FOR SURVEY CONTROL DATA, SEE SURVEY DATA SHEET S001-S048.

LOCATION MAP

DISTRICT VII

APPROX. CENTER OF PROJECT
LATITUDE: 34°38'16.20" N
LONGITUDE: 97°42'44.50" W

DESIGN DATA	
AADT 2024	= 2505
AADT 2044	= 3465
DHV (1-WAY)	= 57%
K	= 11%
D	= 57%
T (% DHV)	= 22%
T (% ADT)	= 29%
T3 (% ADT)	= 20%
V	= 65 MPH
20 YR. FLEX. ESALS	= 6.49 M

SCALES 1"

PLAN	1" =	50'
PROFILE HOR.	1" =	50'
VER.	1" =	5'
LAYOUT MAP	1" =	5280'

LEVEL DATA IS MEAN SEA LEVEL (USC&GS) BEARINGS ARE FROM OBSERVATION OF POLARIS.

CONVENTIONAL SYMBOLS

- PROPOSED ROAD
- RAILROADS
- RANGE & TOWNSHIP
- SECTION LINES
- QUARTER SECTION LINES
- FENCES
- GROUND LINE
- EXISTING ROADS
- BASE LINE
- GRADE LINES (+2% / -2%)
- TELEPHONE & TELEGRAPH
- POWER LINES
- BUILDINGS
- DRAINAGE STRUCTURES - IN PLACE
- DRAINAGE STRUCTURES - NEW
- RIGHT-OF-WAY LINES - EXISTING (PRES. R/W)
- RIGHT-OF-WAY LINES - NEW (R/W)
- RIGHT-OF-WAY MARKERS - IN PLACE
- RIGHT-OF-WAY MARKERS - REMOVE & REPLACE
- RIGHT-OF-WAY MARKERS - NEW
- CONTROLLED ACCESS
- RIGHT-OF-WAY FENCE

2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION GOVERN, APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, DECEMBER 18, 2019.

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED

STATE HIGHWAY

FEDERAL AID PROJECT NO. STP-269B(105)PM ⚠
GRADE, DRAIN, BRIDGE & SURFACE
STATE HIGHWAY 29

STEPHENS COUNTY

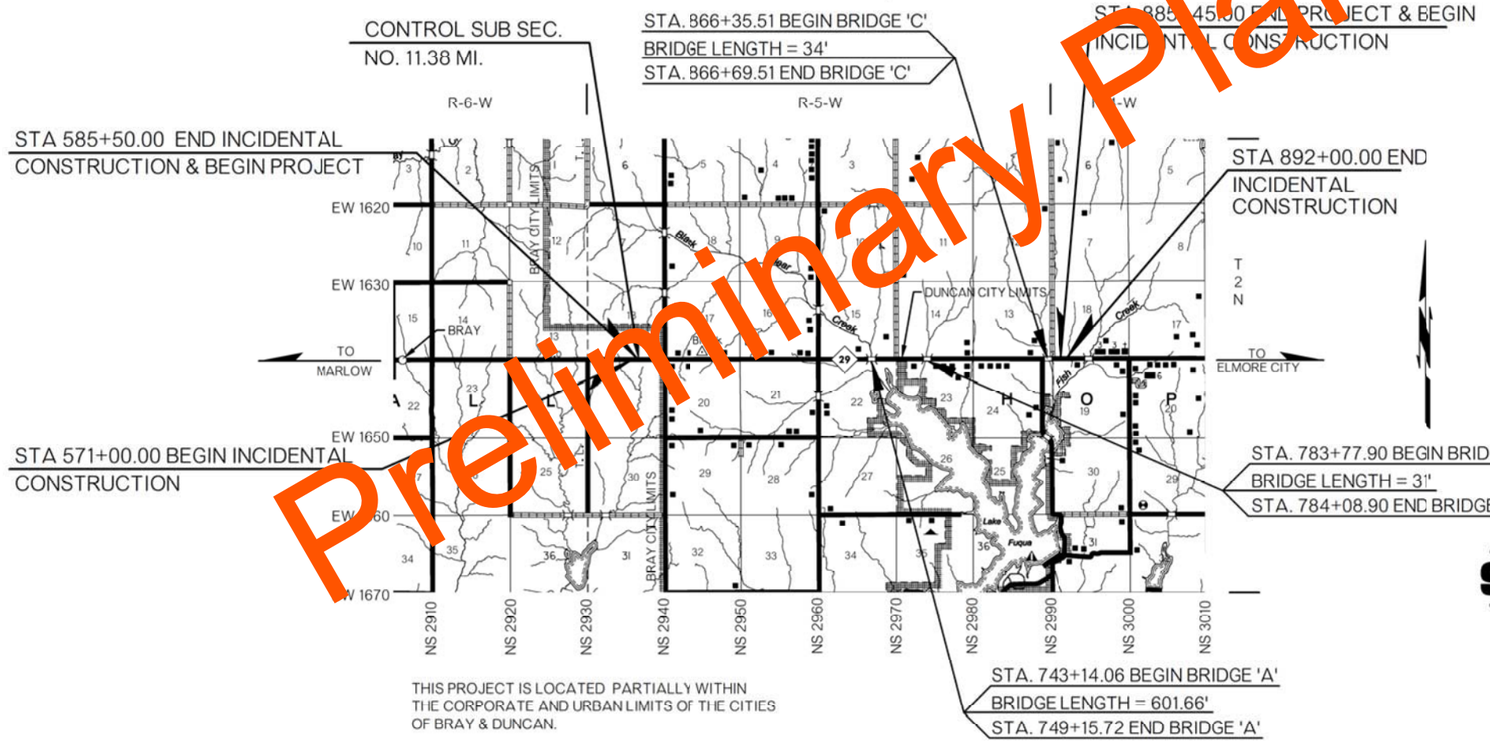
CONTROL SECTION NO. 29-69-12
STATE JOB NO. 29657(04)
BRIDGE "A" LOCATION NO. 6912-1441X
EXISTING NBI NO. 04970; NEW NBI NO. 32079
BRIDGE "B" LOCATION NO. 6912-1511X
EXISTING NBI NO. 08723; NEW NBI NO. 32080
BRIDGE "C" LOCATION NO. 6912-1667X
EXISTING NBI NO. 12957; NEW NBI NO. 33361

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	29657(04)		0001	333

REVISIONS	
DESCRIPTION	DATE
⚠ REVISED PROJECT NUMBER	06-10-2024

INDEX OF SHEETS

SEE SHEET 0002 INDEX OF SHEETS & STANDARDS



THIS PROJECT IS LOCATED PARTIALLY WITHIN THE CORPORATE AND URBAN LIMITS OF THE CITIES OF BRAY & DUNCAN.

