

CASE STUDY

N-12[®] Used at Intermodal Yards

Chicago, IL

OWNER

Norfolk Southern, Atlanta, GA

INSTALLATION DATE

2011-12

ENGINEER

Patrick Engineering, Lisle, IL

PRODUCTS

10,000' (3,048 m) of 8"-60" (200-1500 mm) N-12

CONTRACTOR

Milord Company, Bridgeview, IL

DESCRIPTION

Old industrial parks in Chicago were converted to two rail/truck intermodal yards because of the increasing freight traffic in the region.

Detention systems were required for the stormwater drainage. The detention systems would need to handle the extreme weight of rail cars, which can exceed 250,000 pounds (113,398 kg), and variable depths of cover. N-12 pipe was used because it withstands massive live loads and its proven structural capacity under Cooper E80 loading conditions.

The 47th Street intermodal required a drainage project to reconfigured the Garfield Avenue entrance. The HDPE pipe has 13' (4 m) of cover and is under storage and parking areas.

The 63rd Street intermodal need complete drainage. Due to the sandy soil, a series of detention systems were built throughout the facility. The detention systems are beneath the loading and unloading areas for freight trains and the facility's driveways and storage areas.

