

A SUPPLEMENT TO *WATER & WASTES DIGEST* AND *ROADS & BRIDGES*

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STORM WATER SOLUTIONS

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NOVEMBER/DECEMBER 2012



2012
TOP PROJECTS
WINNERS



2012 Top Storm Water & Erosion Control Projects

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Although the U.S. faced a record-breaking drought this past year, causing concern about water shortages, there was no shortage of storm water and erosion control projects. *Storm Water Solutions* is proud to celebrate the best of these projects with the fifth annual installment of its Top Storm Water & Erosion Control Projects awards.

In this special feature, our editorial staff profiles 10 projects that incorporate innovative solutions and technology to solve an array of problems. The 2012 winners come from 10 different states and include projects that address flood prevention, storm water management and erosion control.

Application & Selection Process

The submission period for SWS Top Projects was June to August 2012, and projects had to be in the design or construction phase within the previous 18 months in order to be considered. The editorial staff selected winners based on the challenges each project faced and the ingenuity and success of the solutions utilized.

We would like to thank all of the project leaders and representatives who took the time to submit projects and photos for the awards program, and we congratulate the owners, engineers, contractors and designers whose projects are honored in this special feature. [SWS](#)

For more information, contact the *Storm Water Solutions* editorial staff at swseditor@sgcmail.com, write in 803 on this issue's reader service form, or visit www.estormwater.com.

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Emory Court/Dupont Drive Area Flood Relief

The East Branch Drainage Ditch (EBDD) is a primary open-channel storm water conveyance system within the city of Tallahassee, Fla., that receives runoff from a 3,400-acre urban watershed. Adjacent to the EBDD is the 129-acre Emory Court/Dupont Drive area, which experienced recurring residential and roadway flooding as result of high tail water on the secondary drainage systems, coupled with low and flat roadway drainage. Emergency response personnel often had to evacuate residents via boats. Storm water model simulations predicted that roadway flooding would occur as often as a five-year storm frequency, and 18 homes would experience finished floor flooding during a 25-year frequency.

To alleviate flood conditions, the EBDD and the secondary drainage system had to undergo extensive improvements. The city added a concrete box culvert (CBC) adjacent to three existing CBCs. An approximately 1,530-ft gabion basket wall was constructed along both sides of the upstream EBDD, along with 1,520 ft of sheet piling along both sides of the downstream EBDD.

The design had to include flood protection for low-lying areas, a large secondary drainage CBC in an existing travel lane and more than 800 ft of utility relocation, including intersection with a 42-in. sewer line and numerous other utility service lines. The design also included precautions for erosive forces from channel velocities of up to 8 ft per second.

Final design simulations indicated that the EBDD and secondary drainage improvements significantly reduced flood stages to provide a minimum 25-year level of service for roadway flooding with no homes flooding.



Cost: \$6.27 million

Size: 5,830 ft

Designer: Robert B. Gaylord; Singhofen & Associates Inc.

Contractor: Allen's Excavation Inc.

Owner: City of Tallahassee

Location: Tallahassee, Fla.