp was a major concern. The concern of dissimilar metals, large amounts of welded areas due to a graduating tapered design, and length of the parts were cause for a discretionary eye prior to and during galvanizing.

Where to place the gateway was up in the air and the Broadway Viaduct location was ultimately chosen because of its location at the center of the most prominent artery in the city. Over 22,000 vehicles pass over the bridge and under the gateway every day.

The artist, Ed Carpenter, and Puritan Manufacturing Company have experience with hot-dip galvanizing from past projects and know the benefits obtained from hot-dip galvanizing for corrosion protection. Climate change with the four seasons and wind will cause small cracks in the painted surface, allowing the elements to reach the base metal. The complete barrier and cathodic protection of hot-dip galvanized steel made it the first protection choice for this reason.

> Galvanizer Valmont Coatings - West Point Galvanizing

> > Artist Ed Carpenter

Specifier Iowa West Foundation

Fabricator Puritan Manufacturing

## duplex systems





