# SURVEY CONTROL DATA

- 1. POSITIONAL CONTROL:
- A. POSITIONAL CONTROL FOR THIS SURVEY IS THE NGS OKLAHOMA STATE PLANE COORDINATE SYSTEM, NAD83 (2011), LAMBERT PROJECTION (NORTH ZONE)
- B. ACCURACY THE POSITIONAL CONTROLS FOR THIS SURVEY MEETS OR EXCEEDS THE FOLLOWING ACCURACY CRITERIA: 1. NETWORK ACCURACY: 0.10 FOOT 2. LOCAL ACCURACY: 0.05 FOOT
- 2. BEARINGS:

THE BEARINGS SHOWN HEREIN OR HEREON ARE GRID BEARINGS DERIVED FROM THE NGS OKLAHOMA STATE PLANE COORDINATE SYSTEM AND ARE NOT ASTRONOMICAL. THE ANGLE OF VARIANCE BETWEEN GRID NORTH (GN) AND THE ASTRONOMICAL TRUE NORTH (TN) IS DEPICTED DIAGRAMMATICALLY.

- 3. VERTICAL CONTROLS:
- A. LEVEL DATUM IS NAVD 88 (Geoid 12b).
- B. ACCURACY VERTICAL CONTROL FOR THIS SURVEY MEETS OR EXCEEDS THE FOLLOWING ACCURACY CRITERIA:
  - 1. NETWORK ACCURACY: 0.10 FOOT
  - 2. LOCAL ACCURACY: 0.02 FOOT

SURVEY BEGAN: November 17, 2021 SURVEY COMPLETED: March 3, 2022

### SURVEY CREW MEMBERS:

Eric Shane King,
Randall Richard Payne,
Geoffrey Tucker,
Jason Scott,
Todd Voight,
Thomas Creecy,
Johnathan Conaway,
Aiden Hicks,
Gavin Jones,
Heather King,
Andrew Mayhue,

Professional Land Surveyor Professional Land Surveyor Project Surveyor Survey CADD Technician Survey CADD Technician Survey Crew Chief Survey Crew Chief Survey Technician Survey Technician Survey Technician Title Specialist

EQUIPMENT: CARLSON BRx7 GPS GEOMAX ZENITH 35 GPS GEOMAX ZOOM 90 ROBOTIC TOTAL STATION GEOMAX DIGITAL LEVEL CARLSON DATA COLLECTORS

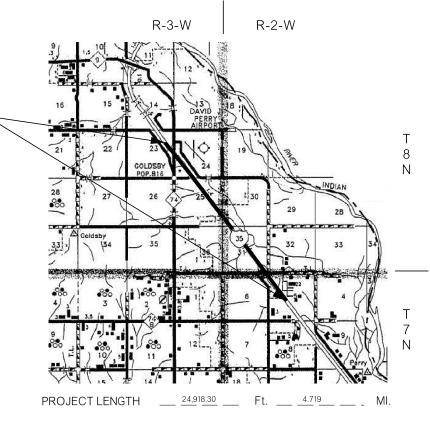
SCALES	1"
SURVEY DATA SHEETS	1" = 50' TOWN
SURVEY DATA SHEETS	1" = 100'
GEOMETRIC DATA SHEETS	1" = 500'

# SURVEY DATA SHEETS McCLAIN COUNTY

SWO 5560(1) STATE JOB NO. 35589(04)

1-35

**PROJECT LOCATION** 



BEGINNING STATION: 632+33.30 ENDING STATION: 881+51.60

THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKI AHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, NOVEMBER 1, 2020.

SPECIFICATIONS FOR SURVEYS FOR PRIMARY AND SECONDARY HIGHWAYS DATED JANUARY 2018 GOVERN

SURVEY EXTENTS

Electronic File Transfer Disclaimer:

hese Files, Drawings and/or Notes are provided for information only. The Oklahoma Department of Transportation (ODDT) and the Owner cannot be held responsible for the content or accuracy of these Files, Drawings and/or Notes due to conversions, software translations, or any other manipulation of said Files, Drawings and/or Notes. ODOT expressly disclaims any responsibility arising from any use of these Files, Drawings and/or Notes. To the full extent permitted by applicable law, the recipient of these Files, Drawings and/or Notes hereby agrees to defend, indemnify, and hold harmless DDDT and the Owner from and against any and all claims, suits, actions, damages, loss, liability or costs of every nature or description (including easonable attorney's fees) arising from, or in any way attributable to or connected with any of these Files, Drawings and/or Notes.

# (OKLAHOMA DEPARTMENT OF TRANSPORTATIO

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				
DESCRIPTION		REVISIONS			DATE

# INDEX OF SURVEY SHEETS

	TITLE SHEET
0:	SURVEY REPORTS
D:	SURVEY DATA SHEETS

Utility Company Owner's List

ONG - Lee Ann Pulliam	405-552-1835
OEC - Kolton Howry	405-217-6623
Windstream	405-228-2530
Goldsby Water Authority - Ronny Nelson	405-288-6697
Centurylink / Level 3 / IXC	800-441-0223
Hill Oil Company	405-273-8046
DCP Midstream	405-288-2387
Western Farmers Electric	405-247-3351
Trace Fiber Networks	844-499-5656

"CALL BEFORE YOU DIG" THE NEW NATIONAL LOCATE NUMBER

\*\*811\*\*

# STATE OF OKLAHOMA DEPARTMENT OF TRANSPORTATION

SWO 5560(1)

Job/Piece 35589(04)

Engr. Contract No. 2321H

# LAND SURVEYOR'S CERTIFICATION

I hereby certify that all land and property sub-division distances, angles, comers, and monumentation made or used in conjunction with this survey and depicted or recorded herein or hereon were recovered, established or re-established in substantial conformity with:

- Applicable instructions contained in the U.S. Government Bureau of Land Management publication "Manual of Survey Instruction"
- Its supplement, "Restoration of Lost or Obliterated Corners and Sub-division of Sections'
- "Oklahoma Minimum Standards for the Practice of Land Surveying" as adopted by the State Board of Licensure for Professional Engineers and Land Surveyors; and
- Sound land surveying practices;

CHECKED

PPROVED

CREW

HLK

ESK

SWO 5560(1

including a thorough search, study, analysis and consideration of all existing records and field evidence

I further certify that all survey monuments depicted exist and that all land survey work was done by me or under my direct supervision and that it is true, accurate and correct to the best of my knowledge and belief. SESSION47

Dated this 3 <sup>rd</sup> day of <u>March</u>	, <u>2022</u> .	ERIC SHANE KING
Land Surveyor		- 1542 0 - 0*: AHOIN
	Eric Shane King	_
	Printed Name	_
Oklahoma Lice	ensed Land Surveyor No. 1542	
Certificate of A	uthorization No. 5954	
	ENGINEERING	
PLS ESK OI	KLAHOMA DEPARTMENT ( SURVEY DIV	OF TRANSPORTATION /ISION
DRAWN ESK	0011121 81	

SURVEY DATA SHEET

PROJECT NO. 35589(04) SHEET NO. 8001



# White Hawk Engineering & Design, LLC# 204 S. Eastern Avenue Moore, OK 73160 (405) 735-6096

March 3, 2022

- To: Mr. Kyle King, PLS, Chief of Surveys
- From: Eric Shane King, PLS

Subject: SWO 5560(1) - 1/P 35589(04) - I-35 - McClain County From 1 mile South of Ladd Road, extend North 4.15 miles to the SH-74 Interchange

HISTORICAL LETTER AND WRITTEN REPORT

1.

General: Method of Survey: Combined Aerial LiDAR and Field Conventional Unit of Measurement: U.S. Survey Foot

Survey Began: November 17, 2021 Survey Completed: March 3, 2022

Previous Surveys and Plans pertinent to this project:		
<ul> <li>SWO 2036(1)</li> </ul>	•	FAP No. I-35-2(6)098 Plans
<ul> <li>SWO 4748(1)</li> </ul>		FAP No. I-35-2(9)104 Plans

<ul> <li>SWO 4748(1)</li> </ul>	<ul> <li>FAP No. I-35-2(9)104 Plans</li> </ul>
<ul> <li>SWO 4892(1)</li> </ul>	<ul> <li>FAP No. NHPPI-3500(074)PM Plans</li> </ul>
<ul> <li>SWO 5415(1)</li> </ul>	<ul> <li>FAP No. NHPPI-0035(297)SS Plans</li> </ul>

- FAP No NHPPI-0035(297)SS Plan
- Assignment of Survey: This survey was assigned to White Hawk via CI-2321H Task Order 3. 2.

### 3.

Survey Limits: This survey begins 1 mile South of SWO 4748(1) POT Sta. 5029+59.67 at Ladd Road and extends North to SWO 4892(1) BOP Sta. 820+00.00, also being SWO 5415(1) BOP Sta. 881+51.60. The width of the survey is everything within Present Right-of-Way.

- 4. Alignment:

  - Alignment:

     The Centerline of Survey is along the centerline of I-15/US-77 as shown on SWO 2036(1) Survey and FAP No. I-35-2(9)098/FAP No. I-35-2(9)104 plans.
     No remaining evidence was found of centerline points or references as shown on SWO 2036(1) Survey within the project limits. The beginning tangent was held between the split of structure at plans Sta. 1065+00 and tied to the intersection of SWO 4748(1) centerline and NS-312 section line. The centerline of SWO 4748(1) was held as the second ungent between NS-312 section line and EW-130.5 ¼ section line. The third tangent was tied to the intersection of SWO 4748(1) was held as the second ungent between NS-312 section line and EW-120.5 ¼ section line. The centerline of SWO 4482(1) was held as the ending tangent and tis exactly with the beginning tangent of SWO 5415(1).
  - The centerline of Ladd Road was taken from SWO 4748(1). The centerline of SH-74 was taken from SWO 4892(1). Ramp alignments were taken from the existing surveys and/or calculated from pertinent

### 5.

Stationing: Stationing was taken from SWO 5415(1) Survey at BOP Sta. 881+51.60, being the EOP of this survey. This stationing was carried back, without equation to the Beginning of Survey.

SWO 5560(1) - I-35 - McClain County Historical Letter and Written Report Page 2 of 3

- Horizontal Control
   Horizontal control for this survey is NAD 83(2011) Oklahoma State Plane, South Zone, taken from SWO 4748(1) and 4892(1) surveys using monuments M-44-726, M-44-727, M-44-729, M-44-739, M-44-858
  - 4/48(1) and 492(1) surveys using monoments in TTP (20, no TTP (20

### 7.

- Vertical Control:
   Vertical control for this survey is NGS, NAVD 88 Level Datum, taken from SWO 4748(1) and SWO 4892(1) surveys. Direct differential leveling was obtained between the existing surveys with remaining monuments held as noted in the check levels list.
   A "BENCHMARKS AND CHECK LEVELS" list has been placed in the submitted Design file and has been submitted with survey, showing the benchmark number, the differences of each run between benchmarks, and the elevation and full description of each benchmark.

### 8

<u>Topography</u>: Topography for this survey was obtained utilizing Aerial LIDAR provided by a consultant of ODOT Survey Division via CL 2333B TOL. Additional data was obtained within obscured areas by conventional methods and combined with the aerial data provided.

- Dizital Terrain Model:
   Breakline data for this project was obtained utilizing Aerial LiDAR and conventional methods as described above. The combined LiDAR and conventional data has been used to create the Final Terrain Model of the entire project.
   OSSDA testing was performed on the submitted terrain model, utilizing 55 randomly collected points. The points were collected using GPS RTK methods from two separate base locations, and the results of the test have been submitted as "SWO5560\_OSSDA.pdf."

## 10.

Land Tier: Land the information was not required for this project. Land lines shown were taken from SWO 4748(1) and SWO 4892(1) Surveys for calculation of Present Right-of-Way only.

- Property Ties: Property divisions were not required for this project.

Existing Right of Way:
 The Stantory Section Line Right-of-Way for this area is a total of 33 feet.
 Existing Right of Way for this survey was taken from records obtained from ODOT Right-of-Way Division and compared to FAP No. 1-35-2(6)098/ FAP No. 1-35-2(9)104 Plans.

# Potential Environment Contamination: There were no potential contamination sites found within the limits of this survey.

### 14.

Utilities: Overhead and underground utility data has been obtained by field conventional methods and has been placed in the submitted design file and on the submitted "Public and Privately Owned Utilities List." Call Okie was contacted for the utility providers list, but they will not mark any lines in the field for design survey projects. GIS data was obtained from companies willing to provide such and combined with visible utility features and markings found.

<u>Drainage</u>: Drainage information was not required for this project.

# SWO 5560(1) - I-35 - McClain County Historical Letter and Written Report Page 3 of 3



# (OKLAHOMA DEPARTMENT OF TRANSPORTATION)

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

16. Submission of Survey Data:

 Submission of Survey Data:

 • All digital survey data has been submitted via the FTP site, and a complete listing of all data files created and used in conjunction with this survey has been placed in the FTP project folder as "SW05560\_Index.pdf".

