

## Community Center Drive over I-25

A HOCHTIEF Company

### Owner

City of Northglenn

### Location

Northglenn, CO

### Value

\$4,300,000

### Market

Bridges

### Start - Completion Dates

1/2003 -10/2003

- 4,000 linear feet of new four-lane roadway construction
- 285-foot by 80-foot three-span prestressed concrete “U” girder bridge
- 16,335 square feet of mechanically stabilized earth walls

## Project Description

Flatiron made many key decisions on this project, resulting in a bridge that has become a landmark for the Northglenn community. The project team made a major decision to utilize a three-sided box girder without a top slab to: increase stability over I-girders, so diaphragms between girders are not required; use two webs, essentially replacing two I-girders to speed up the erection process; and provide a clean trapezoidal-shape.

To create a very flow-able concrete mix, the team used a high-range water reducer to achieve a nine-inch slump without sacrificing strength. The finished product was a very high-quality girder coupled with a smooth finish.

Bridge abutments incorporate cast-in-place concrete pilasters along the wingwalls. These pilasters, with their gold-anodized aluminum spheres mounted on top, architectural lighting, and ceramic tile facing, provide a focal point for the bridge. The wingwalls extend forward from the front face of the abutment to form an angled “hide wall” for the girder ends. The decorative railing and details formed into the bridge face provide visual interest for I-25 traffic below.

### Company Role

Flatiron was the primary contractor for this project.

### Awards

- American Concrete Institute - Award of Excellence in Construction, 2003
- *Colorado Construction Magazine* - Silver Hard Hat Award, 2004

