



HIGH-VOLUME STORM WATER DRAINAGE SYSTEM FOR MEGA FOOD DISTRIBUTION CENTER WINS INDUSTRY AWARD

IRVING, Texas - One of the greatest challenges for building a 1.6 million square foot ConAgra distribution center was not the building itself, but how to manage storm water runoff. It was determined that handling storm water from the building's site along with nearly 500 acres of nearby land would require a drainage system consisting of more than 11,800 linear feet of pipe. Reinforced concrete pipe (RCP) was originally specified by the design engineer for this project, however, alternatives were permitted, and the final choice was corrugated high-density polyethylene (HDPE) pipe. Large diameter HDPE pipe was expected to provide the same or better performance as the RCP, plus it could be installed using the Class 1 backfill already specified. This saved the entire project more than eight percent in total cost and made it possible for the contractor to meet the completion deadline 10 days ahead of schedule. HDPE pipe has a life expectancy of at least 75 to 100 years.

This commercial construction storm water management project just west of Frankfort, Indiana received the Project of the Year Award from the Plastics Pipe Institute, Inc. (PPI), the major trade association representing all segments of the plastic pipe industry. The pipe manufacturer, Prinsco, Inc. (Willmar, MN)

received the honor during the association's annual meeting in May 2015.



HDPE pipe connects to concrete aprons to provide an outlet for the system

"Systems of this size typically need a lot of heavy equipment and large crews," explained Daniel Currence, P.E., director of engineering for the PPI Corrugated Plastic Pipe Division. "The use of HDPE pipe products allowed the contractor to offer a high performance storm water management solution with significant savings in material cost and installation time over a comparable concrete system. The lightweight, durable and easy-to-handle nature of HDPE pipe required smaller installation teams and equipment, reducing the installation costs alone by about 13 percent compared to concrete."

Approximately 2.25 miles of Prinsco's GOLDFLOW® WT watertight corrugated HDPE pipe ranging from 12 to 60 inches in diameter was used.

"HDPE pipe was an ideal solution for this application," stated Tony Radoszewski, president, PPI, "because it is available in large diameters, accommodates high volume applications, provides unmatched service life and offers installation efficiencies. In addition,



HDPE pipe installation allowed the contractor to be finished ahead of schedule. The overall project timeline was very tight, so being able to complete installation early translated to improved efficiencies for the entire project and helped to keep it on schedule.



More than two miles of large diameter corrugated HDPE pipe was installed instead of concrete using the same specified Class 1 backfill.

"This project is a perfect example of how HDPE pipe can effectively compete against concrete in civil and commercial water management applications," Radoszewski continued. "The structural integrity and service life of the pipe easily met the volume and performance requirements of this project. The additional cost and time savings using HDPE pipe over concrete made it an ideal choice for this high-volume conveyance of storm water runoff application. For these reasons, this was indeed a Project of the Year that deserves this recognition."

For additional information about storm water drainage, go to the Plastics Pipe Institute's website at: www.plasticpipe.org.

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The 1.6 million square foot ConAgra distribution center needed a storm water management system that could control runoff from 500 acres of land.

About PPI:

The Plastics Pipe Institute Inc. (PPI) is the major trade association representing all segments of the plastic pipe industry and is dedicated to promoting plastics as the material of choice for pipe applications. PPI is the premier technical, engineering and industry knowledge resource publishing data for use in development and design of plastic pipe systems. Additionally, PPI collaborates with industry organizations that set standards for manufacturing practices and installation methods.