NOTE: PROJECT LENGTH BASED ON CRL STATIONING.

ROADWAY LENGTH	29,328.34 FT.	5.554 MI.
BRIDGE LENGTH	666.66 FT.	0.126 MI.
PROJECT LENGTH		5.680 MI.

EQUATIONS: NONE

EXCEPTIONS: NONE

Preliminary Plans

SMITH ROBERTS BALDISCHWILER, LLC SRB
ENGINEERING
SURVEYING
PLANNING
OKLAHOMA CITY
100 N.E. 5th Street
Oklahoma City, Oklahoma 73104
T: 405.840.7094
F: 405.840.9116
www.srbok.com
NORMAN
2500 McGee Drive, Suite 100
Norman, OK 73072
T: 405.418.2288
F: 405.418.2289
srb@srbok.com
CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2025

SUBMITTED FOR APPROVAL BY:

Gregory Don Allen 5-31-24

GREGORY DON ALLEN
REGISTERED PROFESSIONAL ENGINEER NO. 16191

REGISTERED PROFESSIONAL ENGINEER
GREGORY DON ALLEN
16191
OKLAHOMA

OKLAHOMA DEPARTMENT OF TRANSPORTATION	DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION
DATE APPROVED	DATE APPROVED
BY	BY
CHIEF ENGINEER	DIVISION ADMINISTRATOR

SWO 5144(1) PROJECT NO. ⚠ STP-269B(105)PM
COUNTY STEPHENS HIGHWAY SH 29 SHEET NO. 0001

R:E 114574E Drawings E 29657104E 01-29657104-TITLE michael vanzandt 6-10-24 08:43pm

INDEX OF SHEETS

0001	TITLE
0002	INDEX OF SHEETS & STANDARDS
0003-0004	TYPICAL SECTIONS
AB01-AB02	GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE)
AE01	ENVIRONMENTAL NOTES
AR01	SUMMARY OF PAY QUANTITIES (ROADWAY)
AR02	GENERAL NOTES (ROADWAY)
AR03-AR05	SUMMARIES (ROADWAY)
AR06-AR08	DRAINAGE SUMMARY
AT01	SUMMARY OF PAY QUANTITIES AND NOTES (TRAFFIC)
B001-B003	GENERAL PLAN AND ELEVATION (BRIDGE "A")
B004-B008	SUBSURFACE PROFILE
B009	SUBSTRUCTURE LAYOUT
B010-B011	PIER DETAILS
B012	GENERAL PLAN AND ELEVATION (BRIDGE "B")
B013	GENERAL PLAN AND ELEVATION (BRIDGE "C")
B014	R.C.B. DETAILS
B015-B018	END SECTION DETAILS
E001	SECTION 404 PERMIT COMPLIANCE
R001-R002	DRAINAGE AREA MAP
R003	STORM WATER MANAGEMENT PLAN
R004-R027	EROSION CONTROL
R028-R031	SEDIMENT BASIN SUMMARIES
R032-R034	DISTURBED AREA TABLES
R035-R045	GEOMETRIC DESIGN
R046-R056	SUGGESTED SEQUENCE OF CONSTRUCTION
R057-R067	REMOVALS
R068-R070	MASS DIAGRAM
R071-R092	PLAN & PROFILE
S001-S048	SURVEY DATA SHEET
T001-T031	CONSTRUCTION TRAFFIC CONTROL
T032	SIGN SUMMARY & DETAILS
T033-T043	SIGNING & PAVEMENT MARKING
X001-X115	CROSS SECTIONS

2019 STANDARD ODOT DRAWINGS ROADWAY

BMPR-0	SPI-5-2
TESCA-0	PBB-1-2
RSF-0	FHTMPP-2-1
TSD-0	FHTCP-4-1
TRFD-0	SBI-5-2
SSS-2-1	PUD-4-1
ASCD-6-1	MI-4-2
LECS-5-2	RDI-4-1
PSE-2-1	DC-4-1
PSMD-2-2	PDT-2-2
SMD-4-2	RWF1-3-1
CET4S-4-2	RWF2-3-1
CET6S-4-2	RWF3-3-2
CET6D-4-2	SUEL1-4-1
CDIB-2-2	SUEL4-4-1
CDIP-2-2	

2009 STANDARD ODOT DRAWINGS TRAFFIC

TCS1-1-01	PM3-1-02
TCS2-1-00	PM6-1-00
TCS3-1-01	RSD1-1-00
TCS4-1-01	WSD2-1-00
TCS5-1-00	WSD3-1-00
TCS6-1-02	SZSD1-1-00
TCS7-1-02	MSD1-1-00
TCS8-1-00	MSD3-1-01
TCS9-1-01	MSD4-1-00
TCS10-1-00	MSD5-1-00
TCS11-1-01	SBS1-1-00
TCS12-1-00	SBS2-1-00
TCS13-1-00	[illegible]-1-00
TCS14-1-00	GMS1-1-00
TCS15-1-00	[illegible]-2
[illegible]-01	SSA1-1-[illegible]
TCS19-1-[illegible]	THRI-[illegible]-2
TCS20-1-[illegible]	[illegible]-00
TCS21-1-02	GHW1-1-00
PM[illegible]-03	GHW2-1-00
PM2-[illegible]01	RS1-2-00

2009 STANDARD ODOT DRAWINGS BRIDGE

TR4-2-00E
EJ-SQ-04E
EJ-DTL-02E
HP1-2-01E
B40-C-ABUT-PC3-1-01E
B40-C-ABUT-PC3-2-01E
B40-C-ABUT-MISC-01E
B40-C-XSECT-PC234-01E
B40-C-LSECT-PCB-04E
B40-C-SPR-BLIST-PCB-01E
B40-C-PCB-III-75-00E
B40-C-PCB-DTL-01E
B40-C-DIA-END-PC234-1-02E
B40-C-DIA-END-PC234-2-03E
B40-C-DIA-INT-PCB-01E
B40-C-BRG-PC3-02E
B40-C-SPR-QUAN-PCB-III-03E
B40-C-AS-03E
B40-C-TR4-0-1-01E
B40-C-TR4-0-2-01E
RCB-C1-3&4&5(2-20)-01E
RCB-C1-6(14-20)-01E
RCB-C1-8(2-14)-01E
RCB-C2-14(2-10)-01E
RCB-E1-H3-0-1-01E
RCB-E1-H3-0-2-01E
RCB-E1-H4-0-1-01E
RCB-E1-H4-0-2-01E
RCB-E1-H6-0-1-01E
RCB-E1-H6-0-2-01E
RCB-E2-H8-0-1-01E
RCB-E2-H8-0-2-01E
RCB-E1-H4-30-1-01E
RCB-E1-H4-30-2-01E
RCB-E1-H4-30-3-01E
RCB-E1-H5-30-1-01E
RCB-E1-H5-30-2-01E
RCB-E1-H5-30-3-01E
RCB-CW1-D4-0-01E
RCB-CW2-D4-0-01E
RCB-CW1-D4-30-01E

