

Survey Report

TIP Number: 17BP.7.R.80

Project Number: 67-0023

Bridge 23, Division 7, Orange County

October 7, 2013

Submitted by:



1025 Wade Ave. Raleigh, NC 27605



Michael R. Jackson
10/7/2013

Job Description

The purpose of this project was to provide survey data for Bridge #23 on SR 1508 (Hawkins Rd.) in Orange County. The limits for this project extend 300 ft. from each end of the bridge along SR 1508, and 200 ft. upstream and downstream from centerline SR 1508 along South Fork Little River. All data was collected and processed electronically following guidelines set forth by Location and Surveys unit.

This project was prepared in English units.

Dates of survey: October 2nd, 2013.

Control

Horizontal:

Control was established on this project utilizing GPS points (670023-1 and 670023-2) provided by SEPI Engineering & Construction. The localized coordinate system developed for this project is based on the State Plane Coordinates established by SEPI Engineering & Construction for monument "670023-2" with NAD 83 (2011) State Plane Grid Coordinates of Northing: 893478.37 (ft) Easting: 1965186.66 (ft). The average combined grid factor used on this project (ground to grid) is: (0.99998454). All linear dimensions are localized horizontal distances. A control traverse was run through the project resulting in a raw, unadjusted closure of 1/232379.

Vertical:

The vertical datum is based on SEPI monument "670023-2" (ELEV. 650.29') NAVD 88, Geoid G12NC.

All baseline control elevations were established and verified using differential leveling.

Baseline Descriptions

Baselines were established along the project corridor by Sepi Engineering & Construction. Baseline points set on this project were BL-1, BL-2, and 670023-2. These points are numbered BL1, BL2, and GPS2 in the submitted GPK file.

Existing Alignments**Line -EL-**

- Follows the centerline of SR 1508 (Hawkins Rd.).
- This is a geometric best-fit representation of the existing roadway.
- No centerline points were set.

Utilities

Sepi Engineering personnel collected the underground utility data using NC 811 utility markings as provided by ticket #A132551023, dated 09/12/2013. The following utility owners were notified:

Utility

Phone
Power

Owner

Centurylink
Piedmont Electrical membership Corp.

- No utilities were attached to the bridge at time of Survey.

Existing Right of way

Existing Right-of-way as shown in FS file was determined by Sepi Engineering using the most current retrievable deed descriptions and survey plats.

Property Owner Contacts

Property owners affected by this project were contacted via mailed letter, produced using Procon Reporter. (Bridge Replacement Letter) No comments were received from any of the property owners contacted.

DTM SETTINGS

Curve stroke tolerance: 0.15

Minimum linear distance: 30

Dissolve option: SIDE

Side length: 100

Deliverables

Below is a list of files submitted for this project.

67-0023_LS_FS_131007.DGN

67-0023_LS_DTL_131007.DGN

67-0023_LS_GPK_131007.GPK

67-0023_LS_TNL_131007.TIN

67-0023_LS_PDF_131007.TXT

67-0023_LS_POC_131007.MDB

67-0023_LS_SR_131007.PDF

67-0023_LS_SURVEYCERT_131007.PDF

67-0023_LS_DEEDBOOK_131007.PDF

67-0023_LS_PLATBOOK_131007.PDF



West End of Bridge (Facing East)



East End of Bridge (Facing West)



South Fork Little River (on bridge, facing North)



South Fork Little River (on bridge, facing South)



Side View (in creek, facing North)



Side View (in creek, facing South)