



SOLENO

MASTERING WATER SUSTAINABLY



KUSTOMFLO

HIGHBROOK DRAINAGE IMPROVEMENTS

DRAINAGE REHABILITATION

Location: Pelham Manor, New York

Installation: August, 2025

PROJECT DETAILS

Owner: Village of Pelham Manor

Contractor: Peter Landi Inc.

Engineer: AI Engineers, Inc.

PRODUCT DESCRIPTION

Diameter: 48"

Length: 650'

Profile Information: Open profile pipe, with closed profile bends and fittings

Joints: Gasketed

Accessories Provided: Bends, risers, bend with riser, and reducing bulkhead

SITE CONDITIONS

Trench Depth: 8'

Trench Width: 7'

Type of Existing Soil: Sandy clay

Backfill Material: Crushed stone aggregate

Surface Material: Bituminous Pavement

Other: Limited laydown area, residential street

CONTEXT

The project required a structural solution that could reduce the use of concrete while still delivering strength, efficiency, and adaptability in a complex work zone. **KUSTOMFLO** offered an ideal fit, providing an integrated, lightweight design that could be fabricated rapidly and installed with minimal equipment. Its ability to be placed without a crane proved especially valuable in a confined trench and in an environment where traffic needed to remain active throughout construction. These advantages—speed, flexibility, and simplified installation—were the primary drivers behind the product choice, ensuring the team could meet project demands without compromising safety or workflow.



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CHALLENGE

The project involved relatively straight runs of HDPE pipe. The contractor was looking for a pipe material with watertight joints, that could incorporate access manholes and bends without adding in large, heavy concrete structures.

The contractor was also looking at a product that would ease and speed up construction to avoid costly traffic management on a residential street with many active driveways.



SOLUTION

KUSTOMFLO pipes were a perfect solution for the job. The lightweight open profile pipe was easily able to be stacked onsite in their limited laydown area. The pipe lengths were able to be customized to meet the contractor's needs based on their trench box, and the small laterals that crossed the path of the proposed storm sewer.

The **KUSTOMFLO** accessories tied-in directly to the pipeline proposed to maintain watertight connections, safe access, and easy installation during the project construction phase. Adaptable stub connections allowed for easy location and tie-in of other pipe materials into the new pipeline.



BENEFITS

KUSTOMFLO was the least of the contractor's concerns onsite. With limited space available for both the trench excavation and the equipment laydown area, it was crucial to them to have a lightweight material that could quickly be moved around and installed.

The customizable lengths of **KUSTOMFLO** allowed the contractor to request shorter lengths of pipe that fit easily into their trench boxes, while also allowing for easy adaptability to cross small lateral connections.

Excavation and trench preparation was complicated through the uncovering of unknown and unexpected utilities. The lightweight **KUSTOMFLO** pipe segments allowed the contractor to install all of the pipe without the need of a crane rental, which would have substantial costs as project timelines grew more complicated.

The connections between all of the pipes and the structures were simplified and watertight using the **KUSTOMFLO** double gasket connections.



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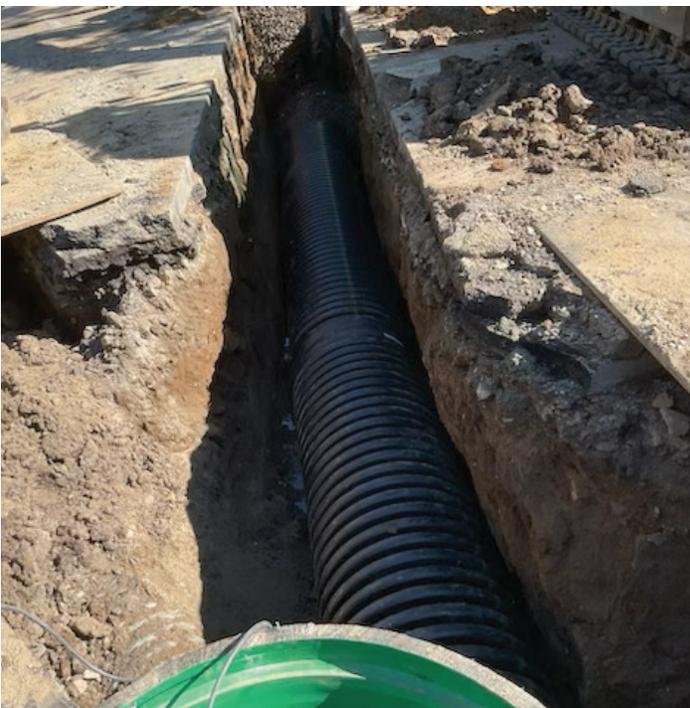
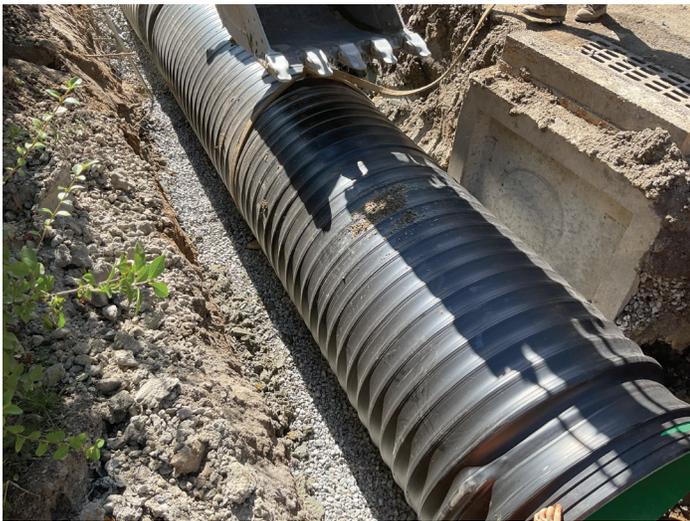
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