

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				
DESCRIPTION			REVISIONS	DATE	

SWO 4938(1), J/P 28312(04) - S.H. 74D - LOGAN COUNTY
OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

APRIL 30TH, 2013

TO: MR. LARRY RESER, CHIEF OF SURVEYS

FROM: JESSE L. CARROLL, PROFESSIONAL LAND SURVEYOR

SUBJECT: SWO 4938 (1), J/P 28312(04), S.H. 74D, BRIDGE OVER ROCK CREEK, 1.7 MILES WEST OF S.H. 74, LOGAN COUNTY.

HISTORICAL LETTER AND WRITTEN REPORT

1. SURVEY ASSIGNMENT

The above described survey was assigned to me by Mr. Larry Reser, Chief of Surveys. (EC 1365-II, T.O. #9)

2. PURPOSE OF THIS SURVEY

The purpose of this survey was to obtain data to facilitate the design of a new bridge over Rock Creek on S.H. 74D, 1.7 mile west of S.H. 74, Logan County.

3. SURVEY LIMITS

This survey began at P.O.T. Sta. 45+89.0 (NS-302 Section line) and extends easterly to P.O.T. Sta. 98+49.0 (NS-303 Section Line), as shown on SAP No. 1026 (1) plans (approximate centerline length 1.0 miles).

4. ALIGNMENT

The centerline of Survey for this project was established along and identical to the centerline of present S.H. 74D as shown on SAP No. 1026 (1) plans.

5. STATIONING

Stationing for this survey was derived by assigning Sta. 45+89.0 to the beginning of this survey at (NS-302 Section Line) and stationing was increased to the east from this point, field measured distance, to the End of Survey without equation.

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6. HORIZONTAL CONTROL

- A. Horizontal Control for this survey is NAD 83 (1993) Oklahoma State Plane Coordinate System, Lambert Projection, North Zone, derived from COORS Stations PRCO, OKAO and OKPR, utilizing OPUS solutions.
- B. Primary Horizontal control was established on 2 monuments along this survey. They are 2 inch aluminum caps marked L-42-650 and L-42-651.
- C. Secondary horizontal control was established along the centerline of survey and referenced and shown on the survey data sheets of this survey.
- D. The primary control network, the secondary network and section boundaries for this survey are in compliance with NGS Second Order Class II standards for horizontal control (1: 20,000).

7. VERTICAL CONTROL

- A. Level datum for this survey is NGS, NAVD 88, taken from OPUS Solutions on Primary Control monuments L-42-650 and L-42-651. A complete line of check levels was run through the limits of this survey.
- B. The adjusted levels and vertical differences between bench marks are shown in following file: SWO4938_1_V1.dgn
- C. Accuracy - 3rd order or better before adjustment.

8. TOPOGRAPHY

Topography on this survey was obtained by utilizing the Trimble gps RTK system and Total Station technology with the TSC1 data collector for field instruments. Data was collected in the form of a Surface Feature Survey and placed in computer file SWO 4938_1_V1_SFF.dgn

9. CROSS SECTIONS

Cross sections on this survey were obtained by utilizing the Trimble gps RTK system and Total Station technology with the TSC1 data collector in the form of a DTM survey and placed in computer file 4938_1_V1_TRU.dgn

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10. LAND TIES

Land ties for this survey were established for the following Sections (3&10, T18N R4W, 1M, LOGAN COUNTY, OKLAHOMA
A search was made for any trace of the original monuments and/or accessories. All filed certified corners received from the Oklahoma Department of Libraries were found and noted. The original survey and survey notes were used from the following survey:

BARRETT - PERFORMED IN JUNE 1874

L-42-559, SW/CORNER OF SECTION 10, T18N, R4W, 1M, LOGAN COUNTY, OKLAHOMA. FOUND #4 REBAR IN PLACE WITH ALUMINUM CAP STAMPED JAC. THAT FITS CORNERS FILED BY PLS 1149 & 1395. USED THIS CORNER AND FILED NEW CCR.

L-42-652, S/4 CORNER OF SECTION 10, T18N, R4W, 1M, LOGAN COUNTY, OKLAHOMA. SET #4 REBAR WITH PLS 1071 CAP HALF WAY AND ON LINE FROM CORNER FOUND 0.5 MILE EAST AND SECTION CORNER ESTABLISHED 0.5 MILE WEST. FILED NEW CCR FOR THIS CORNER LOCATION.

L-42-653, SW/CORNER OF SECTION 10, T18N, R4W, 1M, LOGAN COUNTY, OKLAHOMA. SET #4 REBAR WITH PLS 1071 CAP BY D.P.M FROM MONUMENT 0.5 MILE NORTH AND FENCES 0.5 MILE EAST, WEST AND SOUTH. FILED NEW CCR FOR THIS CORNER LOCATION.

L-42-654, W/4 CORNER OF SECTION 10, T18N, R4W, 1M, LOGAN COUNTY, OKLAHOMA. SET #3 REBAR AND PLS 1071 CAP HALF WAY AND ON LINE FROM CORNERS FOUND 0.5 MILE NORTH AND ESTABLISHED 0.5 MILE SOUTH. FILED NEW CCR FOR THIS CORNER LOCATION. ALSO FOUND BENT #4 REBAR IN PLACE PER PLS 1505 3.1 FEET SOUTH AND 18.7 FEET WEST OF OUR CORNER LOCATION.

L-42-655, NW/CORNER OF SECTION 10, T18N, R4W, 1M, LOGAN COUNTY, OKLAHOMA. FOUND MAG NAIL IN PLACE PER CCR FILED BY PLS 1505. ACCEPTED THIS CORNER AS IT APPEARS TO FIT O.D.O.T. HIGHWAY PLANS. FILED NEW CCR FOR THIS CORNER LOCATION.

PLS	JLC	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	BJG	
CHECKED	JLC	
APPROVED	JLC	
CREW	CARROLL	
		SURVEY DATA SHEET
		SWO 4938 (1) PROJECT NO. 28312(04) SHEET NO. 02