

| OKLAHOMA DEPARTMENT OF TRANSPORTATION | | | | | |
|---------------------------------------|-------|---------------|-------------|-----------|--------------|
| FED. ROAD DIST. NO. | STATE | JOB PIECE NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| | OKLA. | | | | |
| DESCRIPTION | | | | | DATE |
| | | | | | |

Oklahoma Department of Transportation

Date: December 7, 2012

To: Mr. Larry Reser, Chief of Surveys
 From: Cliff R. Stout Jr., Professional Land Surveyor
 Subject: SWO 4836(1) J/P No. 28999(04)
 S.H. 44, Bridge over Elk Creek & Elk Creek Overflow,
 7.6 & 7.8 Miles North of S.H. 9

HISTORICAL LETTER AND WRITTEN REPORT

1. ASSIGNMENT OF SURVEY:

This Survey was assigned by Larry D. Reser, P.L.S. Chief of Surveys, Oklahoma Department of Transportation, 200 N.E. 21st Street, Oklahoma City, Oklahoma on March 9, 2012.

2. GENERAL:

Method of Survey: This survey was performed using the Break Line Method, applying a combination of field conventional methods to obtain topography in the main project area, and real-time kinematic GPS (RTK) to obtain information on existing land tie evidence.

Units of measurement: U.S. Survey Foot

Reference material relevant to this project:

SWO 1609(1) survey
 FAS No. S-413 (3) S.H. plans

3. SURVEY LIMITS:

This survey will begin at P.O.T. Sta. 370+77.00 and will extend northerly to P.O.T. Sta. 440+00.00 as established under SWO 1609(1) survey and shown on FAS No. S-413 (3) plans (approximate centerline length = 1.31 mile).

4. ALIGNMENT:

The Centerline of Survey for this project will be along and identical to the centerline of present S.H. 44 (C.R.L.) as established under SWO 1609 (1) survey and shown on FAS No. F-413 (3) S.H. plans.

5. STATIONING:

Stationing for this survey will be taken from SWO 1609(1) survey and FAS No. S-413 (3) S.H. plans.

6. PURPOSE OF SURVEY

The purpose of this survey is to furnish sufficient data to develop plans to construct new bridges over Elk Creek & Elk Creek Overflow south of Sentinel. The survey will include the Alignment, Topographic/Planimetric data, Surface Features/DTM data, Land Ties, Utilities, Drainage and all other pertinent information needed to aid in the design.

7. TOPOGRAPHY / DTM INFORMATION:

The Break Line Method, applying conventional field methods to obtain topography, and analytical aerotriangulation and stereo compilation of mapping through standard aerial mapping methods was used to create a Digital Terrain Model (DTM) and has been archived within the MicroStation Design File (See: SUBMITTED DATA).

8. HORIZONTAL CONTROL:

Horizontal control for this survey was established by static and real time kinematic GPS (RTK) Survey Methods. Coordinates on this survey are NGS Oklahoma State Plane Coordinate system NAD 83(HPGN) Lambert Projection South Zone. The distances, coordinates, and elevations shown on this survey are in U.S. Survey Feet. All angles and bearings shown are in degrees, minutes, and seconds.

9. VERTICAL CONTROL:

Vertical Control for this survey is NGS, NAVD'88. Total length of run = 1.16 miles. A benchmark list depicting existing and newly established benchmarks, as well as results of the control leveling has been placed and archived within the MicroStation Design File (See: SUBMITTED DATA).

10. UTILITIES:


CALL OKIE was contacted on July 26, 2012, and utilities were located by July 28, 2012. All utility information has been shown and archived within the MicroStation Design File See: SUBMITTED DATA).

UTILITIES OWNERSHIPS:

- 1. Kiwash Electric Cooperative (580) 832-3361
 Cal Humphrey
 120 W 1st Street,
 Cordell, Ok, 73632
- 2. Pioneer Telephone Cooperative (405) 375-0255
 Nich Westfahl
 PO Box 539, 208 E,
 Roberts, Kingfisher,
 Ok, 73750

11. SECTION BOUNDARY SURVEYS:

Land Ties are to include establishing/re-establishing all section corners and 1/4 section corners, including the center section corner, of each section through which the main line passes and any other quarter (1/4) section from which right-of-way may need to be acquired. All section corners and 1/4 section corner so established are to be monumented and referenced in accordance with the Survey Specifications. As a minimum, the following sections or partial sections are to be set up in:

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|-----------------------|------------|--------------|--|
| PLS | CRS | 12/12 | OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION  SMITH ROBERTS BALDISCHWILER, LLC <small>100 N.E. 5th Street Oklahoma City, OK 73104 Telephone: (405) 840-7094 Fax: (405) 840-9116</small> SURVEY DATA SHEET |
| DRAWN | TDL | 12/12 | |
| CHECKED | JAC | 12/12 | |
| APPROVED | CRS | 12/12 | |
| CREW | BC, SG, BH | SWO 4836 (1) | |
| PROJECT NO. 28999(04) | | | SHEET NO. 02 |