State of Oklahoma

Department of Transportation

Guy Engineering Services, Inc.

Dustin M. McNally, PLS 1636

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Phone (918) 437-0282 Fax (918) 437-0455 C.A. 1427, Expires 6/2014

To: Mr. Larry Reser, Chief of Surveys

From: Dustin M. McNally, Professional Land Surveyor

Subject: SWO 4744(1), J/P No. 27092(04), U.S. 169, Bridge over Opossum Creek, 17 miles north of U.S. 60 at Nowata.

NOWATA COUNTY

Historical Letter and Written Report

1. General:

Survey began: February 20, 2013

Survey completed: April 10, 2013

Personnel on this survey:

Dustin M. McNally, PLS

Chris A. Cauthon, PLS

Jason Mock, Survey Technician

Jason Lilly, Survey Technician

Ryan Harrison, LSIT

Tim DeArmon, Survey Technician

Stevfen Miller, Survey Technician

Brandon Travers, Survey Technician

Amanda Reid, Survey Technician

Vincent Miller, Survey Technician

Benjamin Marts, Engineer Intern

Previous Surveys and Plans relevant to this project:

SWO 2137(1) Survey

FAP No. F-193 (12) Plans

2. Assignment:

Assignment of this survey originated by ODOT Project Management Division Task Order No. EC-1412D dated August 13, 2011 from Mr. Larry Reser, PLS, Chief of Surveys. This survey was assigned to me under Engineering Contract No. EC-1365, J/P No. 27092(04).

The Assignment of the survey included:

SWO 4744(1) Survey Special Provisions

Attachment No. 1- Location Map

Attachment No. 2-Land Surveyor's Certification Form

Attachment No. 3-SD Form #7

Attachment No. 4-Specifications for surveys for Primary and Secondary Highways dated January 2011.

Attachment No. 5-Suggested sequence of survey

Attachment No. 6-Project Completion Percentages

Attachment No. 7-Standard CADD files, issued March 5, 2004

3. Purpose:

The purpose of this survey is to furnish sufficient data to develop plans to construct a new bridge over Opossum Creek north of Nowata.

4. Survey Limits:

This survey begins at Station 889+49.10 (EW-5 Section Line) and extends north to Station 925+00 as shown on SWO 2137(1) survey and FAP No. F-193 (12) plans.

There is a station equation shown on SWO 2137(1) survey and FAP No. F-193 (12) plans as Sta. 895+00 Bk. = Sta. 860+31.15 Fwd. This equation has been eliminated.

5. Alignment:

A001 – Centerline of present U.S. 169

The Centerline of Survey is 32.00 feet east and parallel to the centerline of survey as established under SWO 2137(1) survey and shown on FAP No. F-193 (12) plans.

6. Stationing:

A station value of Sta. 825+62.30 has been assigned to the point of intersection with EW-5 Section Line as the Beginning of Survey. Stationing increases north from this point to the End of Survey without equation, expect with other surveys and plans.

7. Horizontal Control:

Horizontal control for this survey is N.G.S. Oklahoma State Plane Coordinate System NAD 83 Lambert Projection North Zone (Zone 3501). The distances, coordinates, and elevations shown in this survey are U.S. Survey Feet. All angles and bearings are shown are in degrees, minutes, and seconds.

8. Vertical Control:

A. Datum:

Level datum for this survey is N.G.S. N.A.V.D. 88.

B. Source:

Recovered NGS First Class II order benchmark P.I.D. GG0455, designation RV 2, a standard monel-metal rivet in top of concrete headwall.

C. Method:

A double line of differential levels was run through the site using Sokkia model 300 and B21 automatic levels.

D. Accuracy:

PLS	DMM		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	ARR		SURVEY DATA SHEET (2)
CHECKED	VKM		
APPROVED	DMM		
CREW	GES, INC.		SWO 4744(1) PROJECT NO. 27092(04) SHEET NO. 40