

CASE STUDY



PROJECT DETAILS

Project Name:

Village of Hewitt Culvert and Pipe Installation

Location:

Hewitt, WI

General Contractor:

Village of Hewitt

Product Manufacturer:

County Materials Corporation

Date:

2019

Key Products:

Horizontal elliptical concrete pipe and precast end walls

The Village of Hewitt Modernizes Storm Water Management System with Precast Concrete Products

Application: Storm Water Management Reconstruction

Solutions: Accommodates shallow ground cover, flat terrain and higher flow capacities, and provides longer service life

Faced with frequent flooding in residential areas, the Village of Hewitt, Wisconsin sought a modernized storm water management solution that would prevent water flow over roadways and costly flooding damage.

The existing storm water management system consisted of corroded metal culverts that were too small and damaged to effectively control water from rain events. The lack of functionality led to extensive property damage, severe erosion, and hazardous road conditions. Village officials knew the storm water management system needed to be replaced and contacted County Materials to find a durable solution.

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A representative from County Materials evaluated the site and recommended the installation of reinforced horizontal elliptical pipe. The elliptical shape allows for greater water flow in areas of shallow ground cover and flat terrain, while reinforced concrete pipe inherently has the longest service life of all culvert materials. The Village was pleased to approve this long-term solution.

Due to site conditions, the culverts were designed with joint ties and precast end walls to finish the grading area at each location. In total, the Village's storm water management system was modernized with 48' of 34" x 53" class III elliptical pipe with gasket joints, 208' of 29" x 45" class III elliptical pipe with gasket joints, 6 apron end walls in 34" x 53" size, and 12 apron end walls 29" x 45" in size.

County Materials relied on its Rib Falls and Madison, Wisconsin production facilities to manufacture and deliver the pipe. The close proximity of these plants to the job site aided in the success of this late season installation.



Reinforced concrete pipe inherently has the longest service life of all culvert materials.