Preliminary Plans

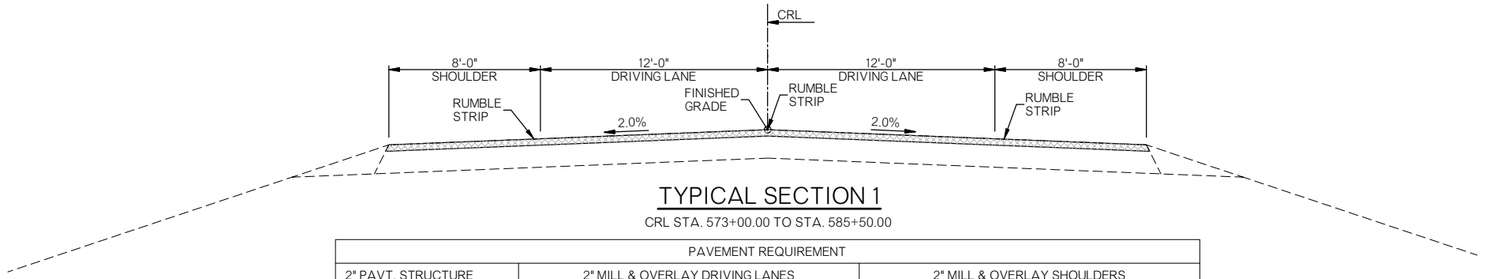
DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS & STANDARDS

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. 0002

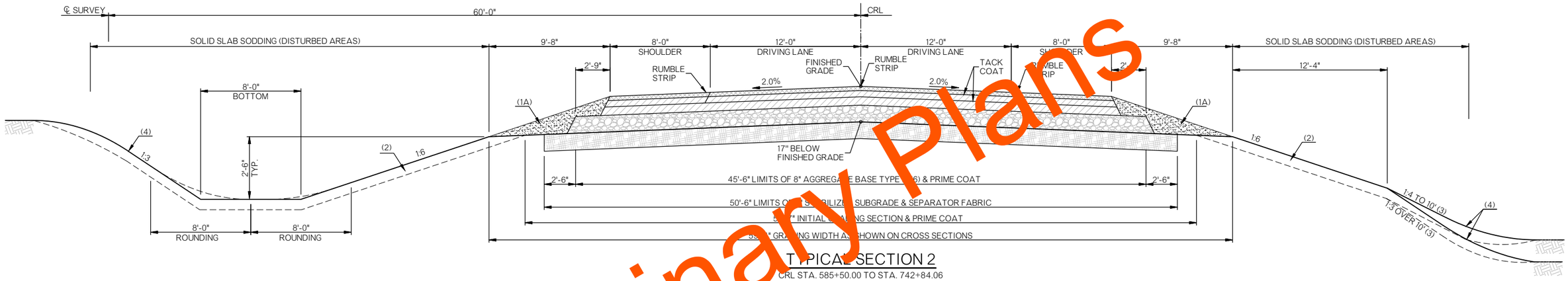
DESCRIPTION	REVISIONS	DATE



TYPICAL SECTION 1

CRL STA. 573+00.00 TO STA. 585+50.00

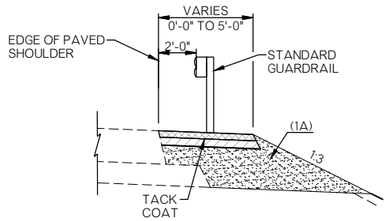
PAVEMENT REQUIREMENT		
2" PAVT. STRUCTURE	2" MILL & OVERLAY DRIVING LANES	2" MILL & OVERLAY SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 70-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE		



TYPICAL SECTION 2

CRL STA. 585+50.00 TO STA. 742+84.06
CRL STA. 749+45.72 TO STA. 885+45.00

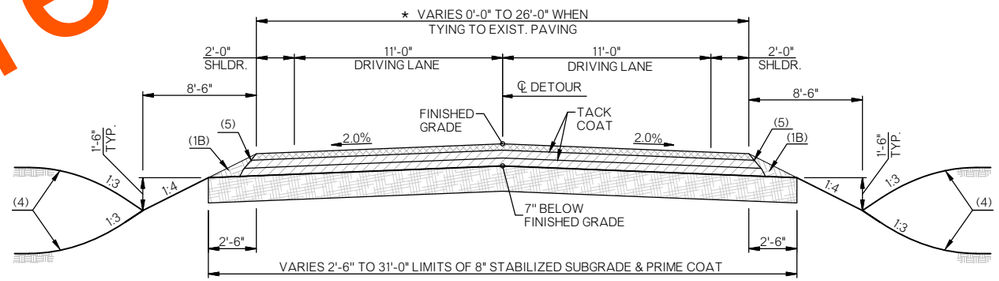
PAVEMENT REQUIREMENT		
9" PAVT. STRUCTURE	12'-0" DRIVING LANES	PAVED SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 70-28 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 70-28 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	4" SUPERPAVE TYPE S3 (PG 64-22 OK)	4" SUPERPAVE TYPE S3 (PG 64-22 OK)



GUARDRAIL WIDENING

CRL STA. 739+79.64 TO STA. 742+84.06 RT.
CRL STA. 741+04.64 TO STA. 742+84.06 LT.
CRL STA. 749+45.72 TO STA. 752+50.14 LT.
CRL STA. 749+45.72 TO STA. 751+25.14 RT.

