



Roadway Reconstruction

689 Main Street Buffalo, NY 14203 P 716 656-1900 F 716 656-1987 www.didonato.cc

## **Client:**

**Erie County DPW** 

#### **Client Contact:**

Charles Sickler, PE (716) 858-8372

# **Completion Date:**

Design - 2012 Construction - 2013

## **Engineer's Estimate:**

\$3,646,146

#### **Bid Amount:**

\$2,907,198 (Accadia)

## **Key Personnel:**

John DiDonato, PE Peter Ringo, PE William Ratka, PE Anthony Buccilli, PE Christopher Gardner, PE Pradeep Simlote, EIT

## **Categories:**

HB01 CS03



DiDonato provided design services for the reconstruction of a 1.6 mile long asphalt pavement section beginning at the limits of the recently reconstructed pavement just east of Delameter Road and ending at the east side of the intersection with NY Route 5 (Erie Road). There are two typical sections within the project limits. The eastern 1.2 mile segment from Delameter Road to N. Main Street consists of a two-lane roadway, 12 ft. travel lanes, 8 ft. shoulders. The western 0.4 mile segment from N. Main Street to Route 5 consists of 4 travel lanes and concrete curb/gutters. The drainage system along the eastern segment is a mixture of open ditches and closed piping. The western segment has a closed drainage system with curb inlets. There is one bridge structure that carries Eden-Evans Center Road across Big Sister Creek between N. Main Street and Old Eden Evans Center Road.

The design included full reconstruction of the roadway pavement for the entire project length, retaining the bottom 6-inches of subbase, in order to address on-going frost heave in the subgrade resulting in pavement degradation. Installation of new underdrain was designed to connect to the existing drainage system. The drainage system had recently been cleaned and was functioning properly. Utilizing Road Diet principles, the roadway width was re-evaluated along the eastern segment similar to Phases 1 & 2 where the overall pavement width was narrowed by approximately 8 feet. The western segment included replacement of the concrete gutters. A standard gutter section was evaluated in comparison with the existing curb/gutter section. The western segment encompasses Lake Shore High School and commercial establishments that needed to be considered for temporary traffic control measures. The bridge over big Sister Creek was re-decked and reconfigured as a two-lane road with wide shoulders to accommodate bicycles and pedestrians. Roadway segments between and adjacent to CSX and Norfolk Southern railroad tracks were also reconstructed.

Also included was the replacement of approximately 1,300 LF of 10-inch waterline which existed under the existing road section. Waterline located outside of the existing pavement area remained in-place. The project design included preparation of all documents required for public bid.



# EDEN EVANS CENTER ROAD | Eden, NY

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Additional text for Eden-Evans Roadway Reconstruction

# Watermain Replacement

The Erie County Department of Public Works (ECDPW) upgraded the existing watermain on Eden Evans Center Road. This upgrade included the installation of a new 10-inch watermain on the north side of Eden Evans Center Road (between Old Eden Evans Center Road and Delamater Road) in the Town of Evans. DiDonato Associates provided design and construction related services to complete this work.

New service connections were put in for all residential customers where new watermain was installed, including at interconnection piping. New fire hydrant assemblies replaced the older hydrants located within the project corridor.

All newly installed watermain had pressure and bacteriological testing prior to being placed in service. Current Erie County Water Authority and Erie County Health Department (Erie County Department of Environment and Planning) standards were utilized for these tests. Approval from the Town of Evans was obtained prior to placing any line in service.

The new waterline was designed using standards from various agencies which govern in the project area. These agencies include the Erie County Department of Environment and Planning (ECDEP), The Erie County Highway Department, the Town of Evans, the Erie County Water Authority (ECWA), the American Water Works Association (AWWA), and the New York State Department of Transportation (NYSDOT). Ten State Standards were used as a guide for the waterline design along with common engineering practices.