

Project: NYS Route 198 (Scajaquada Expressway)
Reconstruction Project – City of Buffalo, NY
(PIN 5470.22)

Location: Erie County, NY

Client: New York State Department of Transportation

Year: 2007 – 2008

Cost: \$159K (Fee)

Work Performed:

- Design Survey
- InRoads Terrain Model
- MicroStation Design File
- Horizontal Control
- Vertical Control
- Field Sketches
- GPS Survey
- Baseline Adjustment
- Underground Utility Investigation
- Stream Survey

This project proposed changing the functional classification and operating speeds of the Scajaquada Expressway corridor through the reconstruction of the highway and interchanges, and through the use of traffic calming measures. The project limits along 5.5 km of NY Route 198, are from I-190 to NY Route 33, not inclusive of the I-190 and NY Route 33 interchanges, in the City of Buffalo, Erie County, New York.

Prudent was responsible for setting the Primary Project Control by utilizing HARN on the NYS Plane Coordinate System. The Primary Control included the setting of three azimuth pairs of GPS horizontal control points, leveling through the site for vertical control, and documenting the procedures and results. The Plan for Primary Project Control, including control to be used, was approved by the Regional Land Surveyor.

Prudent was also responsible for the field survey and field edit of existing aerial mapping. This information was used to obtain data required for the design, which could not be obtained from aerial photography, and to augment the DTM. This work included approximately 5 km of hard surface locations at 20-meter intervals along the Scajaquada Expressway, ramps, and adjoining side streets; details at 12 bridge structures, including

location of substructures, profile, vertical clearance over roadways, low chord elevations over waterways, horizontal clearances, and widths of lanes, shoulders, and sidewalks; details at existing drainage structures, including pipe sizes, rim and invert elevations, flow directions, and connections; as-builts of existing utility structures; and verification of record plan locations and elevations. The completed tasks also included stream survey, mapping, and terrain modeling for approximately 1.7 km of Scajaquada Creek.

All work performed by Prudent for this project conformed to the New York State Department of Transportation Surveying Standards & Procedures Manual, and Section 5.4 of the Highway Design Manual.



Pedestrian Bridge over Scajaquada Expressway



Scajaquada Expressway