PAVEMENT REQUIREMENT	
5" PAVT. STRUCTURE	GUARDRAIL WIDENING
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)



TYPICAL SECTION 3
DETOUR

★ ℄ DETOUR 'A' STA. 830+64.45 TO STA. 835+62.12 (VARIES 0'-0" TO 26'-0")
℄ DETOUR 'A' STA. 835+62.12 TO STA. 843+34.19
★ ℄ DETOUR 'A' STA. 843+34.19 TO STA. 849+02.14 (VARIES 26'-0" TO 0'-0")

PAVEMENT REQUIREMENT		
7" PAVT. STRUCTURE	11'-0" DRIVING LANES	PAVED SHOULDERS
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	2.5" SUPERPAVE TYPE S3 (PG 64-22 OK)	2.5" SUPERPAVE TYPE S3 (PG 64-22 OK)
	2.5" SUPERPAVE TYPE S3 (PG 64-22 OK)	2.5" SUPERPAVE TYPE S3 (PG 64-22 OK)

(1A) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS A PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN T.B.S.C. TYPE E. QUANTITY IS COMPUTED AT 0.54 TON PER LF (0.27 TON PER SIDE).

(1B) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS A PART OF THE FINISHING OPERATIONS. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

(2) TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATIONS SHALL BE INCLUDED IN THE PAY ITEMS FOR SALVAGED TOPSOIL, LUMP SUM.

THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

(3) DISTANCE MEASURED VERTICALLY FROM EDGE OF FINISHED GRADE SHOULDER.

(4) FOR ROUNDING DETAIL SEE SHEET 0004.

(5) SAFETY EDGE TO BE USED INSTEAD OF TRADITIONAL 1:1 SLOPE AND COST TO BE INCLUDED IN OTHER ITEMS OF WORK, AS NO ADDITIONAL QUANTITY HAS BEEN INCLUDED.

(6) AGGREGATE BASE IS TO BE PLANT-MIXED.

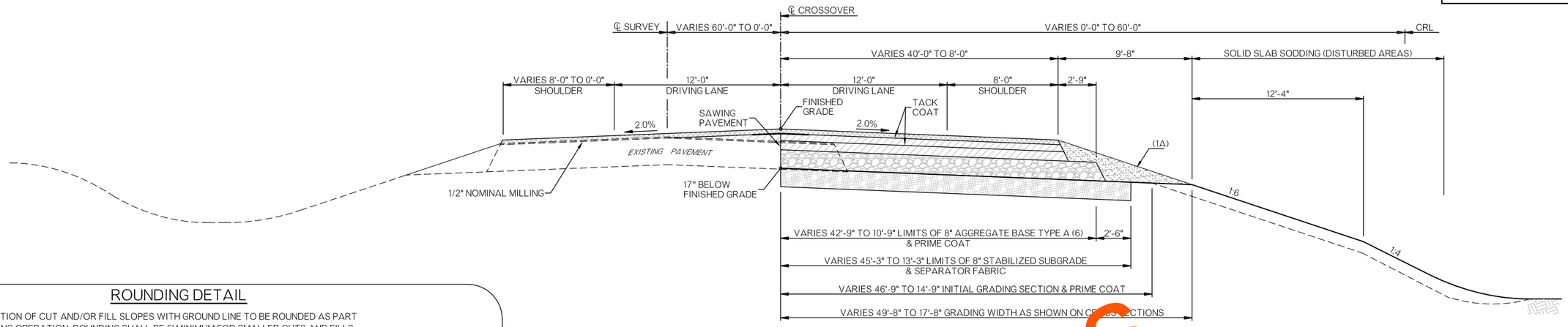
DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		TYPICAL SECTIONS
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. 0003

Preliminary Plans

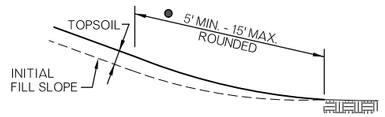
R:\114574\Drawings\29657(04)\29657(04) TYPICAL.dwg 11/1/2022 9:54 AM

DESCRIPTION	REVISIONS	DATE

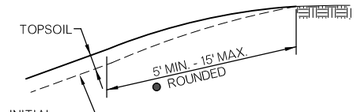


ROUNDING DETAIL

- INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATION. ROUNDING SHALL BE 5' MINIMUM FOR SMALLER CUTS AND FILLS 15' MAXIMUM FOR LARGER CUTS AND FILLS OR AS DESIGNED BY THE ENGINEER. COST OF ROUNDING TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



TOE OF FILL ROUNDING



TOP OF CUT ROUNDING

TYPICAL SECTION 4

℄ CROSSOVER STA. 876+91.91 TO STA. 888+37.93

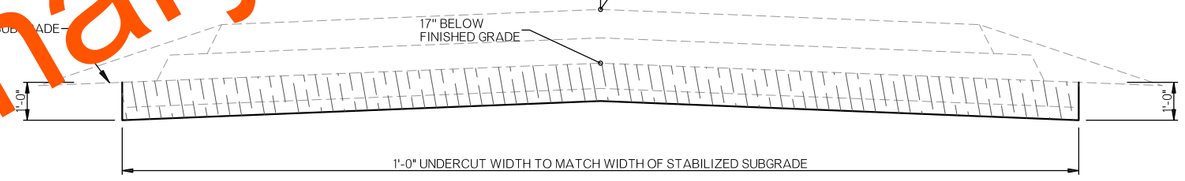
PAVEMENT REQUIREMENT			
9" PAVT. STRUCTURE	[illegible] & OVERLAY	12'-0" FULL DEPTH DRIVING LANE	8'-0" FULL DEPTH SHOULDER
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	VARIES SUPERPAVE TYPE S3 (PG 64-22 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
		4" SUPERPAVE TYPE S3 (PG 64-22 OK)	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

TYPICAL SECTION 5

℄ SURVEY SH 29 STA. 612+85.87 TO STA. 616+12.32 (VARIES 0'-0" TO 14'-2") ●
℄ SURVEY SH 29 STA. 616+12.32 TO STA. 616+76.37 (VARIES 14'-2") ●
℄ SURVEY SH 29 STA. 616+76.37 TO STA. 620+52.[illegible] (VARIES 14'-2" TO 0'-0") ●
℄ SURVEY SH 29 STA. 660+45.14 TO STA. 663+84.03 (VARIES 0'-0" TO 14'-10") ●
℄ SURVEY SH 29 STA. 663+84.03 TO STA. 66[illegible]7.21 (14'-10") ●
℄ SURVEY SH 29 STA. 664+87.21 TO STA. 668+28.32 (VARIES 14'-10" TO 0'-0") ●
℄ SURVEY SH 29 STA. 678+99.10 TO STA. 682+09.10 (VARIES 0'-0" TO 12'-3") ●
℄ SURVEY SH 29 STA. 682+09.10 TO STA. 683+0[illegible]8 (12'-3") ●
℄ SURVEY SH 29 STA. 683+05.08 TO STA. 686+16.24 (VARIES 12'-3" TO 0'-0") ●
℄ SURVEY SH 29 STA. 811+88.32 TO STA. 815+08.81 (VARIES 0'-0" TO 12'-6") ●
℄ SURVEY SH 29 STA. 815+08.81 TO STA. 816+07.52 (12'-6") ●
℄ SURVEY SH 29 STA. 816+07.52 TO STA. 819+18.09 (VARIES 12'-6" TO 0'-0") ●
℄ SURVEY SH 29 STA. 836+12.40 TO STA. 839+31.06 (VARIES 0'-0" TO 22'-0") ●
℄ SURVEY SH 29 STA. 839+31.06 TO STA. 840+15.89 (22'-0") ●
℄ SURVEY SH 29 STA. 840+15.89 TO STA. 843+49.58 (VARIES 22'-0" TO 0'-0") ●

