

North Gratiot Interceptor Drain – Phase 5 & Lenox Local

Lenox Township, Michigan



The North Gratiot Interceptor Drain (NGI) – Phase 5 & Lenox Local Drain project is a new sewer that provides sanitary service to Lenox Township and the Village of New Haven. The sewer was designed along the east side of Gratiot Avenue from 26 Mile Road to 31 Mile Road and consists of approximately 31,600 lineal feet of 15" - 36" diameter sewer pipes.

The sewer design and specifications were developed in accordance with the Office of the Macomb County Public

Works Commissioner (OMCPWC), Michigan Department of Transportation (MDOT), Road Commission of Macomb County (RCMC), and Michigan Department of Natural Resources and Environment (MDNRE) requirements. The service area for this sewer extends from 26 Mile Road to the north limits of the Township and between Grand Truck Western Rail Road / Lowe Plank Road and County Line Road.

The project featured open-cut excavation (approximately 25,300 linear feet) and tunneling construction (approximately 6,300 linear feet) at depths of 30' or more below existing grade, through various soil types, consisting of loose to very dense hard pan. The design constraints included existing trunkline overhead / underground utilities, numerous river crossings, high traffic area, and very limited construction work areas between the edge of the pavement and the existing road right-of-way where a unique traffic treatment plan was designed.

A Parshall Flume Meter Pit was also designed to calculate the sanitary flows from Lenox Township and will be maintained and operated by OMCPWC.

Specific SDA services consisted of the sanitary sewer design, permitting, contract administration, construction layout and staking, and record drawings.

OWNER / CLIENT

Office of the Macomb County Public Works
Commissioner

Lenox Township

PROJECT START - END

September 2006 - September 2007

SDA PROJECT NO.

LE01-008

SOFTWARE

AutoCAD
Excel
FieldManager Suite
MS Project
MS Word
XnView