

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

August 01, 2012

Mr. Reser  
April 20, 2012  
Page 2 of 5

Mr. Reser  
April 20, 2012  
Page 3 of 5

To: Mr. Larry D. Reser, Chief of Surveys  
From: Robert L. Johnston Jr. Professional Land Surveyor, Garver LLC  
Subject: SWO 4889(1) -J/P No. 27956(04) -US 62, intersection modification at S.H. 10 East of Muskogee, Muskogee County.

**Historical Letter and Written Report**

Method of Survey - GPS and Conventional  
Units of Measurement - U.S. Survey Foot  
All angles and bearings shown are in degrees, minutes, and seconds  
Survey Began: June 01, 2012  
Survey Completed: August 01, 2012

**1. GENERAL**

- Previous Survey and Plans used on this project
- a. SWO 2641(1) survey
  - b. SWO 2820(1) survey
  - c. SAP No. 671-A,B plans
  - d. FAP No. RF-404 (43) plans
  - e. FAP No. DP-404 (48) plans

**2. SURVEY ASSIGNMENT**

This survey was assigned to me by Mr. Larry D. Reser Chief of Surveys, through a survey scope letter dated May 24, 2012, by conventional ground survey methods. Garver, LLC began survey work on the project June 01, 2012.

**3. PURPOSE**

The purpose of this survey is to furnish sufficient data to develop plans to modify the intersection of S.H. 10 with NS-345 Section Line & U.S. 62 Northeast of Muskogee.

**4. SURVEY LIMITS**

**U.S. 62:** This survey began at a point identified as P.O.T. Sta. 400+00.00 on FAP No. RF-404 (43) plans and will extend Northeastly to P.O.C. Sta. 430+00.00 (approximate centerline length = 0.57 miles).

**NS-435 (Georgetown Road):** This survey will begin at the intersection of the centerline of the South frontage road of U.S. 62 and NS-345 Section line, as shown on FAP No. RF-404 (43) plans, and will extend North 1,000.00 feet ( approximate centerline length = 0.19 mile).

**S.H. 10:** This survey will begin at P.O.T. Sta. 10+00 also Sta. 426+50 as shown on FAP No. RF-404 (43) and will extend Southeastly to Sta. 20+49.97 (approximate centerline length = 0.38 mile).

**S.H. 10 Connection:** This survey will begin at the intersection of the centerline of the South frontage road for U.S. 62 and NS-435 Section line as shown on FAP No. RF-404 (43) and will extend Easterly to the P.O.T. Sta. 15+49.97 for S.H. 10 as shown on FAP No. RF-404 (43), (approximate centerline length=0.45 mile)

**5. ALIGNMENT**

**U.S. 62:** The Centerline of Survey will be along and identical to the centerline of present U.S. 62 as established under SWO 2820(2) survey and shown on FAP No. RF-404 (43) plans.

**NS-435 (Georgetown Road):** The Centerline of Survey will be along and identical to NS-435 Section line.

**S.H. 10 Connection:** The Centerline of Survey will begin at the intersection of the centerline of the South frontage road of U.S. 62 and NS-435 Section Line and will extend Northeastly to the point identified as P.T. Sta. 15+49.97 on the present S.H. 10 connection, as shown on FAP No. RF-404 (43) plans, thence east along the centerline of present S.H. 10 (EW-86 Section Line). Approximately 500 feet.

**6. STATIONING**

**U.S. 62:** Stationing for this survey began at a point identified as P.O.T. Sta. 400+00.00 on FAP No. RF-404 (43) plans and will extend Northeastly to P.O.C. Sta. 430+00.00.

**NS-435 (Georgetown Road):** A station value of P.O.T. Sta. 100+00.00 assigned to the Beginning of Survey and stationing increases north from this point.

**S.H. 10 Connection:** A station value of P.O.T. Sta. 1000+00.00 assigned to the Beginning of Survey and stationing increases easterly from this point.

**7. HORIZONTAL CONTROL**

Horizontal control for this survey is Oklahoma State Plane Coordinate System, NAD83(2002), Lambert Projection, North Zone, using an OPUS solution based on four (4) different (4) four hour observations on a total of 2 control points; said points are numbered 7400 and 7401 running West to East.

**8. VERTICAL CONTROL**

Vertical Control for this survey is based on using an OPUS solution based on four (4) different (4) four hour observations on a total of 2 control points; said points are numbered 7400 and 7401 running West to East. Reported elevation for point number 7401 was held for the basis for elevation; Digital level loops then commenced starting at 7401 and running to and through the set bench marks and all other subsequent control running West to East.

**9. TOPOGRAPHY**

Topography on this project was obtained by field conventional methods using Total Station instruments and Carlson Data Collectors on all hard surfaces. A portion of the spot shots in open grassy areas have been obtained by RTK GPS methods using Trimble 5800 receivers and Trimble Survey Controllers.