CRL SH 29 STA. 863+92.52 TO STA. 865+75.91 (VARIES 0'-0" TO 8'-0") ●
CRL SH 29 STA. 865+75.91 TO STA. 867+29.05 (8'-0") ●
CRL SH 29 STA. 867+29.05 TO STA. 869+12.69 (VARIES 8'-0" TO 0'-0") ●

PAVEMENT REQUIREMENT	
7.5" PAVT. STRUCTURE	TEMPORARY WIDENING
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	2.5" SUPERPAVE TYPE S3 (PG 64-22 OK)
	3" SUPERPAVE TYPE S3 (PG 64-22 OK)



TYPICAL UNDERCUT DETAIL

STATIONS ARE APPROXIMATE LOCATIONS OF NEEDED UNDERCUT. ACTUAL LOCATIONS OF UNDERCUT WILL NEED TO BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER.

CRL STA. 652+00.00 TO STA. 658+50.00
CRL STA. 667+00.00 TO STA. 670+50.00
CRL STA. 675+00.00 TO STA. 677+00.00
CRL STA. 717+50.00 TO STA. 720+50.00
CRL STA. 767+00.00 TO STA. 776+23.00
CRL STA. 822+50.00 TO STA. 832+50.00
CRL STA. 846+50.00 TO STA. 854+50.00
CRL STA. 873+50.00 TO STA. 876+50.00
℄ DETOUR 'A' STA. 830+63.96 TO STA. 832+50.97

(1A) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS A PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN T.B.S.C. TYPE E. QUANTITY IS COMPUTED AT 0.54 TON PER LF (0.27 TON PER SIDE).

(1B) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS A PART OF THE FINISHING OPERATIONS. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

(2) TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATIONS SHALL BE INCLUDED IN THE PAY ITEMS FOR SALVAGED TOPSOIL, LUMP SUM.

THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

(3) DISTANCE MEASURED VERTICALLY FROM EDGE OF FINISHED GRADE SHOULDER.

(4) FOR ROUNDING DETAIL THIS SHEET.

(5) SAFETY EDGE TO BE USED INSTEAD OF TRADITIONAL 1:1 SLOPE AND COST TO BE INCLUDED IN OTHER ITEMS OF WORK, AS NO ADDITIONAL QUANTITY HAS BEEN INCLUDED.

(6) AGGREGATE BASE IS TO BE PLANT-MIXED.

NOTE:

FOR THE PURPOSES OF ESTIMATING ROCK EXCAVATION, REGIONS WITHIN THE SANDSTONE STRATA, WHERE THE TEXAS CONE VALUES ARE LESS THAN 2 INCHES PER 100 BLOWS, WILL BE CONSIDERED AS ROCK EXCAVATION. THE REMAINING AREAS OF SANDSTONE WILL BE CONSIDERED AND PAID FOR AS UNCLASSIFIED EXCAVATION. ANY AREA THAT IS CONSIDERED TO BE SANDSTONE, REGARDLESS OF BEING CLASSIFIED AS ROCK OR UNCLASSIFIED EXCAVATION, WILL REQUIRE A 1'-0" UNDERCUT. FOR ADDITIONAL DETAILS REFER TO THE ROCK CUT ANALYSIS REPORT, AVAILABLE UPON REQUEST.

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		TYPICAL SECTIONS
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. 0004

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REVISIONS		
REV NO	DESCRIPTION	DATE

GENERAL NOTES

SPECIFICATIONS -
COMPLY WITH THE REQUIREMENTS OF THE 2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EXCEPT AS MODIFIED BY THE PLANS AND SPECIAL PROVISIONS.

EXISTING PLANS -
THE EXISTING STRUCTURE WAS ORIGINALLY CONSTRUCTED AS PART OF STATE AID PROJECT NO. S.A.P. 920 A & B. CONSTRUCTION PLANS FOR THE EXISTING STRUCTURE(S) MAY BE OBTAINED FROM THE OFFICE SERVICES DIVISION OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION.

PHYSICAL ADDRESS: OKLAHOMA DEPARTMENT OF TRANSPORTATION
200 NE 21ST STREET
OKLAHOMA CITY, OKLAHOMA 73105
405-521-2586

FOR QUESTIONS AND CONCERNS REGARDING AS-BUILT PLANS, PLEASE EMAIL: ODOT-PlansLibrary@odot.org

PILE DRIVING -
USE A PILE DRIVING HAMMER OF THE SIZE AND TYPE CAPABLE OF CONSISTENTLY DELIVERING THE EFFECTIVE DYNAMIC ENERGY TO DRIVE THE PILES TO THE REQUIRED TIP ELEVATION AND TO ACHIEVE AN AXIAL LOAD RESISTANCE EQUAL TO OR GREATER THAN THE FACTORED PILE REACTION WITHOUT EXCEEDING THE LIMITATIONS SET ON THE ALLOWABLE DRIVING STRESSES IN ACCORDANCE WITH SUBSECTION 514.03.A.(2) OF THE SPECIFICATIONS.