 • In addition to the digital survey data, PDF copies of the following information have also been submitted:

 • Historical Letter and Written Report of Survey

 • ODOT Form SD-7 - Public and Privately Owned Unlities List

 • ODOT Form SD-1 - Surveyor Certification

 • Benchmarks and Check Levels List

 • Alignment and Coordinate Geometry List

 • OSDA Field Form

PLS	ESK		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	ESK		
CHECKED	HLK		SURVEY DATA SHEET
APPROVED	ESK		
CREW	WHITE	HAWK	SWO 5560(1) PROJECT NO. 35589(04) SHEET NO. 5002

	otion: CLS I	35 IRVEY\ALIGNMENT\CENTERL	THE		Element: Linear PT( 324)
Allgriment Style:	ATTRUMENT/St	IKVET (ALIGNMENT (CENTERL	INE		PT( 324) PC( 325)
		STATION	NORTHING	EASTING	Tangential Direction:
Element: Linear					Tangential Length:
START(	300)	632+33.30	645396.72603	2138213.62367	
HPI( Tangential	301)	677+73.12 N37°33'03.80"W	648995.94325	2135446.74820	Element: Circular PC( 325)
	al Length:	4539.8199			PC( 325) HPI( )
rangerrea	ar cengent	155510255			cc( )
Element: Linear					PT( 327)
HPI(	301)	677+73.12	648995.94325	2135446.74820	Radius:
HPI(	302)	718+23.90	652205.72546	2132975.69614	Delta:
Tangential	al Length:	N37°35'27.20"W 4050.7777			Degree of Curvature(Arc): Length:
rangener	ar rengen.	4030.7777			Tangent:
Element: Linear					Chord:
HPI(	302)	718+23.90	652205.72546	2132975.69614	Middle Ordinate:
HPI(	303)	817+92.45	660106.57516	2126897.16167	External:
Tangential		N37°34'22.64"W			Tangent Direction:
Tangenti	al Length:	9968.5509			Radial Direction: Chord Direction:
Element: Linear					Radial Direction:
HPI(	303)	817+92.45	660106.57516	2126897.16167	Tangent Direction:
END(	304)	881+51.60	665145.97332	2123018.59780	_
Tangential		N37°35'01.02"W			Element: Linear
Tangenti	al Length:	6359.1502			PT( 326)
Alignment name:	ARRO CIS IND	RD			END( 327) Tangential Direction:
		RVEY\ALIGNMENT\CENTERL	TNE		Tangential Length:
		STATION	NORTHING	EASTING	Alignment name: A004 BL RAM
Element: Linear					Alignment style: Alignment
START(	328)	100+00.00	649572.18647 649585.52204	2133495.32547	
END( Tangential	9001) Direction:	119+48.46 N89°36'28.28"E	643585.52204	2135443.74453	Element: Linear
	al Length:	1948.4647			START( 343)
					HPI( 344)
Alignment name:					Tangential Direction:
Alignment style:	Alignment\SU	RVEY\ALIGNMENT\CENTERL	INE		Tangential Length:
Element: Circular		STATION	NORTHING	EASTING	Element: Linear
Element: Circular PC(	321)	675+13.08	648679.04773	2135450.20595	HPI( 344) END( 345)
HPI(	)	675+63.62	648729.58481	2135449.89102	Tangential Direction:
cc(	(				
	)		648678.11303	2135300.20886	Tangential Length:
PT(	) 322)	676+10.57	648678.11303 648769.62749	2135300.20886 2135419.05794	Tangential Length:
PT(	322) Radius:	150.0000	648769.62749		Alignment name: A005 BL RAM
-	322) Radius: Delta:	150.0000 37°14'21.987" Left	648769.62749		
PT( Degree of Curva	322) Radius: Delta: ture(Arc):	150.0000 37°14'21.987" Left 38°11'49.870"	648769.62749		Alignment name: A005 BL RAM
-	322) Radius: Delta: ture(Arc): Length:	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926	648769.62749		Alignment name: A005 BL RAM Alignment style: Alignment\
-	322) Radius: Delta: ture(Arc):	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381	648769.62749		Alignment name: A005 BL RAM Alignment style: Alignment\ Element: Linear
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Degree of Curva Middle Tangent I Radial I Tangent I Element: Linear PT( Tangential Tangentia Element: Circular PC( HPI(	322) Radius: Delta: Length: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: 322) 323) Direction: al Length: 323) )	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"M N59°38'34.68"E N18°58'36.31"W N52°24'12.70"E N37°35'47.30"W 676+10.57 683+59.84 N37°35'27.20"M 749.2658	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134966.09727	Alignment name: A005 BL RAW Alignment style: Alignment\ Element: Linear START( 340) HFI( 341) Tangential Direction: Tangential Length: Element: Linear HFI( 342) Tangential Direction: Tangential Direction: Tangential Direction: Tangential Direction: Tangential Direction: Tangential Length: Alignment name: A006 BL RAW Alignment style: Alignment\ Element: Linear START( 305) HFI( 306)
Degree of Curva Middle Tangent : Radial Chord I Tangent I Element: Linear PT( PC( Tangential Tangenti Element: Circular PC( HPI( CC(	322) Radius: Delta: Length: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: 322) 323) Direction: al Length: 323) ) )	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"M N52°24'12.70"E N37°35'47.30"M 676+10.57 683+59.84 N37°35'27.20"M 749.2658 683+59.84 683+59.84 684+34.23	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL RAW Alignment style: Alignment Element: Linear START( 340) HFT( 341) Tangential Direction: Tangential Length: Element: Linear HPT( 341) END( 342) Tangential Direction: Tangential Direction: Alignment name: A006 BL RAW Alignment style: Alignment Element: Linear START( 305) HPT( 306) Tangential Direction:
Degree of Curva Middle Tangent I Radial I Tangent I Element: Linear PT( Tangential Tangentia Element: Circular PC( HPI(	322) Radius: Delta: Length: Langth: Chord: Ordinate: External: Direction: Direction: Direction: 322) 323) Direction: al Length: 323) ) ) 324)	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"W N89°38'36.31"W N52°24'12.70"E N37°35'47.30"W 676+10.57 683+59.84 N37°35'27.20"W 749.2658 683+59.84 683+59.84 684+34.23 684+97.96	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134966.09727	Alignment name: A005 BL RAW Alignment style: Alignment\ Element: Linear START( 340) HFI( 341) Tangential Direction: Tangential Length: Element: Linear HFI( 342) Tangential Direction: Tangential Direction: Tangential Direction: Tangential Direction: Tangential Direction: Tangential Length: Alignment name: A006 BL RAW Alignment style: Alignment\ Element: Linear START( 305) HFI( 306)
Degree of Curva Middle Tangent : Radial Chord I Tangent I Element: Linear PT( PC( Tangential Tangenti Element: Circular PC( HPI( CC(	322) Radius: Delta: Length: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: 322) 323) Direction: al Length: 323) ) )	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"M N52°24'12.70"E N37°35'47.30"M 676+10.57 683+59.84 N37°35'27.20"M 749.2658 683+59.84 683+59.84 684+34.23	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663 649421.82380	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL RAW Alignment style: Alignment Element: Linear START( 340) HFT( 341) Tangential Direction: Tangential Length: Element: Linear HPT( 341) END( 342) Tangential Direction: Tangential Direction: Alignment name: A006 BL RAW Alignment style: Alignment Element: Linear START( 305) HPT( 306) Tangential Direction:
Degree of Curva Middle Tangent : Radial Chord I Tangent I Element: Linear PT( PC( Tangential Tangenti Element: Circular PC( HPI( CC(	322) Radius: Delta: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: 322) 323) Direction: al Length: 323) ) Radius: Delta: Directian: 324) Radius: Delta: S22) S23)	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"M N52°24'12.70"E N37°35'47.30"M 676+10.57 683+59.84 683+59.84 683+59.84 684+34.23 684+97.96	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663 649421.82380	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL RAW Alignment style: Alignment START( 340) HFI( 341) Tangential Direction: Tangential Direction: Element: Linear HFI( 341) END( 342) Tangential Direction: Tangential Direction: Tangential Direction: Tangential Length: Alignment style: Alignment Element: Linear START( 305) HFI( 306) Tangential Direction: Tangential Direction:
Degree of Curva Middle Tangenti Radial Chord I Radial Tangenti Element: Linear PT( PC( Tangential Tangential Element: Circular PC( HPI( CC( PT(	322) Radius: Delta: Length: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: 322) 323) Direction: al Length: 323) Direction: Direction: Direction: Direction: Length: Len	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"M N89°38'34.68"E N38°58'36.31"W N52°24'12.70"E N37°35'47.30"W 676+10.57 683+59.84 683+59.84 683+59.84 684+34.23 684+97.96 150.0000 52°45'30.426" Left 38°11'49.870" 138.1213	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663 649421.82380	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL RAW Alignment style: Alignment Element: Linear FTART( 340) HFT( 341) Tangential Direction: Tangential Length: Element: Linear HFT( 341) END( 342) Tangential Direction: Tangential Direction: Tangential Length: Alignment name: A006 BL RAW Alignment style: Alignment Element: Linear START( 305) HFT( 306) Tangential Length: Element: Linear HFT( 306) HFT( 306)
Degree of Curva Middle Tangenti Radial Chord I Radial Tangenti Element: Linear PT( PC( Tangential Tangential Element: Circular PC( HPI( CC( PT(	322) Radius: Delta: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: 322) 323) Direction: al Length: 323) ) Radius: Delta: Length: Tangent: Chord: Chord: Direction: 323) Chord:	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"M N52°24'12.70"E N37°35'47.30"M 676+10.57 683+59.84 N37°35'27.20"M 749.2658 683+59.84 683+59.	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663 649421.82380	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL RAW Alignment style: Alignment Element: Linear START( 340) HFT( 341) Tangential Direction: Tangential Length: Element: Linear HPI( 341) END( 342) Tangential Direction: Tangential Direction: Tangential Direction: Cancer START( 305) HFT( 306) Tangential Direction: Tangential Length: Element: Linear HFT( 306) HPT( 307) Tangential Direction:
Degree of Curva Middle Radial Chord Radial Chord Radial Chord Radial Chord Radial PT( PC( Tangential Tangential Tangential Element: Circular PC( HPI( CC( PT( Degree of Curva	322) Radius: Delta: Delta: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: Direction: 322) 323) Direction: al Length: 323) ) 324) Radius: Delta: Length: Tangent: Chord: Chord: Chord: Direction: Direction: Direction: Direction: Direction: Chord: Chord: Direction: Direction: Direction: Chord: Chord: Direction:	159.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"W N89°38'36.31"M N52°24'12.70"E N37°35'47.30"W 676+10.57 683+59.84 676+10.57 683+59.84 683+59.84 683+59.84 684+34.23 684+97.96 159.0000 52°45'30.426" Left 38°11'49.870" 138.1213 74.3929 133.2931	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663 649421.82380	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL RAW Alignment style: Alignment Element: Linear FTART( 340) HFT( 341) Tangential Direction: Tangential Length: Element: Linear HFT( 341) END( 342) Tangential Direction: Tangential Direction: Tangential Length: Alignment name: A006 BL RAW Alignment style: Alignment Element: Linear START( 305) HFT( 306) Tangential Length: Element: Linear HFT( 306) HFT( 306)
Degree of Curva Middle Radial Chord Radial Chord Radial Chord Radial Chord Radial PT( PC( Tangential Tangential Tangential Element: Circular PC( HPI( CC( PT( Degree of Curva	322) Radius: Delta: Length: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: Direction: 322) 323) Direction: al Length: 324) S24) S24) S24) Chord: Delta: Length: Tangent: Chord: Chord: Ordinate: Chord: Cho	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"M N52°24'12.70"E N37°35'47.30"M 676+10.57 683+59.84 0676+10.57 683+59.84 0676+10.57 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 150.0000 52°45'30.426" Left 38°11'49.870" 138.1213 74.3929 133.2931 15.6191	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663 649421.82380	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL RAW Alignment style: Alignment Element: Linear START( 340) HFT( 341) Tangential Direction: Tangential Length: Element: Linear HPT( 341) END( 342) Tangential Direction: Tangential Direction: Tangential Direction: START( 305) HPT( 306) Tangential Direction: Tangential Direction:
Degree of Curva Middle Tangent Radial Tangent Element: Linear PT( PT( Tangential Tangenti Element: Circular PC( HPI( CCC Degree of Curva Middle	322) Radius: Delta: Delta: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: 322) 323) Direction: 323) ) 324) Radius: Delta: ture(Arc): Length: Tangent: Chord: Ordinate: External:	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"W N89°38'34.68"E N37°35'47.30"W 676+10.57 683+59.84 637+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 684+34.23 684+37.96 130.0000 52°45'30.426" Left 38°11'49.870" 138.1213 74.3929 133.2931 15.6191 17.4345	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663 649421.82380	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL RAW Alignment style: Alignment\ Element: Linear START( 340) HFT( 341) Tangential Direction: Tangential Length: Element: Linear HFT( 341) END( 342) Tangential Direction: Tangential Length: Alignment name: A006 BL RAW Alignment style: Alignment\ Element: Linear START( 305) HPT( 306) Tangential Direction: Tangential Length: Element: Linear HFT( 306) HFT( 307) Tangential Length: Element: Linear
Degree of Curva Middle Tangent i Radial Chord i Tangent i Element: Linear PT( PT( Tangential Tangenti Element: Circular PC( HPI( CC( PT( Degree of Curva Middle Tangent i	322) Radius: Delta: Length: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: 322) 323) Direction: al Length: 323) ) 324) Radius: Delta: Length: Tangent: Chord: Ordinate: External: Direction:	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"M N99°38'34.68"E N18°58'36.31"W N52°24'12.70"E N37°35'47.30"W 676+10.57 683+59.84 683+59.84 683+59.84 684+34.23 684+37.96 150.0000 52°45'30.426" Left 38°11'49.870" 138.1213 74.3929 75.57.90"W	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663 649421.82380	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL RAW Alignment style: Alignment Element: Linear START( 340) HFT( 341) Tangential Direction: Tangential Direction: Element: Linear HFT( 341) END( 342) Tangential Direction: Tangential Direction: Tangential Length: Alignment name: A006 BL RAW Alignment style: Alignment Element: Linear HFT( 305) HFT( 306) Tangential Direction: Tangential Direction: Tangential Direction: Tangential Direction: Tangential Direction: Tangential Direction: Tangential Direction: Tangential Direction: Tangential Direction: HFT( 307) Tangential Direction: Tangential Length: Element: Linear HFT( 307)
Degree of Curva Middle Tangenti Radial Chord I Radial Tangenti Element: Linear PT( PC( Tangential Tangential Element: Circular PC( HPI( CC( PT( Degree of Curva Middle Tangent I	322) Radius: Delta: Delta: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: 322) 323) Direction: 323) ) 324) Radius: Delta: ture(Arc): Length: Tangent: Chord: Ordinate: External:	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"W N89°38'34.68"E N37°35'47.30"W 676+10.57 683+59.84 637+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 684+34.23 684+37.96 130.0000 52°45'30.426" Left 38°11'49.870" 138.1213 74.3929 133.2931 15.6191 17.4345	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663 649421.82380	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL RAW Alignment style: Alignment\ Element: Linear START( 340) HFT( 341) Tangential Direction: Tangential Length: Element: Linear HFT( 341) END( 342) Tangential Direction: Tangential Length: Alignment name: A006 BL RAW Alignment style: Alignment\ Element: Linear START( 305) HPT( 306) Tangential Direction: Tangential Length: Element: Linear HFT( 306) HFT( 307) Tangential Length: Element: Linear
Degree of Curva Middle Tangenti Radial Chord I Radial Tangenti Element: Linear PT( PC( Tangential Tangential Element: Circular PC( HPI( CC( PT( Degree of Curva Middle Tangent I	322) Radius: Delta: Length: Tangent: Chord: Ordinate: External: Direction: Direction: Direction: Direction: 322) 323) Direction: al Length: 324) ) ) Radius: Delta: ture(Arc): Length: Tangent: Chord: Ordinate: External: Direction:	150.0000 37°14'21.987" Left 38°11'49.870" 97.4926 50.5381 95.7857 7.8512 8.2849 N00°21'25.32"M N59°38'34.68"E N37°35'47.30"M 676+10.57 683+59.84 676+10.57 683+59.84 076+10.57 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 683+59.84 684+34.23 684+34.23 684+34.23 150.0000 52°45'30.426" Left 38°11'49.870" 138.1213 74.3929 133.2931 15.6191 17.4345 N37°35'37.99"W	648769.62749 648769.62749 649363.33573 649363.33573 649422.28127 649271.82663 649421.82380	2135419.05794 2135419.05794 2134961.99142 2134961.99142 2134916.60727 2134843.13821	Alignment name: A005 BL 1 Alignment style: Alignment START( 344 HPI( 344 Tangential Direction Tangential Length Element: Linear HPI( 344 END( 344 Tangential Direction Tangential Direction Tangential Length Alignment name: A006 BL 1 Alignment style: Alignment Element: Linear START( 300 HPI( 300 Tangential Direction Tangential Length Element: Linear HPI( 300 HPI( 300 Tangential Direction Tangential Direction Tangential Direction Tangential Direction Tangential Direction Tangential Direction Tangential Direction Tangential Length Element: Linear HPI( 300 Tangential Direction Tangential Direction Tangential Length

