CONTROL REPORT

PIN SABP08 – ACCELERATED BRIDGES
BIN 1039280
NY ROUTE 174 OVER NINE MILE CREEK
TOWN OF CAMILLUS – ONONDAGA COUNTY

PREPARED BY
SURVEY UNIT/DESIGN GROUP
REGION 3 – N.Y.S.D.O.T.
SYRACUSE, N.Y. 13202
2012

SURVEY SUPERVISOR: J.V. SALLIN
SURVEY COORDINATOR: P.J. OLSZEWSKI
SURVEY CREWCHIEF: R.C. KOKOSENSKI
COMPiled BY: R.C. KOKOSENSKI
T.E. SALLIN
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**PIN SABP08 – ACCELERATED BRIDGES**  
**BIN 1039280**  
**NY ROUTE 174 OVER NINE MILE CREEK**  
**TOWN OF CAMILLUS – ONONDAGA COUNTY**

<table>
<thead>
<tr>
<th>SHEETS</th>
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</tr>
<tr>
<td>12</td>
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<td>13 of 13</td>
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INTRODUCTION

PIN SABP08 – ACCELERATED BRIDGES
BIN 1039280
NY ROUTE 174 OVER NINE MILE CREEK
TOWN OF CAMILLUS – ONONDAGA COUNTY

THE CONTROL SURVEY FOR THE FOLLOWING PROJECT WAS CONDUCTED BY THE NYSDOT, REGION THREE DESIGN - SURVEY UNIT. THE PURPOSE OF THIS SURVEY IS TO PROVIDE HORIZONTAL AND VERTICAL CONTROL DATA FOR MAPPING AND FUTURE CONSTRUCTION ACTIVITIES AT THIS LOCATION.

THE HORIZONTAL DATUM IS REFERENCED TO NAD 83(CORS 96), CENTRAL ZONE, NEW YORK STATE PLANE COORDINATE SYSTEM.

THE VERTICAL DATUM IS REFERENCED TO NAVD88.

ALL UNITS OF MEASURE FOR THE SURVEY ARE IN U.S. SURVEY FEET.

EQUIPMENT UTILIZED:

<table>
<thead>
<tr>
<th>TOTAL STATION</th>
<th>GPS EQUIPMENT</th>
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<td>MAKE: LEICA</td>
<td>MAKE: LEICA</td>
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<tr>
<td>MODEL: TS15 P</td>
<td>MODEL: GS15</td>
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<tr>
<td>SERIAL # 1610444</td>
<td>SERIAL# 1505324</td>
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<th>DATA COLLECTOR (FIELD CONTROLLER)</th>
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<td>MODEL: CS15</td>
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<tr>
<td>SERIAL# 1593317</td>
<td>SERIAL# 1593321</td>
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<table>
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<th>DIGITAL LEVEL</th>
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<tr>
<td>MAKE: LEICA</td>
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<tr>
<td>MODEL: DNA03</td>
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<tr>
<td>SERIAL# 341729</td>
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HORIZONTAL CONTROL SUMMARY

PIN SABP08 – ACCELERATED BRIDGES
BIN 1039280
NY ROUTE 174 OVER NINE MILE CREEK
TOWN OF CAMILLUS – ONONDAGA COUNTY

A NEW PROJECT BASELINE WAS ESTABLISHED FOR THIS PROJECT AND CONSISTS OF NEW PROJECT BASELINE POINTS 191 AND 192.

THE AZIMUTH OF THE BASELINE WAS DERIVED FROM RTK ROVER CELL OBSERVATIONS OF BASELINE POINTS 191 AND 192.

THE RTK ROVER CELL COORDINATES OF BASELINE POINT 191 WERE HELD.

THE PROCEDURE FOR ESTABLISHING COORDINATES FOR BASELINE POINT 192 ARE AS FOLLOWS:

1. A TOTAL STATION INSTRUMENT WAS SET UP ON BASELINE POINT 191.

2. THE GPS DERIVED AZIMUTH FROM BASELINE POINT 191 TO BASELINE POINT 192 WAS HELD.

3. A TPS MEASURED DISTANCE FROM BASELINE POINT 191 TO BASELINE POINT 192 WAS THEN RECORDED TO ESTABLISH THE FINAL COORDINATES OF BASELINE POINT 192.