PILE CAPACITY -
THE REQUIRED PILE SIZE AND THE FACTORED PILE REACTION ARE SHOWN IN THE PLANS WITH THE FOUNDATION DATA. THE FOLLOWING FORMULA (GATES EQUATION) SHALL BE USED TO DETERMINE THE AXIAL LOAD RESISTANCE OF THE DRIVEN FOUNDATION PILES:

AXIAL LOAD RESISTANCE = PHI * [SQRT (E) * 0.875 * LG (10 * N) - 50] (TONS)

WHERE: PHI = RESISTANCE FACTOR OF 0.4
E = ENERGY PRODUCED BY THE HAMMER PER BLOW IN FOOT-POUNDS. FOR GRAVITY AND SINGLE ACTING DIESEL HAMMERS, THE VALUE IS BASED ON THE ACTUAL RAM STROKE OBSERVED IN THE FIELD AND MEASURED IN FEET MULTIPLIED BY THE RAM WEIGHT IN POUNDS.
N = AVERAGE NUMBER OF HAMMER BLOWS PER INCH OF PILE PENETRATION FOR THE LAST 10 TO 20 BLOWS DELIVERED TO THE PILE HEAD.
SQRT = SQUARE ROOT
LG = LOGARITHM TO THE BASE 10

THE ABOVE FORMULA IS ONLY APPLICABLE WHEN CERTAIN CONDITIONS APPLY: THE PILE DRIVING HAMMER HAS A FREE FALL (GRAVITY & SINGLE ACTING HAMMERS ONLY); THE HEAD OF THE PILE IS NOT BROOMED, CRUSHED OR OTHERWISE DAMAGED; THE PENETRATION IS QUICK AND UNIFORM; THERE IS NO APPRECIABLE REBOUND OF THE HAMMER; AND A FOLLOWER IS NOT USED.
THE NUMBER OF BLOWS PER INCH OF PILE PENETRATION MAY BE MEASURED EITHER DURING INITIAL DRIVING OR BY RE-DRIVING WITH A WARM HAMMER OPERATED AT FULL ENERGY AFTER A PILE SET PERIOD, AS DETERMINED BY THE ENGINEER.
IF WATER JETS ARE USED IN CONNECTION WITH THE DRIVING, DETERMINE THE AXIAL LOAD RESISTANCE BY THE FORMULA SHOWN ONLY AFTER THE JETS HAVE BEEN WITHDRAWN.

CONCRETE -
PROVIDE ALL PEDESTAL CONCRETE EDGES WITH A 3/4" CHAMFER. PROVIDE ALL OTHER EXPOSED CONCRETE EDGES OF THE SUBSTRUCTURE WITH A 1/2" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. PROVIDE ALL EXPOSED CONCRETE EDGES OF THE SUPERSTRUCTURE WITH A 3/4" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. USE SIZED LUMBER FOR ALL CHAMFER STRIPS.
EQUIP CONCRETE VIBRATORS WITH A SHEATH DESIGNED TO PREVENT DAMAGE TO EPOXY COATINGS WHEN VIBRATING CONCRETE CONTAINING EPOXY COATED REINFORCING STEEL.

STRUCTURAL STEEL -
PROVIDE STRUCTURAL STEEL FOR DIAPHRAGM BOLTS, PLATE WASHERS AND BEVELED SPACERS IN ACCORDANCE WITH AASHTO M270 (ASTM A709), GRADE 50W (WEATHERING STEEL, CHARPY V-NOTCH TESTING NOT REQUIRED). THE CONTRACTOR MAY SUBSTITUTE A #10 REINFORCING BAR IN ACCORDANCE WITH AASHTO M31, GRADE 60, AND THREADED AT THE ENDS AS SHOWN IN THE PLANS AT NO ADDITIONAL COST TO THE DEPARTMENT. PROVIDE HEX NUTS IN ACCORDANCE WITH AASHTO M291 (ASTM A563).
PAINT EXPOSED DIAPHRAGM BOLTS, PLATE WASHERS, BEVELED SPACERS AND HEX NUTS WITH TWO (2) COATS OF ZINC-RICH PAINT (6 MIL MINIMUM THICKNESS) AFTER ASSEMBLY. INCLUDE ALL COST OF DIAPHRAGM BOLTS, PLATE WASHERS, BEVELED SPACERS AND HEX NUTS IN THE CONTRACT UNIT PRICE FOR STRUCTURAL STEEL.
PROVIDE STRUCTURAL STEEL FOR ANCHOR PLATES, CONTACT PLATES, AND BUILT-UP CONTACT ANGLES IN ACCORDANCE WITH ASTM A240 (AUSTENITIC STAINLESS STEEL, TYPE 316, CHARPY V-NOTCH TESTING NOT REQUIRED). FOR ANCHOR BOLTS, PROVIDE CONTINUOUSLY THREADED BARS IN ACCORDANCE WITH ASTM A320, CLASS 2, GRADE B8M (AUSTENITIC STAINLESS STEEL, TYPE 316, CHARPY V-NOTCH TESTING NOT REQUIRED). USE AUSTENITIC STAINLESS STEEL NUTS AND WASHERS CONFORMING TO ASTM A194, GRADE 8M AND ASTM A320, RESPECTIVELY. PERFORM ALL WELDING CONSISTENT WITH PROCEDURES FOR STAINLESS STEEL.

STAY-IN-PLACE DECK FORMS -
THE CONTRACTOR MAY USE STAY-IN-PLACE STEEL DECK FORMS IF THE MINIMUM DECK SLAB THICKNESS SHOWN IN THE PLANS IS OBTAINED BY MEASURING FROM THE TOP OF THE DECK SLAB TO THE TOP PORTION OF THE STEEL CORRUGATION. PREFORMED CORRUGATION FILLER, COMPOSED OF POLYSTYRENE OR OTHER MATERIAL, MAY BE USED IF BONDED TO THE DECK FORMS. NO ADDITIONAL CONCRETE WEIGHT OF THE DECK SLAB IS PERMITTED. THE TOTAL ADDITIONAL WEIGHT OF THE DECK FORM AND FILLER SHALL NOT EXCEED 5 P.S.F. THE DEPARTMENT CONSIDERS ALL COSTS OF STAY-IN-PLACE STEEL DECK FORMS TO BE INCLUDED IN THE CONTRACT UNIT PRICE OF CLASS AA CONCRETE.
THE CONTRACTOR MAY SUBSTITUTE STAY-IN-PLACE PRESTRESSED CONCRETE DECK FORMS, AT NO ADDITIONAL COST TO THE DEPARTMENT, IF THE FOLLOWING CONDITIONS ARE MET:
(1) THE BRIDGE ENGINEER APPROVES SHOP DRAWINGS AND STRUCTURAL CALCULATIONS FOR THE FORMS SUBMITTED BY THE CONTRACTOR.
(2) THE BRIDGE ENGINEER APPROVES A NEW STRUCTURAL DESIGN, STRUCTURAL CALCULATIONS, AND NEW REINFORCING SCHEDULE FOR THE DECK SLAB SUBMITTED BY THE CONTRACTOR.
(3) SHOP DRAWINGS, NEW DECK SLAB REINFORCING SCHEDULE, STRUCTURAL DESIGNS, AND CALCULATIONS ARE PREPARED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OKLAHOMA.