				Alignment name: A007 BL RAMP	F		
ent: Linear	ca	<i></i>		Alignment style: Alignment\SU	RVEY\ALIGNMENT\CENTERLIN	E	
PT( 324)	684+97.96	649421.82380 649419.52536	2134842.21580 2134471.60913		CTATION	NORTHING	FACTING
PC( 325) Tangential Direction:	688+68.57 589°38'40.80"W	042412.52550	2134471.00513	Element: Linear	STATION	NORTHING	EASTING
Tangential Length:	370.6138			START( 329)	673+43.14	648628.58348	2135674.03182
				HPI( 330)	676+43.38	648858.97932	2135481.51737
ent: Circular				Tangential Direction:	N39°52'53.40"W		
PC( 325)	688+68.57	649419.52536	2134471.60913	Tangential Length:	300.2400		
HPI( )	689+35.81	649419.10905	2134404.37563				
CC( )		649519.52345	2134470.98993	Element: Linear			
PT( 327)	689+86.96	649481.21461	2134378.61877	HPI( 330)	676+43.38	648858.97932	2135481.51737
Radius:	100.0000			END( 331)	690+53.38	649976.24451	2134621.39033
Delta:	67°49'46.771" Rig	,ht		Tangential Direction:	N37°35'27.20"W		
ree of Curvature(Arc):	57°17'44.806"			Tangential Length:	1410.0000		
Length: Tangent:	118.3851 67.2348			Alignment pamer AGOR DAND A			
Chord:	111.5920			Alignment name: A008 RAMP A Alignment style: Alignment\SU	RVEY\ALTGNMENT\CENTERLTN	F	
Middle Ordinate:	17.0132			All Bunche Selfier All Bunche (Se		-	
External:	20.5011				STATION	NORTHING	EASTING
Tangent Direction:	589°38'42.81"W			Element: Linear			
Radial Direction:	N00°21'17.19"W			START( 311)	683+91.02	650017.05250	2135440.86845
Chord Direction:	N56°26'23.80"W			PC( 315)	683+98.52	650017.00456	2135433.36537
Radial Direction:	N67º28'29.58"E			Tangential Direction:	S89°38'02.04"W		
Tangent Direction:	N22°31'30.42"W			Tangential Length:	7.5032		
				_			
nt: Linear				Element: Circular			
PT( 326)	689+86.96	649481.21461	2134378.61877	PC( 315)	683+98.52	650017.00456	2135433.36537
END( 327)	690+91.69	649577.95736	2134338.49810	HPI()	684+88.05	650016.43250	2135343.83770
Tangential Direction:	N22°31'28.27"W 104.7322			CC( )	695177 02	650366.99741	2135431.12900
Tangential Length:	104./322			PT( 316)	685+73.82	650058.91989	2135265.03192
nment name: A004 BL RAMP	Δ			Radius: Delta:	350.0000 28°41'49.229" Right		
nment style: Alignment\S				Degree of Curvature(Arc):	16°22'12.802"		
micite Style: Alignment(S				Length:	175.3000		
	STATION	NORTHING	EASTING	Tangent:	89.5295		
nt: Linear				Chord:	173.4735		
START( 343)	695+03.35	650401.11585	2134435.64810	Middle Ordinate:	10.9178		
HPI( 344)	708+33.35	651454.99010	2133624.32260	External:	11.2693		
Tangential Direction:	N37°35'27.20"W			Tangent Direction:	S89°38'02.04"W		
Tangential Length:	1330.0000			Radial Direction:	N00°21'57.96"W		
				Chord Direction:	N76°01'03.35"W		
nt: Linear				Radial Direction:	N28°19'51.27"E		
HPI( 344)	708+33.35	651454.99010	2133624.32260	Tangent Direction:	N61°40'08.73"W		
END( 345)	711+33.59	651685.38594	2133431.80816				
Tangential Direction:	N39°52'53.39"W			Element: Linear			
Tangential Length:	300.2400			PT( 316)	685+73.82	650058.91989	2135265.03192
nment name: A005 BL RAMP	P			PC( 312)	689+99.15 N61°40'08.73"W	650260.76654	2134890.64599
nment style: Alignment\S				Tangential Direction: Tangential Length:	425.3315		
mene styre. Arighmene(s	UNVET (AETOMACIAT (CENTER	LINC		Tangenerar Eengen.	425.5515		
	STATION	NORTHING	EASTING	Element: Circular			
nt: Linear				PC( 312)	689+99.15	650260.76654	2134890.64599
START( 340)	695+06.46	650335.25789	2134345.00374	HPI ( )	690+38.01	650279.20476	2134856.44252
HPI( 341)	700+16.46	650739.37509	2134033.89396	cc( )		650128.72967	2134819.46829
Tangential Direction:	N37°35'27.20"W			PT( 310)	690+75.19	650278.71789	2134817.58884
Tangential Length:	510.0000			Radius:	150.0000		
				Delta:	29°02'45.202" Left		
nt: Linear				Degree of Curvature(Arc):	38°11'49.871"		
HPI( 341)	700+16.46	650739.37509	2134033.89396	Length:	76.0420		
END( 342)	703+16.70	650984.41139	2133860.39679	Tangent:	38.8567		
Tangential Direction:	N35°18'01.01"W			Chord:	75.2303		
Tangential Length:	300.2400			Middle Ordinate:	4.7929		
				External:	4.9511		
nment name: A006 BL RAMP				Tangent Direction:	N61°40'19.29"W		
nment style: Alignment\S	UNVET VALTONMENT (CENTER	IL THE		Radial Direction:	N28º19'40.71"E		
	STATION	NORTHING	EASTING	Chord Direction: Radial Direction:	N76°11'41.90"W N00°43'04.50"W		
	STATION	NORTHING	CROILING	Tangent Direction:	S89°16'55.50"W		
nt: Linear	682+03.14	649363.71777	2135219.14529	rangene bir cetion.	IOO M		
	685+03.38	649608.75400	2135045.64810	Element: Linear			
nt: Linear START( 305) HPI( 306)				PT( 310)	690+75.19	650278.71789	2134817.58884
START( 305) HPI( 306)	N35°18'01.05"W			PC( 313)	692+25.18	650276.83079	2134667.61121
START( 305) HPI( 306) Tangential Direction:	N35°18'01.05"W 300.2400			Tangential Direction:	589°16'44.80"W		
START( 305) HPI( 306)	N35°18'01.05"W 300.2400			Tangential Length:	149.9895		
START( 305) HPI( 306) Tangential Direction: Tangential Length:				5 0			
START( 305) HPI( 306) Tangential Direction: Tangential Length:		649608.75400	2135045.64810				
START( 305) HPI( 306) Tangential Direction: Tangential Length: nt: Linear	300.2400	649608.75400 649616.92191	2135045.64810 2135039.36011	Element: Circular			
START( 305) HPI( 306) Tangential Direction: Tangential Length: nt: Linear HPI( 306)	300.2400			PC( 313)	692+25.18	650276.83079	2134667.61121
START( 305) HPI( 306) Tangential Direction: Tangential Length: nt: Linear HPI( 306) HPI( 307)	300.2400 685+03.38 685+13.69			PC( 313) HPI( )	692+25.18 693+75.17	650274.94886	2134517.63612
START( 305) HPI( 306) Tangential Direction: Tangential Length: nt: Linear HPI( 306) HPI( 307) Tangential Direction: Tangential Length:	300.2400 685+03.38 685+13.69 N37°35'25.97"W			PC( 313) HPI( ) CC( )	693+75.17	650274.94886 650576.80718	2134517.63612 2134663.84701
START( 305) HPI( 306) Tangential Direction: Tangential Length: nt: Linear HPI( 306) HPI( 307) Tangential Direction: Tangential Length: nt: Linear	300.2400 685+03.38 685+13.69 N37°35'25.97"W 10.3079	649616.92191	2135039.36011	PC( 313) HFI( ) CC( ) PT( 314)	693+75.17 695+03.35	650274.94886	2134517.63612
START( 305) HPI( 306) Tangential Direction: Tangential Length: ht: Linear HPI( 307) Tangential Direction: Tangential Direction: Tangential Length: ht: Linear HPI( 307)	300.2400 685+03.38 685+13.69 N37°35'25.97"W 10.3079 685+13.69	649616.92191 649616.92191	2135039.36011 2135039.36011	PC( 313) HPI( ) CC( ) PT( 314) Radius:	693+75.17 695+03.35 300.0000	650274.94886 650576.80718	2134517.63612 2134663.84701
START( 305) HPI( 306) Tangential Direction: Tangential Length: hPI( 306) HPI( 307) Tangential Direction: Tangential Length: ht: Linear HPI( 307) END( 308)	300.2400 685+03.38 685+13.69 N37°35'25.97"W 10.3079 685+13.69 690+53.38	649616.92191	2135039.36011	PC( 313) HFI( ) CC( ) PT( 314) Radius: Delta:	693+75.17 695+03.35 300.0000 53°07'33.953" Right	650274.94886 650576.80718	2134517.63612 2134663.84701
START( 305) HPI( 306) Tangential Direction: Tangential Length: nt: Linear HPI( 306) HPI( 307) Tangential Direction: Tangential Length: nt: Linear HPI( 307) END( 308) Tangential Direction:	300.2400 685+03.38 037°35'25.97"W 10.3079 685+13.69 690+53.38 N37°35'27.20"W	649616.92191 649616.92191	2135039.36011 2135039.36011	PC( 313) HFI( ) CC( ) PT( 314) Radius: Delta: Degree of Curvature(Arc):	693+75.17 695+03.35 300.0000 53°07'33.953" Right 19°05'54.935"	650274.94886 650576.80718	2134517.63612 2134663.84701
START( 305) HPI( 306) Tangential Direction: Tangential Length: ht: Linear HPI( 307) Tangential Length: ht: Linear HPI( 307) END( 308)	300.2400 685+03.38 685+13.69 N37°35'25.97"W 10.3079 685+13.69 690+53.38	649616.92191 649616.92191	2135039.36011 2135039.36011	PC( 313) HFI( ) CC( ) PT( 314) Radius: Delta:	693+75.17 695+03.35 300.0000 53°07'33.953" Right	650274.94886 650576.80718	2134517.63612 2134663.84701

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

PLS	ESK		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	ESK		
CHECKED	HLK		SURVEY DATA SHEET
APPROVED	ESK		
CREW	WHITE	HAWK	SWO <u>5560(1)</u> PROJECT NO. <u>35589(04)</u> SHEET NO. <u>S003</u>

	ru: 268.3094		
Middle Ordina Extern			
Tangent Directio			
Radial Directio			
Chord Direction			
Radial Direction	on: N52°24'25.81"E		
Tangent Direction	on: N37°35'34.19"W		
Alignment name: A009 RA	MP B ent\SURVEY\ALIGNMENT\CENT	TEDI TNE	
AIIGHINCHT STYLE, AIIGHIN		ICACINC	
	STATION	NORTHING	EASTING
lement: Linear			
	37) 687+20.53	649578.04033	2134350.61543
	38) 689+36.65	649794.15060	2134349.13631
Tangential Direction	on: N00°23'31.72"W th: 216.1153		
Tangential Leng	216.1155		
lement: Circular			
	38) 689+36.65	649794.15060	2134349.13631
HPI(	) 690+02.54	649860.03846	2134348.68535
cc(	)	649797.57268	2134849.12460
	39) 690+67.67	649923.79383	2134365.31862
Radio		light	
Degree of Curvature(Ar		cigni	
Degree of Curvature(Are Leng			
Tanger			
Choi			
Middle Ordina			
Extern	al: 4.3227		
Tangent Direction	on: N00°23'31.72"W on: N89°36'28.28"E		
	on: N89°36'28.28"E		
Chord Direction			
Radial Direction Tangent Direction			
rangent prijectio	///. N14'3/ 19.50"E		
lement: Linear			
	39) 690+67.67	649923.79383	2134365.31862
PC( 3	35) 692+33 <b>.1</b> 0	650083.86047	2134407.07874
Tangential Direction	on: N14°37'19.50"E		
Tangential Leng	th: 165.4244		
lement: Cincular			
lement: Circular PC( 3	35) 692+33.10	650083.86047	2134407.07874
HPI( 3	) 693+80.09	650226.09790	2134407.07874
CC(	)	650159.58255	2134116.79239
	36) 695+06 <b>.</b> 46	650342.57964	2134354.51506
Radi		-	
Delt		Left	
Degree of Curvature(Ar			
Leng			
Tangei Choi			
Middle Ordina			
Extern			
Tangent Directio			
Radial Directio			
Chord Direction	on: N11°29'03.86"W		
Radial Direction			
Tangent Direction	on: N37°35'19.68"W		
Alignment name: A010 RA	MP C	TEDI TNE	
Alignment name: A010 RA		TERLINE	
Alignment name: A010 RA	MP C ent\SURVEY\ALIGNMENT\CENT		FACTING
Alignment name: A010 RA	MP C	TERLINE	EASTING
Alignment name: A010 RA Alignment style: Alignm lement: Linear	MP C ent\SURVEY\ALIGNMENT\CENT		EASTING 2135429.96406
Alignment name: A010 RA Alignment style: Alignm lement: Linear START( 3:	MP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 18) 683+09.18	NORTHING	
Alignment name: A010 RA Alignment style: Alignm lement: Linear START(3: PC(3: Tangential Directi	NP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 18) 683+09.18 on: N00°22'54.70"M	NORTHING	2135429.96406
Alignment name: A010 RA Alignment style: Alignmu lement: Linear START( 3: PC( 3:	NP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 18) 683+09.18 on: N00°22'54.70"M	NORTHING	2135429.96406
Alignment name: A010 RA Alignment style: Alignm lement: Linear START( 3: PC( 3: Tangential Direction Tangential Leng	NP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 18) 683+09.18 on: N00°22'54.70"M	NORTHING	2135429.96406
Alignment name: A010 RA Alignment style: Alignm lement: Linear START( 3: PC( 3: PC( 3: Tangential Directi Tangential Leng lement: Circular	NP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 683+09.18 0n: N00°22'54.78 N1: 15.2517	NORTHING 649852.62617 649867.87749	2135429.96406 2135429.86241
Alignment name: A010 RA Alignment style: Alignmu lement: Linear START( 3: PC( 3: Tangential Direction Tangential Direction Tangential Leng lement: Circular PC( 3:	NP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 683+09.18 0n: N00°22'54.78 N1: 15.2517	NORTHING 649852.62617 649867.87749	2135429.96406 2135429.86241
Alignment name: A010 RA Alignment style: Alignm Iement: Linear START( 3: PC( 3: Tangential Direction Tangential Leng lement: Circular PC( 3: HPI(	NP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 683+09.18 0n: N00°22'54.78 N1: 15.2517	NORTHING 649852.62617 649867.87749	2135429.96406 2135429.86241
Alignment name: A010 RA Alignment style: Alignm Iement: Linear START( 3: PC( 3: Tangential Directi Tangential Leng Iement: Circular PC( 3: HPI( CC(	AP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 18) 683+09.18 0n: N00°22'54.70 15.2517 18) 683+09.18 ) 683+09.18 )	NORTHING 649852.62617 649867.87749 649867.87749 649956.73946 649866.87779	2135429.96406 2135429.86241
Alignment name: A010 RA Alignment style: Alignm Iement: Linear START( 3: PC( 3: Tangential Directi Tangential Leng Iement: Circular PC( 3: HPI( CC(	AP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 18) 683+09.18 0n: N00°22'54.70 15.2517 18) 683+09.18 ) 683+09.18 )	NORTHING 649852.62617 649867.87749 649867.87749 649956.73946 649866.87779	2135429.96406 2135429.86241
Alignment name: A010 RA Alignment style: Alignm Iement: Linear START( 3: PC( 3: Tangential Directi Tangential Leng Iement: Circular PC( 3: HPI( CC(	AP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 18) 683+09.18 0n: N00°22'54.70 15.2517 18) 683+09.18 ) 683+09.18 )	NORTHING 649852.62617 649867.87749 649867.87749 649956.73946 649866.87779	2135429.96406 2135429.86241
Alignment name: A010 RA Alignment style: Alignm Iement: Linear START( 3: PC( 3: Tangential Directi Tangential Leng Iement: Circular PC( 3: HPI( CC( 3: HPI( CC( 3: Radii Degree of Curvature(Ar	AP C           ent\SURVEY\ALIGNMENT\CENT           STATION           17)         682+93.93           18)         683+09.18           on:         N00°22'54.70"W           th:         15.2517           18)         683+09.18           )         683+98.04           )         683+98.04           )         684+69.63           JS:         150.0000           ta:         61°17'14.032"I           :):         38°11'49.871"	NORTHING 649852.62617 649867.87749 649867.87749 649956.73946 649866.87779	2135429.96406 2135429.86241
Alignment name: A010 RA Alignment style: Alignm Imment: Linear START( 3: PC( 3: Tangential Direction Tangential Leng lement: Circular PC( 3: HPI( CC( PT( 3: Radii Del: Degree of Curvature(Ar- Leng	AP C         Prt \SURVEY\ALIGNMENT\CENT         STATION         17)       682+93.93         18)       683+93.93         18)       683+93.93         18)       683+09.18         18)       683+09.18         18)       683+98.04         19)       684+69.63         15:       150.0000         15:       150.0000         15:       150.0000         15:       150.4000         15:       150.4000         15:       150.4000         15:       150.4000         15:       150.4000         15:       150.4000         15:       150.4000         15:       150.4000         15:       150.4000         15:       150.4000         15:       150.4000         15:       150.4000	NORTHING 649852.62617 649867.87749 649867.87749 649956.73946 649866.87779	2135429.96406 2135429.86241
Alignment name: A010 RA Alignment style: Alignm lement: Linear START( 3: PC( 3: Tangential Directi Tangential Leng lement: Circular PC( 3: HPI( CC( PT( 3: Radi Del Degree of Curvature(Ar Leng Tange	AP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 18) 683+09.18 0683+09.18 16 683+09.18 16 683+09.18 16 683+09.18 19) 684+69.63 15: 150.0000 15: 150.00000 15: 150.00000 15: 150.00000 15: 150.00000 15: 150.00000 15: 150.00000 15: 150.00000 15: 150.00000 15: 150.00000 15: 150.000000 15: 150.000000 15: 150.00000000000000000000000000000000000	NORTHING 649852.62617 649867.87749 649867.87749 649956.73946 649866.87779	2135429.96406 2135429.86241
Alignment name: A010 RA Alignment style: Alignm Iement: Linear START( 3: PC( 3: Tangential Direction Tangential Leng Iement: Circular PC( 3: HPI( CC( 3: HPI( CC( 3: Radin Degree of Curvature(A: Degree of Curvature(A: Tangen Choi	AP C           ent\SURVEY\ALIGNMENT\CENT           STATION           17)         682+93.93           18)         683+09.18           bon:         N00°22'54.70"W           th:         15.2517           18)         683+09.18           )         683+09.18           )         683+09.18           )         683+09.18           )         683+09.18           )         683+09.18           )         684+69.63           JS:         150.00000           c1:         38°11'49.871"           th:         160.4496           nt:         88.8639           od:         152.9883	NORTHING 649852.62617 649867.87749 649867.87749 649956.73946 649866.87779	2135429.96406 2135429.86241
Lingnment name: A010 RA Lingnment style: Alignm Ement: Linear START( 3: PC( 3: Tangential Directi Tangential Directi Tangential Leng Lement: Circular PC( 3: HPI( CC( PT( 3: Radi Del Degree of Curvature(Ar Leng Tange	AP C ent\SURVEY\ALIGNMENT\CENT STATION 17) 682+93.93 18) 683+09.18 0683+09.18 16, 683+09.18 16, 683+09.18 16, 683+98.04 19) 684+69.63 15: 150.0000 15: 15: 150.0000 15: 15: 15: 15: 15: 15: 15: 15: 15: 15:	NORTHING 649852.62617 649867.87749 649867.87749 649956.73946 649866.87779	2135429.96406 2135429.86241