**10. SURFACE FEATURES/CROSS SECTIONS**

Surface data (breakline and ground points) on this project was obtained by conventional ground methods: This information was used to generate a Digital Terrain Model file using Bentley InRoads V8i

**11. LAND AND PROPERTY TIES**

All the land corners that were required on this survey had been researched and due diligence has been performed to find the GLO original corners and/or any monument subsequently restored, as well as any other reported/recorded property corners. All filed Certified Corner Records received from the Oklahoma Department of Libraries were researched and noted.

A complete detailed account of each corner set or used follows:

**Southwest Corner of Section 14, T-15N, R-19E**  
Found 3/8" Capped Iron Rod in the asphalt, the cap was unreadable. Found the references from CCR filed by Harden & Associates dated 10/23/2006. Accepted as Southwest Corner Section 14.

**South 1/4 Corner of Section 14, T-15N, R-19E**

Found ODOT disc under asphalt of S.H.10 couldn't read all of disc, would have had to make large hole in road. Corner was referenced in CCR filed by ODOT dated 6-15-1973. Accepted as the South 1/4 of Section 14. Set 3 references.

**Southeast Corner of Section 14, T-15N, R-19E**

Found ODOT disc under asphalt of S.H. 10, Couldn't read all of disc due to depth below asphalt. Found references from CCR by Holloway Updike and Bellen dated 10/10/2007. Accepted as the Southeast Corner of Section 14.

**East 1/4 Corner of Section 14, T-15N, R-19E**

Found ODOT disc under asphalt couldn't read all of disc due to depth under asphalt. The Corner is referenced in a CCR filed by ODOT the references where not found. Set 3 new references. Accepted as the East 1/4 of Section 14.

**Northeast Corner of Section 14, T-15N, R-19E**

Found 1/2" Iron Rod in asphalt cut out, Found references from CCR filed by ENTZ Engineering dated 5-06-2003. Accepted as the Northeast Corner of Section 14.

**North 1/4 Corner of Section 14, T-15N, R-19E**

Found 6" DIA. Concrete Monument with a hole where the disc was in bean field, it had a 60d nail stuck in the hole. Found 3 reference nails not on any CCR. Corner referenced on CCR by ODOT dated 5/15/1973. Accepted as the North 1/4 of Section 26. Measured the 3 references.

**Northwest 1/4 Corner of Section 14, T-15N, R-19E**

Found ODOT disc under gravel road, disc is beat up. Found references from CCR by White Surveying dated 12/26/2002. Accepted as the Northwest Corner of Section 14.

**West 1/4 Corner of Section 14, T-15N, R-19E**

Found ODOT disc under asphalt of Georgetown Road, disc is beat up. Found references from CCR by Harden & Associates Surveying dated 10/23/2006. Accepted as the West 1/4 Corner of Section 14.

**North 1/4 Corner of Section 15, T-15N, R-19E**

Found ODOT disc in concrete, half of disc is missing. Corner referenced in CCR filed by ODOT dated 6-15-1973, didn't find references. Accepted as the North 1/4 Corner of Section 15. Set 3 new references.

**Northwest Corner of Section 15, T-15N, R-19E**

Found ODOT disc in gravel and dirt road, disc is beat up. Corner referenced in CCR filed by ODOT dated 4-21-2005, found 2 of the references. Accepted as the Northwest Corner of Section 15. Set 1 new reference.

**West 1/4 Corner of Section 15, T-15N, R-19E**

Found BLM disc in gravel and dirt road, disc is beat up. Corner referenced in CCR filed by ODOT dated 4-21-2005, found 3 of the references. Accepted as the West 1/4 Corner of Section 15. Set 1 new reference.

**Center 1/4 Corner of Section 15, T-15N, R-19E**

Found ODOT disc in tree farm, disc is 1.5" +/- down. Corner referenced in CCR filed by Harden & Associates dated 10-23-2006, found all 3 references. Accepted as the Center 1/4 Corner of Section 15.

**Southwest Corner of Section 15, T-15N, R-19E**

Found BLM disc in asphalt shoulder of U.S. 62. Corner referenced in CCR filed by Harden & Associates dated 10-23-2006, found 2 of the 3 references. Accepted as the Southwest Corner of Section 15. Measured 1 new reference.

**South 1/4 Corner of Section 15, T-15N, R-19E**

Found PK Nail W/Disc in West bound lanes of U.S. 62. Corner referenced in CCR filed by Harden & Associates dated 10-23-2006, found 2 of the 3 references. Accepted as the South 1/4 Corner of Section 15. Set 1 new reference.

PLS	RLJ		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	JAJ		
CHECKED	PED		
APPROVED	RLJ		
CREW	RJ, WW, LL, DN		
<b>SURVEY DATA SHEET</b>			
SDS 2 OF 10			SWO 4889 (1) PROJECT NO. 27956(04) SHEET NO. 18

SSDATESS