DECK SLAB -
EPOXY-COAT OR GALVANIZE STEEL ITEMS USED TO FACILITATE CONSTRUCTION, SUCH AS DECK FORM HANGERS, TY-BAR CLIPS, INSERT WELD ANCHORS, OR OTHER APPURTENANCES, THAT WILL REMAIN IN PLACE IN THE DECK SLAB. EPOXY-COAT IN ACCORDANCE WITH AASHTO M284 OR GALVANIZE IN ACCORDANCE WITH AASHTO M111.
PLACE THE DECK SLAB CONCRETE ONE SPAN AT A TIME IN ACCORDANCE WITH SECTION 504.04.B OF THE SPECIFICATIONS. IN THE EVENT OF AN EMERGENCY, HALT THE PLACEMENT OF CONCRETE BY FORMING A CONSTRUCTION JOINT MADE PERPENDICULAR TO THE DIRECTION OF TRAFFIC OR AS DIRECTED BY THE ENGINEER. DO NOT PLACE ANY HEAVY EQUIPMENT ON THE FINISHED DECK SLAB WITHIN 5 FEET OF ANY CONSTRUCTION JOINT UNTIL CONCRETE IS IN PLACE ON BOTH SIDES OF THE RESPECTIVE JOINT AND AT LEAST 48 HOURS HAS ELAPSED SINCE CONCRETE PLACEMENT.
SEAL ALL DECK SLAB CONSTRUCTION JOINTS WITH HIGH MOLECULAR WEIGHT METHACRYLATE IN ACCORDANCE WITH SECTION 523 OF THE SPECIFICATIONS. INCLUDE ALL COST OF EQUIPMENT AND LABOR FOR THE INSTALLATION OF THE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER IN THE CONTRACT UNIT PRICE OF "SEALER CRACK PREPARATION". INCLUDE ALL COST OF THE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER IN THE CONTRACT UNIT PRICE OF "SEALER RESIN". THE DEPARTMENT WILL NOT MEASURE THE PREPARATION AND SEALER OF EMERGENCY CONSTRUCTION JOINTS FOR PAYMENT.

WATER REPELLENT TREATMENT -
APPLY WATER REPELLENT TREATMENT TO THE BRIDGE IN MANNER CONSISTENT WITH THE DETAILS SHOWN IN THE PLANS.

SOFTWARE -
(1) WHITE ENGINEERING ASSOCIATES, INC. DECK SLAB DESIGN (VERSION 2.06, 10-12-07)
(2) WHITE ENGINEERING ASSOCIATES, INC. PRECAST BEAM DESIGN (VERSION 2.01, 04-27-09)
(3) WHITE ENGINEERING ASSOCIATES, INC. PIER DESIGN (VERSION 2.02, 09-24-07)
(4) IES VISUALANALYSIS (VERSION 4.01.013, 02-01-02)
(5) STRUCTUREPOINT SPCOLUMN (VERSION 4.60, 09-07-10)
(6) WHITE ENGINEERING ASSOCIATES, INC. ABUTMENT/RETAINING WALL DESIGN (VERSION 2.00, 10-19-07)
(7) SMART BRIDGE TECH SMART BRIDGE SUITE - CULVERT (VERSION 1.1, BUILD: 1960, 2017)

Preliminary Plans

S.H.29 OVER BLACK BEAR, UNNAMED CREEK AND WEST FISH CREEK
BRIDGES "A", "B" & "C"
STEPHENS COUNTY

GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE)
SHEET 1 OF 2

Design	CEG	
Detail	DRB	
Check	RMF	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04)
SHEET NO. AB01

REVISIONS		
REV NO	DESCRIPTION	DATE

PAY ITEM NOTES

(BR-1) PAYMENT TO THE CONTRACTOR WILL BE BASED ON PLAN QUANTITIES.

(BR-2) THE CONTRACTOR MAY PLACE CONCRETE AGAINST THE LIMITS OF EXCAVATION IF THE MATERIAL IS EXCAVATED TO THE NEAT LINES OF THE SUBSTRUCTURE AND APPROVED BY THE ENGINEER. IF NECESSARY, USE FORMS AT VERTICAL FACES AND REMOVE THE FORMS AFTER CONCRETE HARDENS. IF THE CONTRACTOR CHOOSES TO PLACE CONCRETE AGAINST THE SOIL, THE DEPARTMENT WILL PAY FOR SUBSTRUCTURE EXCAVATION COMMON IN ACCORDANCE WITH THE DIAGRAMS SHOWN IN THE PLANS.

(BR-3) THE APPROACH SLABS CONTAIN AN ESTIMATED TOTAL OF 101.6 C.Y. OF CLASS AA CONCRETE AND 19,760 LB. OF EPOXY COATED REINFORCING STEEL.

(BR-4) THE FIXED BEARING ASSEMBLIES CONTAIN AN ESTIMATED TOTAL OF 2,760 LB. OF STAINLESS STEEL.

(BR-5) THE EXPANSION BEARING ASSEMBLIES CONTAIN AN ESTIMATED TOTAL OF 8,560 LB. OF STAINLESS STEEL.

(BR-6) QUANTITY SHOWN FOR CLASS AA CONCRETE INCLUDES AN ESTIMATED TOTAL OF 9.8 C.Y. FOR BEAM HAUNCHES.

(BR-7) PAYMENT TO THE CONTRACTOR WILL BE BASED ON PLAN QUANTITIES UNLESS ADDITIONAL PILING LENGTH IS REQUIRED. ADDITIONAL PILES, FURNISHED, AS AUTHORIZED BY THE ENGINEER, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE.

(BR-8) QUANTITY SHOWN FOR CROSSHOLE SONIC LOGGING INCLUDES TESTING FIRST PRODUCTION SHAFT AND EVERY SIXTH DRILLED SHAFT. ACTUAL NUMBER OF TESTS PERFORMED WILL BE AT THE DISCRETION OF THE ENGINEER AND PAYMENT WILL BE BASED ON ACTUAL NUMBER OF DRILLED SHAFTS TESTED.

(BR-9) QUANTITY SHOWN FOR SEALER RESIN ESTIMATED AT 0.011 GALLONS PER FOOT OF CONSTRUCTION JOINT.

(BR-10) QUANTITY SHOWN FOR RIPRAP ESTIMATED AT 170 LB. PER CUBIC FOOT.