Chord:

268.3094

Tangent Directi Radial Directi				Length: Tangent:	321.5769 178.1860		
Chord Directi				Chord:	306.4008		
Radial Directi				Middle Ordinate:	42.0666		
Tangent Directi				External:	48.9273		
-				Tangent Direction:	N37°35'01.02"W		
ment: Linear				Radial Direction:	N52°24'58.98"E		
	19) 684+69.63	649998.91101	2135351.05021	Chord Direction:	N68°17'31.02"W		
	20) 685+73.82	650048.35724	2135259.33716	Radial Direction:	N09°00'01.02"W		
Tangential Directi				Tangent Direction:	S80°59'58.98"W		
Tangential Leng	th: 104.1932						
ignment name: A011 RA	MD E			Element: Linear PT( 353)	839+32.32	661637.04920	2125472.57525
	ent\SURVEY\ALIGNMENT\CENTE			PC( 354)	843+37.42	661573.67567	2125072.46337
rement styrer miren				Tangential Direction:	S80°59'58.98"W	001373107307	21250/211055/
	STATION	NORTHING	EASTING	Tangential Length:	405.0996		
ment: Circular							
	09) 690+53 <b>.</b> 38	650037.24450	2134700.62650	Element: Circular			
HPI(	) 693+53.27	650274.90127	2134517.72152	PC( 354)	843+37.42	661573.67567	2125072.46337
CC(	)	650128.73004	2134819.49784	HPI( )	845+09.47	661546.75936	2124902.52590
	10) 693+85.48	650278.71789	2134817.58884	CC( )		661376.13816	2125103.75125
Radi				PT( 355)	846+21.59	661374.70786	2124903.75636
Del		gnu		Radius:	200.0000 81924'34 005" Loft		
egree of Curvature(Ar				Delta:	81°24'34.095" Left		
Leng				Degree of Curvature(Arc):	28°38'52.403"		
Tange Cho				Length: Tangent:	284.1727		
Cno Middle Ordina				Chord:	172.0559 260.8644		
Middle Ordina Extern				Chora: Middle Ordinate:	48.3839		
Tangent Directi				External:	48.3839		
Radial Directi				Tangent Direction:	580°59'58.98"W		
Chord Directi				Radial Direction:	N09°00'01.02"W		
Radial Directi				Chord Direction:	540°17'41.93"W		
Tangent Directi				Radial Direction:	S89°35'24.88"W		
-				Tangent Direction:	500°24'35.12"E		
ignment name: A012 RA				-			
lignment style: Alignm	ent\SURVEY\ALIGNMENT\CENTE	RLINE		Alignment name: A015 RAMP C			
				Alignment style: Alignment\S	URVEY\ALIGNMENT\CENTERL	INE	
	STATION	NORTHING	EASTING				
ement: Circular				<b>F 1 1 1</b>	STATION	NORTHING	EASTING
	33) 690+53.38	649983.56659	2134630.90138	Element: Linear	074:07.00		0404000 00000
HPI(	) 693+59.37	650225.99953	2134444.20791	START( 359)	834+13.66	661587.92954	2124902.30455
CC( PT( 3	) 34) 693+87.88	649892.04636 649929.93393	2134512.05675 2134366.92049	PC( 360) Tangential Direction:	836+81.44 N86°00'12.49"E	661606.59272	2125169.43296
PI( 3 Radi		043727.35535	2134300.72047	Tangential Direction: Tangential Length:	N86°00'12.49"E 267.7796		
Radi Del		Ft		rangential Length:	26/.//96		
Dei egree of Curvature(Ar				Element: Circular			
Leng				PC( 360)	836+81.44	661606.59272	2125169.43296
Tange				HPI( )	841+79.26	661641.28870	2125666.04056
Cho				CC( )		661872.94345	2125150.82410
Middle Ordina				PT( 357)	842+57.36	662035.79171	2125362.41201
Extern				Radius:	267.0000		
Tangent Directi				Delta:	123°35'13.504" Left		
Radial Directi	on: N52°24'02.68"E			Degree of Curvature(Arc):	21°27'32.736"		
Chord Directi				Length:	575.9194		
Radial Directi				Tangent:	497.8182		
Tangent Directi	on: \$14°37'49.66"W			Chord:	470.5876		
				Middle Ordinate:	140.8024		
ignment name: A013 CL				External:	297.8999		
.ignment style: Alignm	ent\SURVEY\ALIGNMENT\CENTE	KLINE		Tangent Direction:	N86°00'12.49"E		
	STATION	NORTHING	EASTING	Radial Direction: Chord Direction;	S03°59'47.51"E N24°12'35.73"E		
ement: Linear	STATION	MOVINTING	EUDITING	Radial Direction:	N52°24'58.98"E		
	46) 787+26.59	661145.40684	2124905.29320	Tangent Direction:	N37°35'01.02"W		
	47) 803+16.67	662735.45359	2124994.55456	rangene of ettion.	NS, 35 51102 H		
Tangential Directi				Element: Linear			
Tangential Leng				PT( 357)	842+57.36	662035.79171	2125362.41201
				END( 356)	849+51.61	662585.96283	2124938.97379
ment: Linear				Tangential Direction:	N37°35'01.02"W		
	47) 803+16.67	662735.45359	2124894.55456	Tangential Length:	694.2537		
	48) 820+00.00	664418.74573	2124883.18853				
Tangential Directi				Alignment name: A016 W SERVI			
Tangential Leng	th: 1683.3305			Alignment style: Alignment\S	URVEY\ALIGNMENT\CENTERL	INE	
ignment name: A014 LI					STATION	NORTHING	EASTING
	ent\SURVEY\ALIGNMENT\CENTE			Element: Linear	STATION	NOV INTING	CADITING
Tennene achter withim	SUS (DOMAE) (VETOMAENT /CENTER			START( 361)	836+22.54	661188.49215	2124889.31238
	STATION	NORTHING	EASTING	PC( 362)	838+73.03	661425.65941	2124808.70885
ment: Circular	STATION	HORITING	COLUG	Tangential Direction:	N18°46'14.93"W	301423.03341	212-000./0000
	52) 836+10.74	661523.71851	2125757.24628	Tangential Length:	250.4900		
HPI(	) 837+88.93	661664.92450	2125648.56733	rangenezaz zeligeni			
CC(	)	661340.74293	2125519.50706	Element: Circular			
	53) 839+32.32	661637.04920	2125472.57525	PC( 362)	838+73.03	661425.65941	2124808.70885
				HPI( )	839+21.61	661471.64850	2124793.07902
		Ft		CC( )		661522.19445	2125092.75283
Radi	ta: 61°25'00.000" Le						
Radi		-		PT( 363)	839+69.34	661520.21994	2124792.75933

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		OF TO ANGOOD	
UNLAHOWA	DEPARTMENT	UT TRANSFUR	TATION

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

1	PLS	ESK		OKLAHOMA DEPARTMENT OF TRANSPORTATIO	N
	DRAWN	ESK		301101 10101010	
	CHECKED	HLK		SURVEY DATA SHEET	
	APPROVED	ESK			
	CREW	WHITE	HAWK	SWO 5560(1) PROJECT NO. 35589(04) SHEET NO. 8004	4

