

## Dayton Superior Keeps Light Rail Expansion on Track

### SUMMARY

Recognizing the need to open up the City of Calgary's downtown core to residents of surrounding communities, city leaders approved an expansion to the West light rail transit system (LRT). The expansion, to serve areas west of the city between the Bow River and Glenmore Reservoir, includes the first new LRT line in 20 years. This new line includes elevated track in several locations and a tunnel track under the Westbrook Mall parking lot. The final station for the line will be just west of 69th Street S.W.

The West LRT expansion covers an area that, over the next 20 years will experience a nearly 25% growth in population, going from approximately 90,000 people to 120,000 people.

### CUSTOMER

- Owner: The City of Calgary, Calgary Transit
- Contractor: SLG JV (Graham Construction and SNC Lavalin)

### PROJECT

- Calgary Light Rail Transit (LRT) West Expansion
- Transportation

### CHALLENGE

One of the project's challenges was that the contractor needed a coil tie that offered the same tensile strength as the coil rod being used on the project. In addition, the contractor needed a resource able to provide track inserts on an extremely tight delivery schedule.

### SOLUTION

After a competitive bidding process and numerous jobsite visits, Dayton Superior was selected by the contractor to manufacture coil ties in  $\frac{3}{4}$ " and 1" along with coil rod. Thanks to Dayton Superior's capacity to manufacture and deliver products in a narrow time frame, the company was also selected to provide track inserts to the jobsite, meeting the demanding project schedule. The company provided further product solution support to the project with our Segmental



*The precast contractor chose Dayton Superior Bar Lock®, Coil Rod, and Segmental Bridge Epoxy to help them maintain a demanding construction schedule.*



*The distinctive roof supports for the new Sunalta train station utilized Bar Lock to join long rebar strands in their rebar cages.*



*The specialized Segmental Bridge Epoxy was utilized in this rail overpass. (Photo courtesy of CanadaWeb Inc.)*

Bridge Epoxy. The epoxy's ease of use reduced the amount of time needed by labor for product application. Dayton Superior also provided Bar-Lock couplers for use in the precast arc detailing in the new stations and bridge overhang brackets and hangers used on the Sarcee Interchange; where the design on the overhang was crucial due to the limitations on the NU style girders.

"Dayton Superiors products, customer care, and knowledgeable staff far exceed any other in the industry. It has been great working with Dayton, and I look forward to doing it in the future," said Kimberly Evanoff, Buyer with SNC-Lavalin Constructors Inc./Graham Infrastructure LP, A Joint Venture.

## RESULTS

- Dayton Superior's manufacturing capabilities allowed the company to meet the contractor's specific coil tie needs, eliminating manufacturing wait times and allowing the contractor to stay on schedule.
- Dayton Superior was able to manufacture and deliver track inserts in a compressed timeframe, allowing the contractor to maintain a demanding construction schedule.
- Dayton Superior's Segmental Bridge Epoxy saved the contractor precious time on the jobsite which reduced overall labor costs.

## RESOURCES

Learn more about Dayton Superior's Product Solutions at: [www.daytonsuperior.com](http://www.daytonsuperior.com)



*In addition to our expertise, Dayton Superior products were chosen for the design, supply and labor advantages to the contractor.*



*Bridge Overhang Brackets attached to the NU style girders supported the bridge deck during construction. (Photo courtesy of City of Calgary)*

## DAYTON SUPERIOR B2 FOUR STRUT COIL TIE

- Extremely effective when used as inserts for lifting and handling thin wall precast elements
- Available with an optional B3 screw-on coil for use with the B30 screw-on plastic cone to set the insert back from the face of the concrete
- Minimum spacing between inserts is twice the corner distance

## RELATED PRODUCTS FROM DAYTON SUPERIOR

- B3 Screw-on coil
- B30 Screw-on plastic cone
- B1 Two Strut Coil Tie

**Additional Dayton Superior product information is available online at [www.daytonsuperior.com](http://www.daytonsuperior.com). Contact your Dayton Superior representative at 888-977-9600, or send an email to [info@daytonsuperior.com](mailto:info@daytonsuperior.com) if you would like to discuss how these or other innovative systems can make your construction projects more productive.**