

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	OKLA.	24750(04)		37	127
DESCRIPTION		REVISIONS		DATE	

D. Accuracy:
These benchmarks exceed the requirements for N.G.S. 3rd order leveling.

E. Results:
The results of these level runs have been placed in a list in the project design file showing the BM number, elevation, run 1 and run 2 differences, description of each benchmark, and position by station and offset from the CLS.

9. Measurement Units:
The distances, coordinates, and elevations shown on this survey are in US SURVEY FEET. All angles and bearings shown are in degrees, minutes, and seconds.

10. Topography/Digital Terrain Model:
Topography on this project was obtained from conventional field level topography using Trimble S-6 Robotic Total Stations, Trimble R8 GPS receivers with Trimble TSC-2 data collectors, and using Carlson RTK GPS receivers with Carlson Surveyor+ data collectors. All paving, structures, and finished floor elevations were obtained with the total stations. GPS RTK surveying was used for land ties and miscellaneous topography. As a minimum, the coverage bandwidths for topographic and/or surface features data obtained on this survey are as follows:

- 100 feet right and 200 feet left of the Centerline of Survey from the Beginning of Survey to Station 706+40.79, thence;
- 250 feet right and left of Centerline of Survey from 706+40.79 to Station 719+04.43, thence;
- 100 feet right and 200 feet left of the Centerline of Survey from Station 719+04.43 to the End of Survey.

11. Land Ties:
Complete land tie information was obtained by a combination of conventional field methods and real-time kinematic (RTK) GPS as needed to purchase new right-of-way, including the bounding out of all sections through which the survey centerline passes.
North Quarter Corner of Section 18, T-28-N, R-16-E, I.M.

Set a mag nail with Shiner stamped "CA-1427". The position was determined by single proportionate measurement.
Northwest Corner of Section 17, T-28-N, R-16-E, I.M.
The position was established by using a survey performed by the Settle Engineering Company for the Oklahoma Department of Transportation during 1956 to 1959. The survey is named SWO 2137(1). The survey shows an angle and distance from a P.O.T. at Station 795+79.10 established at the intersection of the north line of Section 17 Township 28 North Range 16 East and the Centerline of Survey, P.O.T. 795+79.10 nor any references were recovered. P.O.T. 795+79.10 was computed from points recovered north and south along the Centerline of Survey. The point south is a P.T. at Station 777+43.85. The point north is a P.O.T. at Station 799+01.10. Although the points themselves were not recovered, reference pin lines were found in condition. Field measure between the points resulted in a distance of 2158.27', the survey reflects a distance of 2157.25'. A proportioned position was computed for P.O.T. 795+79.10. An angle of 89°55'02" was measured between, a line beginning at the computed P.O.T. 795+79.10 to the north quarter corner of Section 17 Township 28 North Range 16 East and the Centerline of Survey. The survey reflects an angle of 89°55'. The survey reflects a distance of 99.60' from the P.O.T. 795+79.10 and the northwest corner of Section 17 Township 28 North Range 16 East. The position was established at 99.60' from the computed P.O.T. 795+79.10 at a bearing running from the north quarter corner of Section 17 Township 28 North Range 16 East through the computed P.O.T. 795+79.10.
East Quarter Corner of Section 20, T-28-N, R-16-E, I.M.
Set a 1/2" iron pin with cap stamped "CA-1427". The position was determined by single proportionate measurement.
North Quarter Corner of Section 29, T-28-N, R-16-E, I.M.
Set a 1/2" iron pin with cap stamped "CA-1427" using recorded ties to the centerline of survey performed by Settle Engineering for the Oklahoma Department of Transportation in 1956-1959, named SWO 2137(1). Set three references to monument.
Northeast Corner of Section 29, T-28-N, R-16-E, I.M.
The position was determined by double proportionate measurement. No monument was set. This position falls in a cultivated field.
West Quarter Corner of Section 30, T-28-N, R-16-E, I.M.
Set a 1/2" iron pin with cap stamped "CA-1427". The position was determined by single proportionate measurement.

East Quarter Corner of Section 30, T-28-N, R-16-E, I.M.
The position was determined by single proportionate measurement. No monument was set. This position falls in the Verdigris River.

12. Right-of-Way:
The existing rights-of-way shown on this survey are established by the direct relationship between field observation and descriptions found in a combination of easements and deeds found on file in the County Clerk's offices at the Nowata County Courthouse in Nowata, Oklahoma, along with the right-of-way depicted on FAP No. F-193 (10) plans. All property divisions adjacent to the present rights-of-way throughout the project limits have been properly established. This includes, as a minimum, the complete mathematical bounding of all parcels that fall partially or completely within the survey coverage limits. "Property division" includes present rights-of-way. The present rights-of-way have been tied to the centerline of survey and shown on the submitted survey notes.

13. Utilities:
Note: All utilities are shown as flagged by the utilities contacted or their representatives. All utilities serving the project area were contacted through OKIE One-Call. All utility locations are approximate, and depths and types are unknown. The utility locations shown on this survey are based on the flagged locations as performed by the utility owners or their contractors. Any inaccuracies or omissions are the responsibility of the utility owners and/or their contractors, and Guy Engineering Services accepts no responsibility for their failure to respond to the OKIE survey requests. Contact CALL OKIE at 1-800-522-OKIE.

14. Drainage:
Drainage areas for all drains crossing the Survey Centerline were taken from USGS quad maps scanned into a Microstation Design File.

15. Data Submitted:

PLS	DMM	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION SURVEY DATA SHEET (3) SWO 4721(1) PROJECT NO. 24750(04) SHEET NO. 37
DRAWN	ARR	
CHECKED	VKM	
APPROVED	DMM	
CREW	GES, INC.	