Radius:	300.0000							Middle Ordinate:	23.2755		
Delta: Degree of Curvature(Arc):	18°23'37.351" Righ 19°05'54.935"	t		Element: Linear PT( 368)	858+58.14	663281.52039	2124367.13176	External: Tangent Direction:	25.4449 N00°54'26.81"W		
Length:	96.3092			PT( 368) END( 369)	863+59.85	663703.05767	2124095.06433	Radial Direction:	N89°05'33.19"E		
Tangent:	48.5725			Tangential Direction:	N32°50'20.02"W	000/00/00/0/	2221055100155	Chord Direction:	N24°44'18.77"W		
Chord:	95.8962			Tangential Length:	501.7114			Radial Direction:	N41°25'49.28"E		
Middle Ordinate:	3.8565							Tangent Direction:	N48°34'10.72"W		
External:	3.9067 N18°46'14.93"W			Alignment name: A018 RAMP D Alignment style: Alignment\SU				Alignment name: A021 S ENT			
Tangent Direction: Radial Direction:	N71º13'45.07"E			Arighment Style, Arighment/So		LINE		Alignment style: Alignment\	URVEY\ALTGNMENT\CENTERLTNE		
Chord Direction:	N09°34'26.26"W				STATION	NORTHING	EASTING				
Radial Direction:	N89°37'22.42"E			Element: Linear					STATION	NORTHING	EASTING
Tangent Direction:	N00°22'37.58"W			START( 358) END( 371)	821+51.60	660366.79207 661634.73460	2126646.41072 2125670.54099	Element: Linear	300+00.00 6	63617.84674	2124888.68948
Element: Linear				END( 371) Tangential Direction:	837+51.60 N37°35'01.02"W	661634./3460	21256/0.54099	START( 377) PC( 384)		63655.07790	2124888.09950
PT( 363)	839+69.34	661520.21994	2124792.75933	Tangential Length:	1600.0000			Tangential Direction:	N00°54'28.32"W		
PC( 364)	850+18.76	662569.60750	2124785.67212					Tangential Length:	37.2358		
Tangential Direction:	N00°23'13.02"W			Alignment name: A019 RAMP B				flammta cianalar			
Tangential Length:	1049.4115			Alignment style: Alignment\SU	KVET (ALIGNMENT (CENTER)	LINE		Element: Circular PC( 384)	300+37.24 6	63655.07790	2124888.09950
Element: Circular					STATION	NORTHING	EASTING	HPI( )		63691.81673	2124887.51731
PC( 364)	850+18.76	662569.60750	2124785.67212	Element: Linear				cc( )		63650.75233	2124615.13377
HPI( )	851+19.71	662670.55664	2124784.99034	START( 383)	851+51.60	662792.97781	2124880.05211	PRC( 385)		63727.09429	2124877.24234
CC( ) PT( 365)	852+13.52	662567.58145 662750.55702	2124485.67896 2124723.41818	PC( 382) Tangential Direction:	859+44.27 N37°35'01.02"W	663421.14080	2124396.58757	Radius: Delta:	273.0000 15°19'51.259" Left		
Radius:	300.0000	002/30.33/02	2124/23.41616	Tangential Length:	792.6706			Degree of Curvature(Arc):	20°59'14.874"		
Delta:	37°11'48.000" Left							Length:	73.0479		
Degree of Curvature(Arc):	19°05'54.935"			Element: Circular				Tangent:	36.7434		
Length:	194.7613			PC( 382)	859+44.27	663421.14080	2124396.58757	Chord:	72.8302		
Tangent: Chord:	100.9514 191.3590			HPI( ) CC( )	864+82.10	663847.35152 663583.98918	2124068.55474 2124608.17530	Middle Ordinate: External:	2.4396 2.4616		
Middle Ordinate:	15.6667			PT( 381)	865+37.01	663850.98303	2124606.37248	Tangent Direction:	N00°54'28.32"W		
External:	16.5299			Radius:	266.9999			Radial Direction:	N89°05'31.68"E		
Tangent Direction:	N00°23'13.02"W			Delta:	127°11'48.430" Rig	ht		Chord Direction:	N08°34'23.95"W		
Radial Direction:	N89°36'46.98"E			Degree of Curvature(Arc):	21°27'32.755"			Radial Direction:	N73°45'40.42"E		
Chord Direction: Radial Direction:	N18°59'07.02"W N52°24'58.98"E			Length: Tangent:	592.7406 537.8300			Tangent Direction:	N16°14'19.58"W		
Tangent Direction:	N37°35'01.02"W			Chord:	478.3033			Element: Circular			
5				Middle Ordinate:	148.2757			PRC( 385)	301+10.28 6	63727.09429	2124877.24234
Element: Linear				External:	333.4583			HPI( )		63783.76563	2124860.73620
PT( 365)	852+13.52	662750.55702	2124723.41818	Tangent Direction:	N37°35'01.17"W			cc( )		63773.79431	2125037.57982
END( 370) Tangential Direction:	865+00.00 N37°35'01.02"W	663770.04858	2123938.76828	Radial Direction: Chord Direction:	N52°24'58.83"E N26°00'53.04"E			PT( 386) Radius:	302+23.76 6 167.0000	63838.22227	2124883.50829
Tangential Length:	1286.4830			Radial Direction:	500°23'12.74"E			Delta:	38°55'55.010" Right		
				Tangent Direction:	N89°36'47.26"E			Degree of Curvature(Arc):	34°18'31.860"		
Alignment name: A017 LINE B								Length:	113.4749		
Alignment style: Alignment\SU	JRVEY\ALIGNMENT\CENTERL	INE		Element: Linear	0(5) 27 01	CC2050 00200	2124505 27248	Tangent:	59.0262		
	STATION	NORTHING	EASTING	PT( 381) PC( 380)	865+37.01 866+25.50	663850.98298 663851.58051	2124606.37248 2124694.85716	Chord: Middle Ordinate:	111.3045 9.5458		
Element: Circular				Tangential Direction:	N89°36'47.13"E			External:	10.1245		
PC( 366)	856+89.34	663127.62728	2124433.20672	Tangential Length:	88.4867			Tangent Direction:	N16°14'19.58"W		
HPI()	857+36.52	663165.02200	2124404.42593	Flerent, Gineulan				Radial Direction:	N73°45'40.42"E		
CC( ) PRC( 367)	857+82.02	663249.61100 663211.33782	2124591.69953 2124395.39578	Element: Circular PC( 380)	866+25.50	663851.58051	2124694.85716	Chord Direction: Radial Direction:	N03°13'37.93"E S67°18'24.57"E		
Radius:	200.0000	003211.33782	2124353.35578	HPI( )	866+83.69	663851.97347	2124753.04602	Tangent Direction:	N22°41'35.43"E		
Delta:	26°33'04.000" Righ	t		cc( )		663684.58445	2124695.98491	5			
Degree of Curvature(Arc):	28°38'52.403"			PT( 379)	867+37.48	663816.12057	2124798.87905	Alignment name: A022 N ENT			
Length:	92.6809			Radius:	166.9999			Alignment style: Alignment\	URVEY\ALIGNMENT\CENTERLINE		
Tangent: Chord:	47.1879 91.8538			Delta: Degree of Curvature(Arc):	38°25'16.386" Rig 34°18'31.955"	nu			STATION	NORTHING	EASTING
Middle Ordinate:	5.3446			Length:	111.9862			Element: Circular	5171201	NORTHER OF	LIGITIG
External:	5.4914			Tangent:	58.1902			PC( 387)		64051.80185	2124886.11729
Tangent Direction:	N37°35'01.02"W			Chord:	109.8998			HPI( )		63955.82247	2124887.06687
Radial Direction: Chord Direction:	N52°24'58.98"E N24°18'29.02"W			Middle Ordinate:	9.2993			CC( )		64050.14971 63906.68870	2124719.12546 2124804.61194
Radial Direction:	N24°18'29.02'W N78°58'02.98"E			External: Tangent Direction:	9.8477 N89°36'47.09"E			PT( 388) Radius:	167.0000	03900.088/0	2124004.01134
Tangent Direction:	N11º01'57.02"W			Radial Direction:	500°23'12.91"E			Delta:	59°46'36.117" Right		
				Chord Direction:	S71º10'34.72"E			Degree of Curvature(Arc):	34°18'31.860"		
Element: Circular				Radial Direction:	538°02'03.47"W			Length:	174.2311		
PRC( 367) HPI( )	857+82.02 858+20.54	663211.33782	2124395.39578 2124388.02331	Tangent Direction:	S51°57'56.53"E			Tangent: Chord:	95.9841 166.4360		
CC( )	000720.04	663249.15132 663173.06465	2124368.02331	Alignment name: A020 S EXIT				Middle Ordinate:	22.2113		
PT( 368)	858+58.14	663281.52039	2124367.13176	Alignment style: Alignment\SU	RVEY\ALIGNMENT\CENTER	LINE		External:	25.6186		
Radius:	200.0000							Tangent Direction:	500°34'00.63"E		
Delta:	21°48'23.000" Left				STATION	NORTHING	EASTING	Radial Direction:	\$89°25'59.37"W		
Degree of Curvature(Arc): Length:	28°38'52.403" 76.1187			Element: Circular PC( 377)	200+00.00	663617.84674	2124888.68948	Chord Direction: Radial Direction:	S29°19'17.43"W N30°47'24.51"W		
Tangent:	76.1187 38.5255			PC( 377) HPI( )	200+00.00	663738.41401	2124888.68948	Tangent Direction:	N30-4/ 24.51 W S59°12'35.49"W		
Chord:	75.6601			CC( )	201.201.00	663613.52323	2124615.72824				
Middle Ordinate:	3.6104			PT( 378)	202+27.09	663818.20449	2124796.37186	Alignment name: A023 RAMP A			
External:	3.6767			Radius:	272.9955			Alignment style: Alignment\	URVEY\ALIGNMENT\CENTERLINE		
Tangent Direction: Radial Direction:	N11º01'57.02"W N78º58'02.98"E			Delta:	47°39'43.910" Lef 20°59'16.126"	τ			STATION	NORTHING	EASTING
Chord Direction:	N21º56'08.52"W			Degree of Curvature(Arc): Length:	20*59*16.126**			Element: Circular	STATION	NORTHING	ENDITING
Radial Direction:	N57°09'39.98"E			Tangent:	120.5824			PC( 389)	857+14.94 6	63900.30576	2124795.95480
Tangent Direction:	N32°50'20.02"W			Chord:	220.6032			HPI( )		63857.69871	2124748.65648

# (OKLAHOMA DEPARTMENT OF TRANSPORTATION)

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

dinate:	23.2755
ternal:	25.4449
ection:	N00°54'26.81"W
ection:	N89°05'33.19"E
ection:	N24°44'18.77"W
ection:	N41°25'49.28"E
ection:	N48°34'10.72"W

PLS	ESK		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	ESK		
CHECKED	HLK		SURVEY DATA SHEET
APPROVED	ESK		
CREW	WHITE	HAWK	SWO 5560(1) PROJECT NO. 35589(04) SHEET NO. 5005

cc( )		664024.38558	2124684.18183
PT( 390)	858+36.58	663857.38757	2124584.99806
Radius:	167.0000 41°43'58.666" Right		
Delta: Degree of Curvature(Arc):	34°18'31.860"		
Length:	121.6391		
Tangent:	63.6592		
Chord:	118.9679		
Middle Ordinate:	10.9530		
External:	11.7218		
Tangent Direction:	547°59'13.19"W		
Radial Direction:	N42°00'46.81"W		
Chord Direction:	568°51'12.52"W		
Radial Direction:	N00°16'48.15"W 589°43'11.85"W		
Tangent Direction:	589-43 11.85 W		
Element: Linear			
PT( 390)	858+36.58	663857.38757	2124684.99806
PC( 391)	859+29.46	663856.93357	2124592.11150
Tangential Direction:	589°43'11.85"W		
Tangential Length:	92.8877		
-1 1			
Element: Circular	859+29.46	663956 03367	2124502 11150
PC( 391) HPI( )	859+29.46 859+71.41	663856.93357 663856.72855	2124592.11150 2124550.16526
CC( )	0554/1.41	663589.93676	2124550.16526
PT( 392)	860+12.68	663843.67104	2124510.30262
Radius:	267.0000		
Delta:	17°51'24.565" Left		
Degree of Curvature(Arc):	21°27'32.736"		
Length:	83.2133		
Tangent:	41.9467		
Chord:	82.8769		
Middle Ordinate:	3.2352		
External: Tangent Direction:	3.2/49 589°43'11.85"W		
Radial Direction:	N00°16'48.15"W		
Chord Direction:	580°47'29.57"W		
Radial Direction:	N18°08'12.71"W		
Tangent Direction:	S71°51'47.29"W		
Element: Linear			
PT( 392)	860+12.68	663843.67104	2124510.30262
PC( 393) Tangential Direction:	861+92.66 571°51'47.29"W	663787.64404	2124339.26053
Tangential Length:	179.9845		
rangenezaz zengent	1,515015		
Element: Circular			
PC( 393)	861+92.66	663787.64404	2124339.26053
HPI( )	863+81.54	663728.84702	2124159.76202
CC( )	865.01 44	664041.37831	2124256.14665
PT( 394) Radius:	865+21.44 267.0000	663878.53005	2124044.55874
Delta:	70°33'11.694" Right		
Degree of Curvature(Arc):	21°27'32.736"		
Length:	328.7802		
Tangent:	188.8830		
Chord:	308.3981		
Middle Ordinate:	49.0283		
External:	60.0563		
Tangent Direction: Radial Direction:	S71°51'47.29"W N18°08'12.71"W		
Chord Direction:	N18°08'12./1"W N72°51'36.86"W		
Radial Direction:	N52°24'58.98"E		
Tangent Direction:	N37°35'01.02"W		
2			
Element: Linear			
PT( 394)	865+21.44	663878.53005	2124044.55874
END( 395)	880+51.60	665091.12365	2123111.28822
Tangential Direction: Tangential Length:	N37°35'01.02"W 1530.1559		
rangentiai tength:	1020.1002		
Alignment name: A024 N EXIT			
Alignment style: Alignment\S	URVEY\ALIGNMENT\CENTERLIM	NE .	
Flomont, Cinculan	STATION	NORTHING	EASTING
Element: Circular PC( 396)	600+23.43	664036.80371	2124886.26567
HPI( )	600+65.23	663995.00504	2124886.26567
	000103.23	664034.10290	2124613.27903
PRC( 397)	601+06.39	663954.99764	2124874.56691

