

# Big R Pedestrian Bridge Helps Earn Engineering Excellence Award

**February 11th, 2009**

Dennis Corporation, a licensed civil engineering, surveying and construction management firm located in Columbia, SC, was recently awarded an Engineering Excellence Award from the American Council of Engineering Companies for its Roddey Drive Pedestrian Bridge and Sidewalks project in Lancaster, SC. Central to the project's success story, was a custom-designed bridge solution from Big R Bridge.

Dennis Corporation's innovative and cost-effective project consisted of a single-span pedestrian bridge across Gills Creek and an interconnected system of sidewalks along Roddey Drive designed to provide a safe passageway for almost 14,000 students attending three schools from nearby neighbourhoods. Prior to the construction of the new bridge and sidewalks, pedestrians had to utilize a small, two-lane vehicular bridge and connecting roads as their only access — walking along the shoulders of the narrow bridge and roads, mere inches away from busy traffic.

Gills Creek is part of the Katawba Valley Land Trust Greenway and a valued habitat for six threatened and endangered species. Sandwiched between the existing vehicular bridge and an active sewer main crossing, it was vital that the minimum amount of site disturbance take place to preserve the integrity of this protected habitat.

After reviewing several design options, a single-span arched design from Big R Bridge was chosen. The bridge was then pre-fabricated by Big R and shipped to the site where a crane set the bridge on pre-installed concrete footings with surgical precision. The single-span 124'-6" bowstring truss design alleviated the need for supports that would intrude on Gills Creek and potentially cause environmental impacts to the threatened and endangered species or water quality of the Katawba Valley Land Trust Greenway.

Dennis Corporation also specified weathering steel (also known as COR-TEN steel), with a pinewood boardwalk. Weathering steel saves the City maintenance dollars and reduces environmental impacts because it requires no painting and has a 100-year maintenance free design service life. Since weathering steel does not need to be painted, the emissions and future removal of volatile organic compounds from oil-based coatings are eliminated from the environment. Plus, the steel alloy composition of weathering steel develops a vibrant rust coating, or patina, that gives the appearance of age in keeping with other historic monuments and architectural features of Lancaster.

Incorporating AASHTO's wheelchair- and handicapped-access standards, the new bridge also improved access between the schools and the neighborhoods with added width and handrails.

On the occasion of the ribbon-cutting ceremony, City of Lancaster's Director of Support Services, Teresa Meeks, noted,

The construction of the bridge resembled a well-orchestrated dance, perfectly timed and beautiful. Dennis Corporation exceeded the City of Lancaster's expectations by providing sound engineering solutions and a common sense approach to funding, planning, design and public relations in order to complete the Roddey Drive Pedestrian Bridge and Sidewalks project under budget and before the 2008–2009 academic school year.

On behalf of everyone at Big R Bridge, we congratulate our project partner, Dennis Corporation, on earning this prestigious award and thank them for choosing *The Right Bridge. Built Right.*

***Mailing address:***

*P.O. Box 1290  
Greeley, Colorado  
80632-1290*

***Physical address:***

*19060 WCR 66  
Greeley, CO 80631*

1-800-234-0734  
1-970-356-9600  
1-970-356-9621 fax  
bigrbridge.com

©2008 Big R Bridge • Greeley, Colorado • 1-800-234-0734  
Web site by [Tantramar Interactive Inc.](#)