A TRAVERSE WAS NOT UTILIZED FOR THIS PROJECT LOCATION.

ALL COORDINATES ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE BASED ON NAD 83 (CORS 96).

ALL AZIMUTHS AND BEARINGS ARE REFERRED TO GRID NORTH.
<table>
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<tr>
<th>Attributes</th>
<th>Point Id</th>
<th>Northing</th>
<th>Easting</th>
<th>Ortho. Hgt.</th>
<th>Pcsn. + Hgt. Qly</th>
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<td></td>
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<td>1098032.987</td>
<td>886230.401</td>
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<td>0.000</td>
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<td>885987.323</td>
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PIN SABP08
APPLIED PROJECT COMBINED SCALE FACTOR
EQUALS 1.00000000000
PIN SABP08-ACCELERATED BRIDGES
BIN 1039280
NY ROUTE 174 OVER NINE MILE CREEK
TOWN OF CAMILLUS – ONONDAGA COUNTY

List Coordinates Report

Project: SABP08_BIN1039820_MAP_SUR_S
Alignment Name: SABP08_BIN1039820_BL

<table>
<thead>
<tr>
<th>Point</th>
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<th>Easting</th>
<th>Elevation</th>
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Table of Clearances – Control Line Data

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<tr>
<th>POINT</th>
<th>STATIONING</th>
<th>DISTANCE (FEET)</th>
<th>NORTHING (Y)</th>
<th>EASTING (X)</th>
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<tr>
<td>191</td>
<td>10+00.000</td>
<td>377.169</td>
<td>1098032.9870</td>
<td>886230.4010</td>
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<tr>
<td>192</td>
<td>13+77.169</td>
<td></td>
<td>1098321.3281</td>
<td>885987.2630</td>
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Horizontal Alignment Review Report

Project: SABP08_BIN1039820_MAP_SUR_S
Alignment Name: SABP08_BIN1039820_BL
Alignment Description: 2012 SURVEY BASELINE
Alignment Style: CB

Element: Linear

<table>
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<th>Easting</th>
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<td>10+00.000</td>
<td>1098032.9870</td>
</tr>
<tr>
<td>POE</td>
<td>13+77.169</td>
<td>1098321.3281</td>
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Tangential Direction: N 40°08'19" W
Tangential Length: 377.169
NEW YORK STATE
DEPARTMENT OF TRANSPORTATION
CONTROL SURVEY DATA
BASED ON THE
NEW YORK STATE PLANE COORDINATE SYSTEM
VALUES IN SURVEY FEET

PROJECT: SABT 08
ORDER OF SURVEY: THIRD
ZONE: NY CENTRAL
CHIEF OF PARTY: P. KOLOSENSKI
USGS QUAD: NYS DOT REGION No. 3, SYRACUSE

CAMILLUS
COWANDA
329
191
10+00.00
2 FOOT LONG REBAR W/CAP

NORTHING: 1098032.987'  HORIZONTAL DATUM: NAD 83/ CORS 96
EASTING: 886230.401'  VERTICAL DATUM: NAVD 88
SURVEYING METHOD: GPS □ CONVENTIONAL

NORTHING: 1098032.987'  HORIZONTAL DATUM: NAD 83/ CORS 96
EASTING: 886230.401'  VERTICAL DATUM: NAVD 88
SURVEYING METHOD: GPS □ CONVENTIONAL

COMBINED FACTOR: 1.00000
GRID SCALE FACTOR: OBJECT
ELLIPS. REDUCTION FACTOR: 192 N40-08-19 W1 377.17 F
ESTABLISHED BY: YEAR
NYS DOT: 2012

DETAILED DESCRIPTION AT STATION: BASELINE POINT 191 IS A TWO FOOT LONG REBAR WITH CAP AND IS LOCATED ON THE EAST SIDE OF NEW YORK STATE ROUTE 174; 330 FEET NORTH OF THE INTERSECTION OF MARTISCO RD AND NEW YORK STATE ROUTE 174.