		Chord:	82.6383		
	Middle	e Ordinate:	3.1450		
		External:	3.1816		
		Direction:	S00°34'00.63"E		
		Direction:	S89°25'59.37"W		
		Direction:	508°08'18.46"W		
		Direction:	N73°09'22.46"W		
	Tangent	Direction:	S16°50'37.54"W		
Element:					
	PRC(	397)	601+06.39	663954.99764	2124874.56691
	HPI(	)	601+44.30	663918.71064	2124863.58098
	CC(	)		663928.33945	2124962.61997
	PT(	398)	601+78.31	663885.21937	2124881.35092
		Radius:	92.0000		
		Delta:	44°47'36.533"	Left	
Degree	of Curva	ature(Arc):	62°16'40.876"		
		Length:	71.9250		
		Tangent:	37.9135		
		Chord:	70.1073		
	Middle	e Ordinate:	6.9398		
		External:	7.5060		
		Direction:	S16°50'37.54"W		
		Direction:	N73°09'22.46"W		
		Direction:	S05°33'10.73"E		
	Radial	Direction:	S62°03'01.01"W		
	Tangent	Direction:	S27°56'58.99"E		
Alignme	nt name:	A025 ROUNDA	BOUT		
Alignme	nt style	: Alignment\	SURVEY\ALIGNMENT\CEN	NTERLINE	
			STATION	NORTHING	EASTING
Element:	Circula	r			
	PC(	379)	0+00.00	663816.12057	2124798.87905
	HPI(	)			
	HPI( CC(	) 400)		663859.44106	2124832.76616
		400) 399)	1+72.79	663859.44106 663902.76154	2124832.76616 2124866.65328
	CC(	400) 399) Radius:	55.0000	663902.76154	
	CC( PCC(	400) 399) Radius: Delta:	55.0000 "180°00'00.000	663902.76154	
Degree	CC( PCC(	400) 399) Radius: Delta: ature(Arc):	55.0000	663902.76154	
Degree	CC( PCC(	400) 399) Radius: Delta: ature(Arc): Length:	55.0000 180°00'00.000" 104°10'26.869" 172.7876	663902.76154	
Degree	CC( PCC(	400) 399) Radius: Delta: ature(Arc): Length: Tangent:	55.0000 180°00'00.000" 104°10'26.869" 172.7876 5.1509E+10	663902.76154	
Degree	CC( PCC( of Curva	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord:	55.0000 180°00'00.000" 104°10'26.869" 172.7876 5.15095+10 110.0000	663902.76154	
Degree	CC( PCC( of Curva	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate:	55.0000 180°00'00.000" 104°10'26.869" 172.7876 5.1509E+10 110.0000 55.0000	663902.76154	
Degree	CC( PCC( of Curva Middla	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External:	55.0000 180°00'00.000" 104°10'26.869" 172.7876 5.1509E+10 110.0000 55.0000 5.1509E+10	663902.76154	
Degree	CC( PCC( of Curva Middla Tangent	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction:	55.0000 180°00'00.000" 104°10'26.869" 172.7876 5.1509E+10 110.0000 55.0000 5.1509E+10 551°57'57.53"	663902.76154	
Degree	CC( PCC( of Curva Middla Tangent Radial	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction: Direction:	55.0000 180°00'00.000" 104°10'26.869" 172.7876 5.1509E+10 110.0000 5.1509E+10 551°57'57.53"E 538°02'02.47"W	663902.76154	
Degree	CC( PCC( of Curva Middla Tangent Radial Chord	400) 399) Radius: Delta: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction: Direction:	55.0000 180°00'00.000" 184°10'26.859' 172.7876 5.1599E+10 110.0000 5.1599E+10 5.1599E+10 5.1599E+10 5.1599E+10 5.1599E+10 5.1599E+10 5.1592'02'02'47'' N38°02'02'47''	663902.76154	
Degree	CC( PCC( of Curva Middla Tangent Radial Chord Radial	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction: Direction: Direction:	55.0000 180°00'00.000" 104°10'26.860" 172.7876 5.1509E+10 110.0000 5.1509E+10 551°57'57.53" 538°02'02.47"E N38°02'02.47"E	663902.76154	
Degree	CC( PCC( of Curva Middla Tangent Radial Chord Radial	400) 399) Radius: Delta: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction: Direction:	55.0000 180°00'00.000" 184°10'26.859' 172.7876 5.1599E+10 110.0000 5.1599E+10 5.1599E+10 5.1599E+10 5.1599E+10 5.1599E+10 5.1599E+10 5.1592'02'02'47'' N38°02'02'47''	663902.76154	
Ţ	CC( PCC( of Curva Middla Tangent Radial Tangent	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction: Direction: Direction: Direction:	55.0000 180°00'00.000" 104°10'26.860" 172.7876 5.1509E+10 110.0000 5.1509E+10 551°57'57.53" 538°02'02.47"E N38°02'02.47"E	663902.76154	
Degree Element:	CC( PCC( of Curva Middla Tangent Radial Chord Radial Tangent Circula	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction: Direction: Direction: Direction: Direction:	55.0000 180°00'00.000" 104°10'26.869" 172.7876 5.1509E+10 110.0000 5.1509E+10 551°57'57.53"W N38°02'02.47"E N38°02'02.47"E N38°02'02.47"E	663902.76154 Left	2124866.65328
Ţ	CC( PCC( of Curve Middle Tangent Radial Chord Radial Tangent Circulae PCC(	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: chord: Direction: Direction: Direction: Direction: Direction: Direction: Direction: Direction:	55.0000 180°00'00.000" 104°10'26.860" 172.7876 5.1509E+10 110.0000 5.1509E+10 551°57'57.53" 538°02'02.47"E N38°02'02.47"E	663902.76154 Left 663902.76154	2124866.65328
Ţ	CC( PCC( of Curva Middld Tangent Radial Tangent Circulaa PCC( CCC	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction	55.0000 180°00'00.000" 184°10'26.869" 172.7876 5.1599E+10 110.0000 5.1599E+10 5.1599E+10 5.1599E+10 5.1597'57.53"E S38°02'02.47"E N38°02'02.47"E N38°02'02.47"E N51°57'57.53"W	663902.76154 Left 663902.76154 663859.44106	2124866.65328 2124866.65327 2124832.76616
Ţ	CC( PCC( of Curve Middle Tangent Radial Chord Radial Tangent Circulae PCC(	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: condinate: External: Direction:	55.0000 180°00'00.000" 104°10'26.860" 172.7876 5.1509E+10 110.0000 5.1509E+10 551°57'57.53" S38°02'02.47"E N38°02'02.47"E N51°57'57.53"W 1+72.79 3+45.58	663902.76154 Left 663902.76154	2124866.65328
Ţ	CC( PCC( of Curva Middld Tangent Radial Tangent Circulaa PCC( CCC	400) 399) Radius: Delta: ture(Arc): Length: Tangent: Chord: External: Direction:	55.0000 180°00'00.000" 184°10'26.850" 172.7876 5.1509E+10 110.0000 5.1509E+10 5.1509E+10 5.1509E+10 5.1509E+10 5.1509E+10 5.1509E+10 5.1509E+10 1.150	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	CC( PCC( of Curve Middle Radial Chord Radial Tangent Circulaa PCC( CCC( PT(	400) 399) Radius: Delta: ture(Arc): Length: Tangent: Chord: e Ordinate: External: Direction:	55.0000 180°00'00.000" 104°10'26.869" 172.7876 5.1509E+10 110.0000 5.1509E+10 551°57'57.53"E 538°02'02.47"W N38°02'02.47"E N51°57'57.53"W 1+72.79 3+45.58 55.0000 180°00'00.000"	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	CC( PCC( of Curve Middle Radial Chord Radial Tangent Circulaa PCC( CCC( PT(	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: c Ordinate: External: Direction	55.0000 180°00'00.000" 184°10'26.869" 172.7876 5.1509E+10 5.1509E+10 551°57'57.53"E 538°02'02.47"E N38°02'02.47"E N51°57'57.53"W 1+72.79 3+45.58 55.0000 180°00'00.000"	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	CC( PCC( of Curve Middle Radial Chord Radial Tangent Circulaa PCC( CCC( PT(	400) 399) Radius: Delta: Delta: Length: Tangent: Chord: e Ordinate: External: Direction: Di	55.0000 180°00'00.000" 180'10'26.863" 172.7876 5.1599E+10 110.0000 5.1599E+10 5.1599E+10 5.1599E+10 5.1599E+10 5.1592'57.53"E S38°02'02.47"E N38°02'02.47"E N38°02'02.47"E N38°02'02.47"E N51°57'57.53"W 1+72.79 3+45.58 55.0000 180°00'00.000" 104°10'26.920"	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	CC( PCC( of Curve Middle Radial Chord Radial Tangent Circulaa PCC( CCC( PT(	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction: Tangent: Length: Tangent:	55.0000 180°00'00.000" 104°10'26.869" 172.7876 5.1509E+10 110.0000 5.509E+10 551°57'57.53" S38°02'02.47"E N38°02'02.47"E N38°02'02.47"E N51°57'57.53"W 1+72.79 3+45.58 55.0000 180°00'00.000" 104°10'26.920" 172.7876 0.0000	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	CC( PCC( of Curva Middla Tangent Chord Radial Tangent Circulaa PCC( CC( PT( of Curva	400) 399) Radius: Delta: ture(Arc): Length: Tangent: Chord: External: Direction:	55.0000 180°00'00.000" 184°10'26.869" 172.7876 5.1509E110 5.1509E110 5.1509E110 5.1509E100 5.1509E100 5.1509E100 5.1509E10 1.1509E10	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	CC( PCC( of Curva Middla Tangent Chord Radial Tangent Circulaa PCC( CC( PT( of Curva	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction	55.0000 180°00'00.000" 180'10'26.869" 172.7876 5.1599±10 110.0000 5.1599±10 551°57'57.53"E 538°02'02.47"W N38°02'02.47"E N38°02'02.47"E N38°02'02.47"E N51°57'57.53"W 1+72.79 3+45.58 55.0000 180°00'00.000" 104°10'26.920" 172.7876 0.0000 110.0000 0.0000	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	CC( PCC( of Curva Middlu Tangent Radial Tangent Circulaa PCC( CC( PT( of Curva Middlu	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction	55.0000 180°00'00.000" 104°10'26.860" 172.7876 5.1509E+10 110.0000 5.1509E+10 551°57'57.53" S38°02'02.47"E N38°02'02.47"E N51°57'57.53"W 1+72.79 3+45.58 55.0000 180°00.000" 104°10'26.920" 172.7876 0.0000 0.0000	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	CC( PCC( of Curva Middla Tangent Chord Radial Tangent Circulas PCC( CC( PT( of Curva Middla Tangent	400) 399) Radius: Delta: Delta: Chord: Length: Tangent: Chord: e Ordinate: External: Direction: Direction: Direction: Direction: Direction: Direction: Direction: Chord: Chord: Chord: Direction: Direction: Direction: Direction: Chord: e Ordinate: Chord: External: Delta: Chord: External: Delta: Chord: External: Direction: Directio	55.0000 180°00'00.000" 184°10'26.859" 172.7876 5.1599±10 110.0000 5.1599±10 551°57'57.53"E 538°02'02.47"K N38°02'02.47"E N38°02'02.47"E N38°02'02.47"E N51°57'57.53"W 1+72.79 3+45.58 55.0000 180°00'80.000 180°00'80.000 180.0000 0.0000 0.0000 N51°57'57.53"	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	CC( PCC( of Curva Middla Tangent Radial Tangent Circulan PCC( CC( CC( PT( of Curva Middla Tangent Radial	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction: Direction: Direction: Direction: Direction: Direction: Direction: Chord: e Ordinate: External: Direction: D	55.0000 180°00'00.000" 180'10'26.869" 172.7876 5.1509E+10 110.0000 5.1509E+10 551°57'57.53"E 538°02'02.47"K N38°02'02.47"E N38°02'02.47"E N51°57'57.53"W 1+72.79 3+45.58 55.0000 180°00'00.000" 180°00'00.000" 180°00'00.000" 180°00'00.000" 192.7876 0.0000 0.0000 0.0000 N51°57'57.53"W	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	CC( PCC( of Curva Middla Tangent Radial Tangent Circulaa PCC( CC( PT( of Curva Middla Tangent Radial Chord	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: e Ordinate: External: Direction: Direction: Direction: Direction: Direction: Direction: Chord: e Ordinate: External: Direction: Direction: Chord: e Ordinate: External: Direction: Direction: Direction: Chord: e Ordinate: External: Direction	55.0000 180°00'00.000" 184'10'26.850" 172.7876 5.1509E110 5.1509E110 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 1.172.797 3.445.58 5.0000 180°00'00.000" 122.7876 0.0000 110.0000 0.00000 0.00000 0.000000	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	cc( Pcc( of Curva Middla Tangent Chord Radial Tangent Circulaa PCC( PT( of Curva Middla Tangent Radial Chord Radial	400) 399) Radius: Delta: ature(Arc.): Length: Tangent: Chord: e ordinate: External: Direction: Direction: Direction: Direction: Direction: Direction: Direction: Ad0) 379) Radius: Delta: ature(Arc): Length: Tangent: Chord: e ordinate: External: Direction:	55.0000 180°00'00.000" 180'10'26.850" 172.7876 5.1509E+10 110.0000 5.1509E+10 551°57'57.53"E 538°02'02.47"K N38°02'02.47"E N38°02'02.47"E N38°02'02.47"E 3+45.58 55.0000 180°00'00.000 100.0000 0.0000 0.0000 0.0000 0.0000 0.0000 10.0000 0.0000 0.0000 10.0000 0.0000 0.0000 10.0000 0.0000 0.0000 10.0000 0.0000 0.0000 10.0000 0.0000 0.0000 10.0000 0.0000 0.0000 10.0000 0.0000 0.0000 10.0000 0.0000 0.0000 10.0000 0.00000 0.0000 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.0000000 0.00000000	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616
Element:	cc( Pcc( of Curva Middla Tangent Chord Radial Tangent Circulaa PCC( PT( of Curva Middla Tangent Radial Chord Radial	400) 399) Radius: Delta: ature(Arc): Length: Tangent: Chord: c Ordinate: External: Direction: Direction: Direction: Direction: Direction: Direction: Direction: Chord: c Ordinate: External: Direction: Direction: Direction: Chord: c Ordinate: External: Direction: Direction: Direction: Direction: Chord: c Ordinate: External: Direction	55.0000 180°00'00.000" 184'10'26.850" 172.7876 5.1509E110 5.1509E110 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 5.1509E10 1.172.797 3.445.58 5.0000 180°00'00.000" 122.7876 0.0000 110.0000 0.00000 0.00000 0.000000	663902.76154 Left 663902.76154 663859.44106 663816.12058	2124866.65328 2124866.65327 2124832.76616

Element:	Circular					
	PC(	396)	600+23.43		664036.80371	2124886.2
	HPI(	)	600+65.23		663995.00504	2124886.0
	CC(	)			664034.10290	2124613.2
	PRC(	397)	601+06.39		663954.99764	2124874.5
		Radius:	273.0000			
		Delta:	17°24'38.166"	Right		
Degree	of Curvat	ure(Arc):	20°59'14.874"			
		Length:	82.9571			
		Tangent:	41.8007			

# (OKLAHOMA DEPARTMENT OF TRANSPORTATION)

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

PLS	ESK		OKLAHOMA DEPARTMENT OF TRANSPORTATION							
DRAWN	ESK									
CHECKED	HLK		SURVEY DATA SHEET							
APPROVED	ESK									
CREW	WHITE	HAWK	SWO <u>5560(1)</u> PROJECT NO. <u>35589(04)</u> SHEET NO. <u>S006</u>							

PT#	NORTHING	EASTING	ELEVATION	PT#	NORTHING	EASTING	ELEVATION
101	645357.73700	2138363.52700	1131.734	309	650037.24450	2134700.62650	
102	645657.13500	2138109.13300	1138.643	310	650278.71789	2134817.58884	
103	646302.34500	2137639.34700	1145.742	311	650017.05250	2135440.86845	
104	646959.78700	2137106.14300	1140.167	312	650260.76654	2134890.64599	
105	647676.83300	2136315.68500	1109.240	313	650276.83079	2134667.61121	
106		2136079.40300		314		2134426.13721	
107		2135960.10600		315		2135433.36537	
108		2135333.03200		316		2135265.03192	
109		2134786.45200		317		2135429.96406	
110		2134843.68200		318		2135429.86241	
111		2134341.64000		319		2135351.05021	
112		2133842.36500		320		2135259.33716	
113		2133715.20100		321		2135450.20595	
114		2133531.79300		322		2135419.05794	
115		2132983.77500		323		2134961.99142	
116		2132806.42700		324		2134842.21580	
117		2132380.65500		325		2134471.60913	
118		2131914.47500		326		2134378.61877	
119		2131448.56100		327		2134338.49810	
120		2130992.85200		328		2133495.32547	
121		2130606.86300		329		2135674.03182	
122		2130335.82400		330		2135481.51737	
123		2130130.81500		331		2134621.39033	
124		2129653.19200		332		2134995.22404	
125 126		2129307.89600 2128911.71500		333		2134630.90138 2134366.92049	
126				334		2134366.92049	
127		2128585.68100 2128271.02400		335		2134407.07874	
120		2128271.02400		337		2134350.61543	
129		2127619.02100		338		2134350.61543	
130		2127819.02100		339		2134345.31862	
131		212/230.32200		340		2134345.00374	
133		2126478.33300		341		2134033.89396	
134		2125987.22800		342		2133860.39679	
135		2125481.48300		343		2134435.64810	
136		2124940.00300		344		2133624.32260	
137		2124777.04200		345		2133431.80816	
300		2138213.62367	11/0./20	346		2124905.29320	
301		2135446.74820		347		2124894.55456	
302		2132975.69614		348		2124883.18853	
303		2126897.16167		349		2136433.69945	
304		2123018.59780		350		2135364.64820	
305	649363.71777	2135219.14529		351	653692.68110	2131831.70385	
306		2135045.64810		352		2125757.24628	
307	649616.92191	2135039.36011		353	661637.04920	2125472.57525	
308	650044.56664	2134710.13765		354	661573.67567	2125072.46337	

COORDINATE POINT LIST

J/P 35589(04)

SWO 5560(1)

