

Cornell Avenue Dam Rehabilitation

Managing Agency: Village of Wheeling
Design By: Baxter & Woodman, Inc.
Constructed by: Lilco Construction



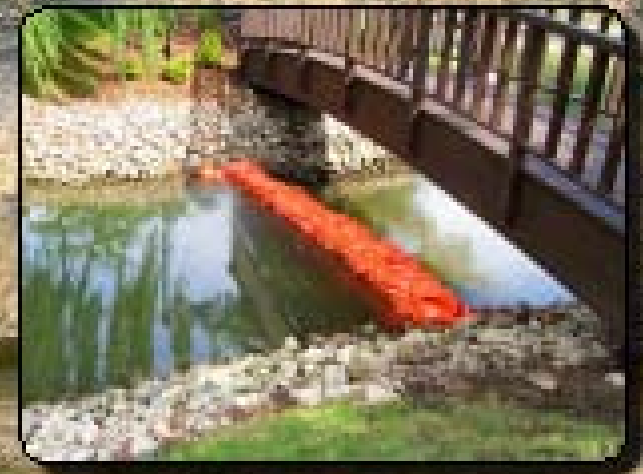
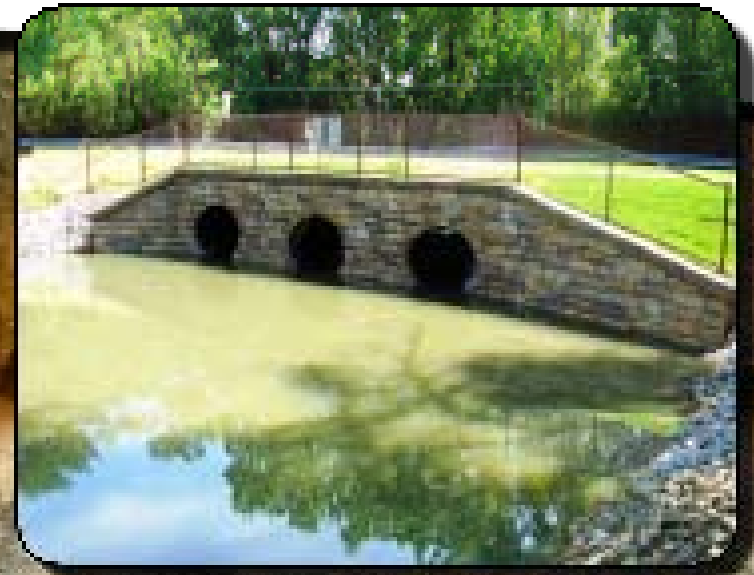
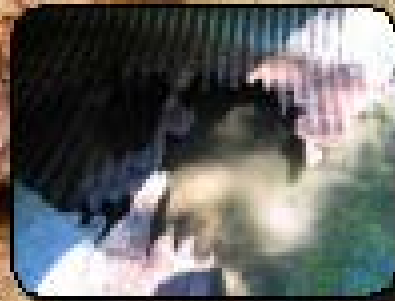
2008 SUBURBAN BRANCH PROJECT OF THE YEAR

Under \$2 Million
Emergency Construction/Repair



PROJECT HIGHLIGHTS

The Cornell Avenue Dam was constructed in 1970, had lived past its useful life, and was in a critical stage of failure. Cornell Avenue provided the only access to the residents of the lake in the Winds subdivision and concern was mounting that continued deterioration of the pipe arches and further erosion of the soils beneath the pipes could lead to a total collapse of the Dam and loss of emergency access for fire and police departments to serve this area.



In fall of 2005, Baxter & Woodman Consulting Engineers prepared a report outlining the condition of the Dam and alternatives to rehabilitate the structure. Coordination with the Illinois Department of Natural Resources confirmed the using alternative would be considered a maintenance activity and permitting would not be required. The upstream headwall was recommended to be replaced and a new headwall on the downstream side was also included in the plans.

Environmental considerations included:

BEST MANAGEMENT PRACTICES - Debris screens and portable sediment tanks were used during construction to collect excess sediment.

TREE PROTECTION - Pipes were cut back approximately 5 feet to avoid right-of-way issues and protect trees located in the project vicinity.

EROSION PROTECTION - Installation of new retaining wall and rip rap.

RECYCLED MATERIALS - The original CMP pipe was reused with the slip liner method of restoration.