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MAP OF SURVEY POINTS AND DISTANCES

NORTH: 84.16 FT
EAST: 22.10 FT
SOUTH: 68.54 FT
WEST: 0.357' ALLTEL

ISTORY HOUSE
ISTORY GARAGE
MARTISCO RD
### NEW YORK STATE PROJECT: SABPOS
#### ORDER OF SURVEY: THIRD
#### ZONE: NY CENTRAL
#### CHIEF OF PARTY: K. BOROSKIVI
#### USGS QUAD: NYSDOT REGION No. 3, SYRACUSE

### CONTROL SURVEY DATA

**NEW YORK STATE PLANE COORDINATE SYSTEM**

*VALUES IN SURVEY FEET*

<table>
<thead>
<tr>
<th>CITY, VILLAGE OR TOWN</th>
<th>COUNTY</th>
<th>S.H. No.</th>
<th>STATION NAME</th>
<th>@ STATION</th>
<th>MONUMENT TYPE</th>
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<tbody>
<tr>
<td>CAMILLUS</td>
<td>Onondaga</td>
<td>329</td>
<td>192</td>
<td>13 + 77.17V</td>
<td>2 foot long, 3/4 inch cap</td>
</tr>
</tbody>
</table>

**NORTHING:** 10983.21 feet  
**EASTING:** 885987.263 feet

**HORIZONTAL DATUM:** NAD 83 CORS 96  
**SURVEYING METHOD:** GPS  
**CONVENTIONAL**

**VERTICAL DATUM:** NAVD 88  
**SURVEYING METHOD:** GPS  
**CONVENTIONAL**

<table>
<thead>
<tr>
<th>COMBINED FACTOR</th>
<th>DISTANCES &amp; DIRECTIONS TO BACKSIGHTS AND FORESIGHTS</th>
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<tr>
<td>1.00000</td>
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**GRID SCALE FACTOR:**  
**ELLIPSE REDUCTION FACTOR:**

**ESTABLISHED BY:** NYSDOT  
**YEAR:** 2012

**DETAILED DESCRIPTION AT STATION:** BASELINE POINT 192 IS A TWO FOOT LONG RED STEM WITH CAP AND IS LOCATED ON THE WEST SIDE OF NEW YORK STATE ROUTE 174, 705 FT NORTH OF THE INTERSECTION OF MARTISCO RD AND NEW YORK STATE ROUTE 174.

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**CHISEL CUT**  
**DELINERATOR POST**  
**SINGLE GREEN**

**1 STORY HOUSE # 5023**

**NEW YORK STATE ROUTE 174**  
**NINE MILE CREEK**

**BOLT IN MAIL BOX POST 3.0 FT ABOVE GROUND**

---

**GRID SCALE FACTOR:**  
**ELLIPSE REDUCTION FACTOR:**
VERTICAL CONTROL SUMMARY

PIN SABP08 – ACCELERATED BRIDGES
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NY ROUTE 174 OVER NINE MILE CREEK
TOWN OF CAMILLUS – ONONDAGA COUNTY

RTK ROVER CELL SOLUTIONS WERE USED TO ESTABLISH THE ELEVATION OF NEW PROJECT BASELINE POINT 191.

THE REMAINING VERTICAL CONTROL FOR THIS PROJECT LOCATION WAS ESTABLISHED BY PERFORMING A LEVEL RUN WHICH UTILIZED A DIGITAL LEVEL AND BAR CODED STAFF.

THIS LEVEL RUN BEGAN AT NEW PROJECT BASELINE 191 AND PASSED THROUGH NEW PROJECT BASELINE POINT 192, NEW PROJECT BENCHMARKS; 1 AND 2, AND CLOSED BACK ON NEW PROJECT BASELINE POINT 191.

THIS LEVEL RUN CLOSED WITH AN ERROR OF 0.002 FEET, WITH AN ALLOWABLE ERROR OF 0.021 FEET AND MEASURED 992± FEET IN LENGTH.