SWO 5560	D(1)		COORDINATE PO	INT LIS	т	/L	P 35589(04)	SWO 556	0(1)
PT#	NORTHING	EASTING	ELEVATION I	PT#	NORTHING	EASTING	ELEVATION	PT#	NORTHING
355	661374.70786	2124903.75636	7	600	645335.77922	2138134.34261		7647	652204.9606
356	662585.96283	2124938.97379	7	601	647263.92273	2136904.36155		7648	652206.3629
357	662035.79171	2125362.41201	7	602	646950.73275	2136892.85730		7649	652206.5542
358	660366.79207	2126646.41072	7	603	646950.06351	2136783.37427		7650	652669.5615
359	661587.92954	2124902.30455	7	604	647309.55765	2136881.89335		7651	652863.4239
360	661606.59272	2125169.43296	7	605	647094.21989	2136782.55247		7652	652862.5042
361	661188.49215	2124889.31238	7	606	647564.78229	2136395.58390		7653	652513.0544
362	661425.65941	2124808.70885	7	607	647497.89125	2136472.23266		7654	652604.4872
363	661520.21994	2124792.75933	7	608	648776.12963	2135464.36829		7655	654817.1487
364	662569.60750	2124785.67212	7	609	648520.20701	2135465.67212		7656	654743.8963
365	662750.55702	2124723.41818	7	610	649543.78363	2134123.76792		7657	654811.9331
366	663127.62728	2124433.20672	7	611	649539.48704	2134123.79045		7658	649592.0883
367	663211.33782	2124395.39578	7	612	649095.01479	2135521.91915		7659	649626.7339
368	663281.52039	2124367.13176	7	613	649049.32759	2135544.45622		7660	649701.4871
369	663703.05767	2124095.06433	7	614	649172.54272	2135462.34872		7661	649893.5663
370	663770.04858	2123938.76828	7	615	649490.57648	2135460.72845		7662	649924.1154
371	661634.73460	2125670.54099	7	616	645457.67284	2138292.90472		7663	650097.9953
372	662708.31417	2124894.73785	7	617	648520.00235	2135432.67274		7664	650309.3548
373	655911.89825	2130124.34471	7	618	648565.41892	2135432.44136		7665	654814.0662
374	657814.08438	2128660.89402	7	619	648678.79847	2135410.20672		7667	654801.7193
375	660708.17444	2126434.14185	7	620	648745.22363	2135387.36485		7668	654862.6964
376	662134.60982	2125336.28839	7	621	649338.93330	2134930.29723		7669	654847.2547
377	663617.84674	2124888.68948	7	622	649381.82456	2134842.46178		7670	655024.2453
378	663818.20449	2124796.37186	7	623	649379.52613	2134471.85681		7671	655252.7069
379	663816.12058	2124798.87906	7	624	649465.89173	2134341.67030		7672	654850.1481
380	663851.58051	2124694.85716	7	625	649514.34010	2134321.57803		7673	654848.4908
381	663850.98298	2124606.37248	7	627	649539.48704	2134123.79045		7674	655586.8399
382	663421.14080	2124396.58757	7	628	649559.43384	2134042.89575		7675	654844.9326
383	662792.97781	2124880.05211	7	629	650384.51321	2135422.09279		7676	656000.2931
384	663655.07790	2124888.09950	7	630	650216.75960	2135389.71011		7677	656253.7309
385	663727.09429	2124877.24234	7	631	650128.04828	2135242.17233		7678	656253.9095
386	663838.22227	2124883.50829	7	632	650335.31490	2134857.73347		7679	656153.9115
387	664051.80185	2124886.11729	7	633	650332.82639	2134666.90856		7680	656154.7116
388	663906.68870	2124804.61194	7	634	650427.95595	2134470.50971		7681	660091.0660
389	663900.30576	2124795.95480	7	635	651121.24992	2133936.78106		7682	660092.8606
390	663857.38757	2124684.99806	7	636	651261.50167	2133955.00921		7683	654844.7200
391	663856.93357	2124592.11150	7	637	651320.93907	2133909.25130		7684	658507.4737
392	663843.67104	2124510.30262	7	638	651259.93715	2133830.01264		7685	658557.7631
393	663787.64404	2124339.26053	7	639	650820.93389	2133915.57744		7686	655630.0964
394	663878.53005	2124044.55874	7	640	650887.98342	2133838.71913		7687	659469.1151
395	665091.12365	2123111.28822	7	641	652256.04783	2132785.57577		7688	659537.6976
396	664036.80371	2124886.26567	7	642	652204.76300	2132785.91200		7689	660045.5906
397	663954.99764	2124874.56691	7	643	652256.04783	2132785.57577		7690	660089.2646
398	663885.21937	2124881.35092	7	644	654815.60088	2131093.95390		7691	660087.4701
399	663902.76154	2124866.65327	7	645	652285.01183	2133078.71881		7692	660120.4692
400	663859.44106	2124832.76616	7	646	652132.53804	2132880.59828		7693	660122.0841

1 OF 3

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# (OKLAHOMA DEPARTMENT OF TRANSPORTATION)

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

# COORDINATE POINT LIST

J/P 35589(04)

IING	EASTING	ELEVATION	PT#	NORTHING	EASTING	ELEVATION
96062	2132824.87982		7694	661486.51347	2125708.90597	
86297	2133101.40636		7695	661576.80026	2125482.11805	
55423	2133139.11943		7696	661513.42673	2125082.00618	
6153	2132782.86473		7697	661375.14410	2124964.75480	
12398	2132781.59375		7698	661320.06234	2124954.11477	
50420	2132596.57272		7699	661145.74334	2124955.29206	
)5445	2132587.84722		7700	661164.66889	2124855.16197	
8726	2132542.73733		7701	661412.78808	2124770.83631	
L4873	2131448.75972		7702	661519.94980	2124752.76024	
39637	2130896.77867		7703	662567.77436	2124745.68359	
93310	2130253.21021		7704	662829.48694	2124599.57557	
08832	2133992.30343		7705	663225.68621	2124294.64149	
73393	2134159.57022		7706	663271.40860	2124272.07020	
8711	2134255.64691		7707	665054.48553	2122899.72819	
56637	2134305.76346		7708	660125.85977	2127285.04351	
L1546	2134307.52782		7709	660124.80465	2127138.04792	
9532	2134352.89174		7710	660147.83974	2127048.46201	
85483	2134309.41678		7711	660167.61569	2127007.91779	
06621	2130742.17024		7712	660308.93581	2126899.15101	
71934	2130726.12183		7713	660423.24179	2126842.72279	
59645	2130805.37959		7714	662690.46813	2125097.75608	
25471	2130785.30850		7715	662847.29105	2125043.80267	
24531	2130933.43289		7716	664019.76431	2125035.88418	
70698	2130820.75076		7717	664468.87137	2124942.84901	
L4810	2131448.54339		7718	664468.02719	2124817.85186	
19080	2131068.64997		7719	664089.79308	2124820.40632	
33994	2130248.25835		7720		2124759.50148	
3267	2130253.03955		7721	663863.34437	2124334.44997	
29313	2130245.59387		7722	663944.35487	2124069.60998	
73096	2130243.96060		7723	665206.96517	2123097.84421	
90950	2130210.95876		7724		2134259.74217	
91158	2130211.60319		9000	646941.95700	2135457.21250	
	2130063.70633		9001		2135443.74453	
06603	2127035.26428		9002	652218.15270	2135426.19850	
	2127285.28037		9003		2138109.53600	
	2130220.04023		9004		2132768.63900	
	2128001.26294		9005		2130236.64600	
	2127943.64706		9006		2124912.40533	
	2130214.97890		9007		2127557.42310	
	2127242.49661		9008		2130202.47844	
	2127208.65811				2136771.70300	
	2126817.90959				2133260.63500	
	2126784.29604				2136746.27000	
	2126534.30141				2132902.49400	
	2126534.06231				2124988.97100	
08414	2126759.03654		M-44-859	661374.73900	2124773.94200	1174.050

3 OF 3

PLS	ESK		OKLAHOMA DEPARTMENT OF TRANSPORTATION							
DRAWN	ESK									
CHECKED	HLK		SURVEY DATA SHEET							
APPROVED	ESK									
CREW	WHITE	HAWK	SWO 5560(1) PROJECT NO. 35589(04) SHEET NO. 8007							

			CHECK LEVE	LS		BENCH MARK LIST					CHECK LEVE	LS			BENCH M		
SWO 5560(1)	)						NAVD 88 DATUM										
BM NO.	RUN 1	RUN2	MEAN DIFF.	ADJ. DIFF	PUBLISHED ELEV.	ADJ. ELEV.	BM DESCRIPTION	BM NO.	RUN 1	RUN2	MEAN DIFF.	adj. Diff	PUBLISHED ELEV.	ADJ. Elev.	BM DE		
-44-726					1135.810		#6 REBAR EST. UNDER SWO 4748(1) SURVEY STA. 654+81.5 9.5' LT.	BM 24						1124.666	#6 REBAR STA. 771+47.0 96.7 LT.		
•	4.357	4.357	4.357	4.357				то	14.726	14.727	14.727	14.730					
M 4						1140.167	"X" ON SE CORNER EAST HEADWALL STA. 651+47.5 74.6" RT.	BM 25						1139.396	#6 REBAR STA. 777+22.4 89.7" LT.		
0	5.574	5.575	5.575	5.575				то	1.605	1.607	1.606	1.610					
M 3						1145.742	#6 REBAR STA, 643+01.3 96.7 RT.	BM 26						1141.006	"X" ON NORTH EDGE CONC. INLE		
0	-7.101	-7.097	-7.099	-7.099				то	5.137	5.138	5.138	5.141					
M 2						1138.643	"X" ON C/L EAST HEADWALL STA. 635+03.4 75.9" RT.	BM 27						1146.147	80d SPIKE IN POWER POLE STA. 7		
0	-6.908	-6.909	-6.909	-6.909				то	-0.594	-0.595	-0.595	-0.591					
3M 1						1131.734	#6 REBAR STA. 631+11.0 95.1 RT.	BM 28						1145.556	80d SPIKE IN POWER POLE STA		
								то	-12.594	-12.595	-12.595	-12.591					
44-726					1135.810		#6 REBAR EST. UNDER SWO 4748(1) SURVEY STA. 654+81.5 9.5' LT.	BM 29						1132.965	"X" ON C/L EAST HEADWALL STA		
0	-26.614	-26.615	-26.615	-26.570				то	4.470	4.469	4.470	4.473					
3M 5					1109.240		#6 REBAR STA. 661+97.7 115.1' LT. = BM1 ON SWO 4748(1)	BM 30						1137.438	80d SPIKE IN POWER POLE STA		
o	-3.431	-3.431	-3.431	-3.435				то	12.560	12.561	12.561	12.564					
BM 6						1105.806	"X" ON SOUTH WING OF WEST HEADWALL STA. 666+43.1 70.7" LT.	BM 31						1150.002	80d SPIKE IN POWER POLE STA		
0	6.208	6.208	6.208	6.204				то	3.144	3.146	3.145	3.149					
BM 7					1112.010		#6 REBAR STA. 670+66.9 104.6' RT. = BM2 ON SWO 4748(1)	BM 32						1153.151	"X" ON SOUTH END CURB RADIU		
o	20.650	20.650	20.650	20.641				то	1.549	1.547	1.548	1.552					
8 M 8						1132.651	"X" ON TOP CENTER OF RETAINING WALL STA. 678+27.8 101.4" LT.	BM 33						1154.703	#6 REBAR STA. 826+01.8 94.4" RT.		
ю	12.982	12.978	12.980	12.971				то	2.849	2.851	2.850	2.854					
BM 9						1145.622	"X" ON WEST END NORTH BRIDGE PARAPET STA. 686+55.8 153.8" LT.	BM 34						1157.556	#6 REBAR STA 834+02.9 91.2' RT.		
ю	-27.105	-27.105	-27.105	-27.114				то	5.722	5.723	5.723	5.726					
BM 10						1118.508	"X" ON C/L EAST HEADWALL STA. 688+90.5 99.2' RT.	BM 35						1163.282	"X" ON SOUTH END EAST HEADW		
ю	18.931	18.931	18.931	18.922				то	2.983	2.985	2.984	2.988					
M 11					1137,430		#6 REBAR STA. 697+06.2 = BM6 ON SWO 4748(1)	BM 36					1166.270	1166.270	NE COR EAST HDWL STA. 845+63.		
0	3.822	3.823	3.823	3.810				то	7.779	7.780	7.780	7.780					
M 12					1141.240		#6 REBAR STA, 702+74.5 = BM7 ON SWO 4748(1)	M-44-859					1174.050	1174.050	#4 REBAR W/CAP EST. UNDER SW		
							••										

CHECK LEVELS							BENCH MARK LIST
SWO 5560(1	1)						NAVD 88 DATUM
BM NO.	RUN 1	RUN2	MEAN DIFF.	ADJ. DIFF	PUBLISHED ELEV.	ADJ. ELEV.	BM DESCRIPTION
BM 12						1141.240	#6 REBAR STA. 702+74.5 = BM7 ON SWO 4748(1)
то	-6.480	-6.480	-6.480	-6.485			
BM 13						1134.756	"X" ON NE CORNER CONC. INLET STA. 705+07.0 80.5" LT.
то	-2.793	-2.789	-2.791	-2.796			
BM 14					1131.960		#6 REBAR STA. 710+35.5 94.8' RT. = BM8 ON SWO 4748(1)
то	-21.244	-21.242	-21.243	-21.216			
BM 15						1110.745	"X" ON NE CORNER CONC. INLET STA. 717+15.5 73.3' LT.
то	2.603	2.603	2.603	2.630			
M-44-730					1113.375		#6 REBAR EST. UNDER SWO 4748(1) SURVEY STA. 718+11.2 102.2' LT.
то	-6.250	-6.257	-6.254	-6.250			
BM 16						1107.125	"X" ON NORTH WING OF EAST HEADWALL 721+76.1 57.4" RT.
то	14.433	14.433	14.433	14.437			
BM 17						1121.562	#6 REBAR STA. 729+25.2 96.5' RT.
то	2.786	2,789	2.788	2.791			
BM 18						1124.353	#6 REBAR STA. 736+88.7 95.7 RT.
то	-9.222	-9.223	-9.223	-9.219			
BM 19						1115.134	"X" ON C/L EAST HEADWALL STA. 744+28.5 77.0' RT.
то	-2.876	-2.878	-2.877	-2.873			
BM 20						1112.261	"X" ON C/L EAST HEADWALL STA. 751+83.4 82.9' RT.
то	-0.217	-0.217	-0.217	-0.213			
BM 21						1112.047	"X" ON NORTH END EAST HEADWALL STA. 756+03.9 80.6" LT.
то	1.322	1.322	1.322	1.326			
BM 22						1113.373	"X" ON C/L WEST HEADWALL STA. 760+52.4 77.5' LT.
то	6.872	6.874	6.873	6.877			
BM 23						1120.249	"X" ON NORTH WING OF WEST HEADWALL STA. 764+16.9 55.7" LT.
то	4.413	4.413	4.413	4.417			
BM 24						1124.666	#6 REBAR STA. 771+47.0 96.7 LT.

		BENCH MA					
SWO 5560(	1)						
BM NO.	RUN 1	RUN2	MEAN DIFF.	adj. Diff	PUBLISHED ELEV.	adj. Elev.	BM DESC
BM 36					1166.270	1166.270	NE COR EAST HDWL STA. 845+63.1 33
то	1.557	1.541	1.549	1.550			
M-44-858					1167.820	1167.820	#4 REBAR W/CAP EST. UNDER SWO 4
то	2.886	2.896	2.891	2.900			
BM 37					1170.720	1170.720	NE COR. BOTTOM STEP STA. 871+82.7

# (OKLAHOMA DEPARTMENT OF TRANSPORTATION)

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

CH MARK LIST

NAVD 88 DATUM

ET COVER STA 783+87.6 77.7" LT.

788+94.1 99.4° LT.

. 794+02.0 105.7" LT.

A. 801+12.3 75.3' RT.

. 807+38.7 100.1' RT.

813+41.9 99.7" RT.

