

CASE STUDY

CSO Storage Solution

North Vernon, IN

OWNER

City of North Vernon, IN

INSTALLATION DATE

Summer 2014

ENGINEER

Lochmueller Group, Inc., Evansville, IN

PRODUCTS

1,600' (488 m) of 48" (1200 mm) SaniTite® HP pipe

CONTRACTOR

Brackney Excavating, Brookville, IN

DESCRIPTION

Significant rain events were causing North Vernon's lift stations, including the southwest lift station, to overflow a number of times each year. The excess water would occasionally overflow directly to surface water bodies. The city solved this issue using long, parallel runs of SaniTite HP 48" (1200 mm) pipe rather than replacing or enlarging the lift station.

The pipe system temporarily stores wet weather volumes upstream of the lift station for one-two hours. Water flows from the pipe to the lift station and onto the treatment plant.

After gathering flow monitoring data, Lochmueller Group knew a storage volume of 128,000 gallons (484,532 liters) was needed for the detention pipe system. By using 1,600' (488 m) of SaniTite HP pipe, over 147,000 gallons (556,456 liters) of storage was provided.

SaniTite HP was chosen because it is watertight and was less expensive than concrete or other pipe that met specifications. At project completion, the system was tested with zero leakage.