THE LEVEL RUN WAS ADJUSTED UTILIZING “LEICA GEO OFFICE” PROCESSING SOFTWARE.
NEW YORK STATE
DEPARTMENT OF TRANSPORTATION
CONTROL SURVEY DATA
BASED ON THE
NEW YORK STATE PLANE COORDINATE SYSTEM
VALUES IN SURVEY FEET

<table>
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<tr>
<th>CITY, VILLAGE OR TOWN</th>
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<th>STATION NAME</th>
<th>E STATION</th>
<th>MONUMENT TYPE</th>
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<tr>
<td>Camillus</td>
<td>Onondaga</td>
<td>329</td>
<td>BMI</td>
<td></td>
<td>&quot;Bench Tie&quot; Spike in U.P.</td>
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NORTHING: 173617364
EASTING: 45377.4
ELEVATION: 177.84

HORIZONTAL DATUM: NAD 83/CORS 96
SURVEYING METHOD: GPS CONVENTIONAL

VERTICAL DATUM: NAVD 88
SURVEYING METHOD: GPS CONVENTIONAL

DISTANCES & DIRECTIONS TO BACKSIGHTS AND FORESIGHTS

GRID SCALE FACTOR: 1
ELLIPS. REDUCTION FACTOR: 2012

Established by NYSDOT

Detailed description at station: BMI is a "Bench Tie" spike in utility pole NG/70 and is located on the east side of New York State Route 174, 1/2 f feet north of the intersection of Martisco Rd and New York State Route 174.
<table>
<thead>
<tr>
<th>CITY, VILLAGE OR TOWN</th>
<th>COUNTY</th>
<th>S.H. No.</th>
<th>STATION NAME</th>
<th>@ STATION</th>
<th>MONUMENT TYPE</th>
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</thead>
<tbody>
<tr>
<td>CAMILLUS</td>
<td>ONONDAGA</td>
<td>329</td>
<td>BMZ</td>
<td></td>
<td>BENCH TIE SPIKE IN UP</td>
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NORTHING:

EASTING:

ELEVATION: 453.82 ft

VERTICAL DATUM: NAVD 88

SURVEYING METHOD: GPS

COMBINED FACTOR:'

DISTANCES & DIRECTIONS TO BACKSIGHTS AND FORESIGHTS

GRID SCALE FACTOR:

OBJECT GRID BEARING GRID DISTANCE

ELLIPS. REDUCTION FACTOR:

Established by:

NYS DOT

2012

Detailed description at station: BMZ is a "Bench Tie" spike in a utility pole and is located on the west side of New York State Route 174, 700 ft N of the intersection of Martisco Rd and New York State Route 174.
<table>
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<th>Height</th>
<th>Point Class</th>
<th>Point Subclass</th>
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<td>43.73</td>
<td>455.065</td>
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<td></td>
<td>BM1</td>
<td>5.024</td>
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<td>Control</td>
<td>Fixed in Height</td>
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</table>
# Level Summary

**SABP.08_NY174 OVER NINE MILE CREEK_LEVEL**

03/15/2012 07:52:16

## Project Information

- **Project name:** SABP.08_NY174 OVER NINE MILE CREEK_LEVEL
- **Date created:** 03/15/2012 07:38:15
- **Application software:** LEICA Geo Office 8.0

## Line 001

- **Line length:** 991.858 fts
- **Method:** BF
- **Start point id:** CBP191
- **Number of stations:** 4
- **Date/time:** 03/13/2012 17:21:44
- **Number of observations:** 8

## Processing Parameters

- **Adjustment method:** by distance
- **Processed with Staff Corrections:** No
- **Height difference:** -0.002 fts

## Tolerance

<table>
<thead>
<tr>
<th>Tolerance</th>
<th>Permitted [fts]</th>
<th>Actual [fts]</th>
<th>Accepted</th>
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<tbody>
<tr>
<td>Misclosure</td>
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<td>-0.002</td>
<td>✓</td>
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## Points

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<th>Height [fts]</th>
<th>Corr [fts]</th>
<th>Delta Hgt. [fts]</th>
<th>Point Class</th>
<th>Sd. Hgt. [fts]</th>
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