S STA. 819+18.5 142.7' RT.

WALL STA. 842+02.9 68.7" RT.

3.1 337.3 LT. = BM2 ON SWO 4892(1)

WO 4892(1) STA: 840+92.4 909.1 LT.

MARK LIST

NAVD 88 DATUM

337.3' LT. = BM2 ON SWO 4892(1)

4892(1) STA. 861+05.9 911.9' RT.

82.7 1472.5' RT. = BM1 ON SWO4892(1)

PLS	ESK		OKLAHOMA DEPARTMENT OF TRANSPORTATION				
DRAWN	ESK						
CHECKED	HLK		SURVEY DATA SHEET				
APPROVED	ESK						
CREW	WHITE	HAWK	SWO 5560(1) PROJECT NO. 35589(04) SHEET NO. 5008				

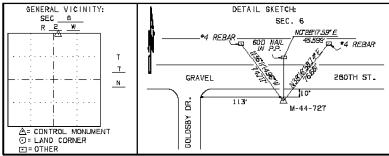
	POSITION	STATE OF OKLA DEPARTMENT OF H SURVEY DIVIS AND DESCRIPTION OF	IGHWAYS ION	S.D. FORM ND. L1 REVISED 3/10/75 ENTS
COUNTY MCCLAI	N S	TATION NUMBER <u>M-44</u>	-726 SWQ	4748[1] DATE <u>11-01-13</u>
TYPE OF MONUME	NT#6.F	REBAR MO	NUMENT SET FOI	VERT. & HORZ. CONTROL
				VERSOTHER (SPECIFY)
HEIGHT OF INST	UMENT ABOVE NO	NUMENT:FEET.	TYPE OF WITNE	SS POST <u>NONE</u>
260TH STREET (L. TO STATION ON R	ADD ROADI, GO SOU	THEAST ALONG INTERST PERPENDICULAR WEST	ATE 35 FOR APPR	NTERSTATE 35 SOUTH AND OXIMATELY 3.034.00 FEET NE OF INTERSTATE 35.10.00
GEOID M	ODEL: 124	OBSERVED B	. JUSTIN LEE	TALCOTT, PLS 1646
COORDINATE SYS	STEM: NADA3(	аз) 🗌 ОНБ. 🖾 ОТНЕ	R (SPECIFY) N.	AD83(2011) EPOCH(2010.00)
GRID DATA:	COORDINATES IF	EETI GRID BEARING		PDINTS OBSERVED
SOUTH 70NF	χ <u>2,136,</u> 171.68	N25* 08'37.09*E	20, 391.48	CORS A143
AUGURAGY:		N00 <sup>6</sup> .35'.36 . 84"W		CORS OKTE M-44-729
SECOND ORDER	Y647,123.990	N32*54'57.73*W		M-44-728
		N65°21'41.49"W	4,267.48	M-44-727
GEODETIC DATA		POSITION		ELEVATION
ANGLE OF VARIANCE ( <del>o</del> )	LATITUDE	35°06'36.7282"	NORTH	ELLIP. HT. = 1,049.51' ORTHO. HT. = 1,135.81'
00°19'26'	LONGITUDE	97°26'14.6030*	WEST	SOURCE <u>NAVD8B</u> ACCURACY: <u>3RD</u> ORDER
GENERAL V SEC_S R_2_ 	<u>ж</u>     МОЛИМЕЛТ	*4 REBAP <u>N48 45 42 65 W</u> <del>4912 * 4</del> REBAP <u>\$5307 0065 W</u> 9523	DETA IL SKETI Togari is 300 M-44-726 <u>S22-35-26-97-E</u> 44 <sup>4</sup> REBAR	SH: SEC. 5

DEPARTMENT OF HIGHWAYS REVISED 3/10/75 SURVEY DIVISION POSITION AND DESCRIPTION OF SURVEY MONUMENTS STATION NUMBER M-44-727 SWO 4748(1) DATE 11-01-13 COUNTY MCCLAIN #6 REBAR MONUMENT SET FOR VERT, & HORZ. CONTROL TYPE OF MONUMENT METHOD ESTABLISHED: TRILATERATION X, TRIANGULATION, TRAVERS, OTHER (SPECIFY) 6PS STATIC DESERVATIONS WITH A FULLY CONSTRAINED C.O.R.S LEAST SQUARES ADJUSTMENT HEIGHT OF INSTUMENT ABOVE MONUMENT:\_\_\_\_\_FEET, TYPE OF WITNESS POST\_\_\_\_ NONE WRITTEN DESCRIPTION OF LOCATION: FROM THE INTERSECTION OF INTERSTATE 35 SOUTH AND 280TH STREET (LADD ROAD), GO WEST ALONG 280TH STREET (LADD ROAD) FOR APPROXIMATELY 1,732.00 FEET TO STATION ON THE LEFT. STATION IS APPROXIMATELY 23.00 FEET SOUTH OF THE CENTERLINE OF 28DTH STREET. GEOID MODEL: 12A OBSERVED BY: JUSTIN LEE TALCOTT, PLS 1646 COORD INATE SYSTEM: NADA3(93) OHD. X OTHER (SPECIFY) NADA3(2011) EPOCH(2010.00) GRID DATA: CUDRDINATES (FEET) GRID BEARING DISTANCE POINTS OBSERVED SOUTH ZONE X 2,133,260.6012 N37\*12'40.63'E 20,132.42' N71\*57'53.63'E 172,783.69' CORS OKTE

STATE OF OKLAHOMA

S.D. FORM ND. L1

SECOND ORDER	Y <u>649,549.6073</u>	555°21'41.49°E 589°18'51.98°E	4,267.48' 1,956.21'	M-44-726 M-44-728
		N07°63'27.42'W	2,608.40'	M-44-730
GEODETIC DATA	PDSITION			ELEVATION
ANGLE OF VARIANCE ( <del>O</del> ) 		7'00.9105" 6'56.7039"	NORTH WE\$T	ELLIP. HT. = 1.052.32' ORTHO. HT. = 1.136.66' SOURCE <u>NAVD88</u> ACCURACY: <u>3RD</u> ORDER

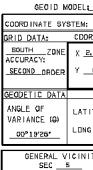


COUNTY MCCLAIN

TYPE DF MONUMENT\_\_\_\_\_

GPS STATIC DESER

WRITTEN DESCRIPTION 280TH STREET (LADD ROA THE STATION ON THE RIG



SEC <u>5</u> <u>R 2</u> <u>W</u> 		ERAL		VITY	:
<u>A</u> " <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u>					
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DESCRIPTION		REVISIONS			DATE
	OKLA.				
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

STATE OF OKLAHOMA S.D. FORM NO. L1 DEPARTMENT OF HIGHWAYS REVISED 3/10/75 SURVEY DIVISION POSITION AND DESCRIPTION OF SURVEY MONUMENTS

STATI	DN NUMBER <u>M-44-</u>	729 SWQ	4748[1] DATE 11-01-13			
#6 REBAR	#6 REBAR MONUMENT SET FOR VERT. & HORZ. CONTROL					
TRILATERATION X, TRIANGULATION, TRAVERS, OTHER (SPECIFY) RVATIONS WITH A FULLY CONSTRAINED C.O.R.S LEAST SQUARES ADJUSTMENT T ABOVE MONUMENT: FEET, TYPE OF WITNESS POST NONE						
DAD), GO EAST ALO	N OF LOCATION:					
<u>12A</u>	OBSERVED BY	JUSTIN LEE	TALCOTT. PLS 1646			
: NAD83(93)	ОНО. ХОТНЫ	R (SPECIFY) NA	D83(2011) EPOCH(2010.00)			
RDINATES IFEETI	GRID BEARING	DISTANCE	PDINTS OBSERVED			
1 120 740 9009	N28° 29'50.76"E	18, 212, 49'	CORS A143			
2, 136, 746, 2692	N71°36'32.33"E	169, 463.93'	CORS OKTE			
649,577.4445	500°35'36.84°E	2,453.59	M-44-726			
0101011110	\$88°04'52.47'W	1,530.45'	M-44-728			
	N66°22'43.04°W	4,615.95	M-44-730			
	POSITION		ELEVATION			
ITUDE 35°0	7'01.9957"	NORTH	ELLIP. HT. = 1,008.25'			
			DRTHO. HT. = 1,094.59'			
GITUDE 97°2	6'14.7444"	WEST	SOURCE NAVD8B			
			ACCURACY: <u>3RD</u> ORDER			
ITY:		DETAIL SKETC				
T	MINI FARMS D	5 C <u>N6/25</u> /4 7756	EC. 5 600 MAIL 10 P.P. 10 P.P. 120743 120745 12			
JMENT	MART INGAL					

	PLS	ESK		OKLAHOMA DEPARTMENT OF TRANSPORTATION			
I	DRAWN	ESK		30KVET DIVISION			
ſ	CHECKED	HLK		SURVEY DATA SHEET			
ſ	APPROVED	ESK					
ſ	CREW	WHITE	HAWK	SWO 5560(1) PROJECT NO. 35589(04) SHEET NO. 5009			

	POSITION	STATE OF ( DEPARTMENT O SURVEY D AND DESCRIPTIO	F HIGHWAYS IVISION	
COUNTY MCCLA	IN S	TATION NUMBER	M-44-730 SW	0 4748[1] DATE <u>11-01-13</u>
TYPE OF MONUME	INT#6 I	REBAR	MONUMENT SET	FOR VERT. & HORZ. CONTROL
				TRAVERSOTHER (SPECIFY)
HEIGHT OF INST	IUMENT ABOVE MO	NUMENT:FEE	T, TYPE OF WIT	NESS POST <u>NONE</u>
STREET (LADD RO)	AD), GO NORTHWEST	ALONG INTERSTAT	E 35 FOR APPROXI	TERSTATE 35 SOUTH AND 280TH MATELY 3,290.00 FEET TO THE ERLINE OF INTERSTATE 35.
	ODEL: 124			EE TALCOTT, PLS 1646
COORDINATE SY				NAD83(2011) EPOCH(2010.00)
GRID DATA:		EETI GRID BEAR N42*58'46.1		
SOUTH ZONE	χ <u>2,132,902.49</u>	INTE 49 00.	74°E 172, 343, 41	
	Y652, 133.30	68 507°53′27.4		
		566° 22'43.1		M-44-729
GEODETIC DATA		POSITION		ELEVATION
ANGLE OF VARIANCE (0)		35"07"26.4841"	NORTH	ELLIP. HT. = 1, D26.99' ORTHD. HT. = 1, 113.38'
00*18/59*		97°27'00.8451*	WEST	SOURCE <u>NAVD88</u> ACCURACY: <u>3RD</u> ORDER
GENERAL V SEC3 R _2_	1		DETAIL SK	ETCH: SEC. 31
A= C⊡NTROL C= LAND CD D= DTHER	Т Т <u>В</u>  МОЛИМЕМТ	ар 1971 - 19 34286 54267 1975 - 20 54286 6022 602 602 602 602 602 602 6		·e

STATE OF OKLAHOMA S.D. FURM NO. 11 DEPARTMENT OF HIGHWAYS REVISED 03/01/2016 SURVEY DIVISION POSITION AND DESCRIPTION OF SURVEY MONUMENTS	POSITION
CQUNTYMcClainMonument_Number <u>_M-44-858</u> SWO4892111DATE!2/15/20	COUNTYMociainM
TYPE OF MONUMENT <u>No.4 Rebar / w cop OOOT PLS/663</u> MONUMENT SET FOR <u>Primary Control</u>	TYPE OF MONUMENT <u>No.4 Report</u>
WRITTEN DESCRIPTION OF LOCATION: <u>This monument is located approx. 0.25 mi. north of SH 74 and 1-35 int.</u> and approximitely 92 east of the east edge of SH 74 and approx. 44 west of existing R/W fence.	WRITTEN DESCRIPTION OF LOCA and approximately IO2' west of the west
control Is set approx.3-4° below ground surface	control is set approx.3-4" below ground
ESTABL ISHED BY: Shown Smith PLS	
CODRDINATE SYSTEM: NAOB3(2011) (2010,0000) ZONE; South	CODRDINATE SYSTEM:
CDORDINATES (FEET) X2/2 <i>4988.9472</i> Y66408/2062	CDORDINATES (FEET) X2/2
CEDDETIC POSITION           LATITUDE         35 09 25069/8"         NORTH           LONG ITUDE         97 28' 35.36447"         WEST           ELL IPSQ IDAL         HEIGHT         329.593/8           METHOD         USED         TO           ESTABLISHED:         Static GPS	LATITUDE LONGITUD ELLIPSO METHOD USED TO ESTABLISHED:
SOURCE:	SOURCE:
ORTHOMETRIC HEIGHT	
FEETGEOID_MODEL:GEOID_SEPRATION:FEET METHOD_USED_TO_ESTABLISHED:Static GPS	<u> </u>
SOURCE:Dffferential leveling	SOURCE:
GENERAL VICINITY: SEC R R A = CONTROL MONUMENT © = LAND CORNER C = OTHER	$\begin{array}{c c} \hline & & \\ \hline & & \\ \hline & & \\ & & \\ & & \\ \hline \hline & & \\ \hline \\ \hline$

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- <u>0</u> =	ROL M CORN R		NT

(	OKLAHOM	A DEPAR	TMENT OF		
	FED. ROAD DIST. NO.	STATE	PROJ.NO.	FISCAL SHEET YEAR NO.	TOTAL SHEETS
		OKLA.			
	DESCRIPTION		REVISIONS		DATE
STATE OF OKLAHOMA S.D.	FORM N	a. 11			
	ED 03/0:				
SURVEY DIVISION					
POSITION AND DESCRIPTION OF SURVEY MONUMENTS					
Monument Number <u>#44-859</u> SWO <u>48920</u>	DATE <u>/2</u>	/15/20			
la.4 Rebar/w cop 0007 PLS/663_MDNUMENT SET FORPrimary	r Control				
N DE LOCATION: This monument is located approx. 0.25 ml. south of SH	74 and (-1	75. (mt			
of the west edge of SH 74 and approx. 5 west of existing top road elepe		<u>, , , , , , , , , , , , , , , , , , , </u>			
elow ground sufface	•				
ESTABLISHED BY: Shown Smith PLS					
	South				
	JUNIT				
Х <u>2/2477<b>3,93</b>/2</u> Y <u>66/3743/89</u>					
CEODETIC POSITION LATITUDENORTH					
LANTITUDE					
ELLIPSQIDAL HEIGHT33/.5/4m					
TABL I SHED: Static GPS					
OPUS Solution					
ORTHOMETRIC HEIGHT					
	75 // 10	FFFT			
GEOID MODEL: <u>Geold/8</u> GEOID SEPRATION: <u>5</u> FABLISHED: Static GPS		FEET			
TABLISHED:STOTIO GPS					
Differential leveling					
TY: DETAILED SKETCH:					
Cultivation					
a ja					
\$ <u>\$</u>					
MENT / ?/ 34					

PLS	ESK		OKLAHOMA DEPARTMENT OF TRANSPORTATION					
DRAWN	ESK							
CHECKED	HLK		SURVEY DATA SHEET					
APPROVED	ESK							
CREW WHITEHAWK		HAWK	SWO 5560(1) PROJECT NO. 35589(04) SHEET NO. 5010					