(BR-11) QUANTITY SHOWN FOR FILTER BLANKET ESTIMATED AT 105 LB. PER CUBIC FOOT.

(BR-12) INCLUDE THE COST OF PIPE UNDERDRAIN COVER MATERIAL (BOTH FILTER SAND AND COARSE) AND FILTER FABRIC IN THE CONTRACT UNIT PRICE OF "6" PERFORATED PIPE UNDERDRAIN ROUND". INSTALL AS SHOWN IN THE PLANS AND ON STD. PUD-4.

(BR-13) THE ENGINEER MAY ADJUST THE EXTENT, LOCATION AND DEPTH OF NON-PERFORATED PIPE UNDERDRAIN DURING CONSTRUCTION. INCLUDE THE COST OF TRENCH EXCAVATION AND STANDARD BEDDING MATERIAL IN THE CONTRACT UNIT PRICE OF "6" NON-PERF. PIPE UNDERDRAIN RND". INSTALL AS SHOWN IN THE PLANS AND ON STD. PUD-4.

(BR-14) ITEM "REMOVAL OF EXISTING BRIDGE STRUCTURE" CONSISTS OF REMOVING AND DISPOSING OF THE SUPERSTRUCTURE AND SUBSTRUCTURE OF THE EXISTING BRIDGE IN ACCORDANCE WITH SUBSECTION 619.04.B OF THE SPECIFICATIONS AND IN A MANNER APPROVED BY THE ENGINEER. ALL EXISTING BEAMS ARE TO BECOME PROPERTY OF CIRCUIT ENGINEERING DISTRICT 1 (CED-1). THE EXISTING BRIDGE IS DESCRIBED AS 62' STEEL I-BEAM SPAN BRIDGE WITH 24' CLEAR ROADWAY.

(BR-15) ITEM "REMOVAL OF EXISTING BRIDGE STRUCTURE" CONSISTS OF REMOVING AND DISPOSING OF THE EXISTING BRIDGE IN ACCORDANCE WITH SUBSECTION 619.04.B OF THE SPECIFICATIONS AND IN A MANNER APPROVED BY THE ENGINEER. ALL REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE EXISTING BRIDGE IS DESCRIBED AS (3) 10' x 12' x 37.6' R.C.B.

(BR-16) ITEM "TEMPORARY EARTH RETAINAGE" CONSISTS OF THE INSTALLATION AND REMOVAL OF TEMPORARY RETAINING STRUCTURES OR GEOGRID REINFORCED SOILS NECESSARY TO FACILITATE THE PROPOSED SEQUENCE OF CONSTRUCTIONS SHOWN IN THE PLANS. LOCATIONS OF POTENTIAL TEMPORARY RETAINAGE ARE FOR INFORMATIONAL PURPOSES ONLY AND HAVE NOT BEEN DESIGNED OR DETAILED. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ACTUAL LIMITS NEEDED BASED ON THE CHOSE MEANS AND METHODS AND SUBMITTING DESIGN CALCULATIONS AND DRAWINGS PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OKLAHOMA, IN ACCORDANCE WITH SUBSECTION 502.04D OF THE SPECIFICATIONS. DO NOT BEGIN INSTALLATION UNTIL BRIDGE ENGINEER APPROVAL HAS BEEN RECEIVED. INCLUDE ALL COST ASSOCIATED WITH PROFESSIONAL SERVICES, LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN THE CONTRACT UNIT PRICE.

(BR-17) ITEM "REMOVAL OF EXISTING BRIDGE STRUCTURE" CONSISTS OF REMOVING AND DISPOSING OF THE EXISTING BRIDGE IN ACCORDANCE WITH SUBSECTION 619.04.B OF THE SPECIFICATIONS AND IN A MANNER APPROVED BY THE ENGINEER. ALL REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE EXISTING BRIDGE IS DESCRIBED AS (3) 10' x 12' x 37.6' R.C.B.

J.P. NO. 29657(04)
0200 BRIDGE "A"
NBI NO. 32079

PAY QUANTITIES

S.H.29 OVER BLACK BEAR CREEK
(8)75' TYPE III P.C.B. SPANS
40'-0" CL. RDWY. WITH TR4 TRAFFIC RAILS
℄ STA. 746+14.89, 0° SKEW

ITEM NO.	ITEM DESCRIPTION		UNIT	TOTAL
501(B) 1300	SUBSTRUCTURE EXCAVATION COMMON	(BR-1, 2)	C.Y.	170
501(G) 1800	CLSM BACKFILL	(BR-1)	C.Y.	180
502 3100	TEMPORARY EARTH RETAINAGE	(BR-16)	L.SUM	1
503(A) 4230	PRESTRESSED CONCRETE BEAMS (TYPE III)	(BR-1)	L.F.	2,392.0
504(A) 5200	APPROACH SLAB	(BR-1, 3)	S.Y.	281.2
504(B) 5300	SAW-CUT GROOVING	(BR-1)	S.Y.	2,940.4
504(D) 5420	CONCRETE RAIL (TR4)	(BR-1)	L.F.	1,323
506(A) 7200	STRUCTURAL STEEL	(BR-1)	LB.	3,[illegible]0
507(A) 8200	STAINLESS STEEL FIXED BEARING ASSEMBLY	(BR-1, 4)	EA.	[illegible]
507(B) 8300	STAINLESS STEEL EXPANSION BEARING ASSEMBLY	(BR-1, [illegible]	EA.	48
509(A) 0210	CLASS AA CONCRETE	(BR-1, 6)	C.Y.	694.0
509(B) 0320	CLASS A CONCRETE	(BR-1)	C.Y.	273.3
511(A) 2210	REINFORCING STEEL	(BR-1)	LB.	1,120
511(B) 2310	EPOXY COATED REINFORCING STEEL	(BR-1)	LB.	196,720
514(A) 5210	PILES, FURNISHED (HP 10x42)	(BR-7)	L.F.	278
514(A) 5220	PILES, FURNISHED (HP [illegible]x53)	(BR-7)	L.F.	939
514(B) 5310	PILES, DRIVEN (HP [illegible]x42)		L.F.	278
514(B) 5320	PILES, DRIVEN ([illegible]12x53)		L.F.	939
514(L) 6300	PILE SPLICE, (PILE NON-BIDDABLE)		EA.	1
515(A) 72[illegible]	WATER REPELLENT (VISUALLY INSPECTED)	(BR-1)	S.Y.	2,522
51[illegible](A) [illegible]230	DRILLED SHAFTS 48" DIAMETER		L.F.	918
5[illegible](C) 8[illegible]00	CROSSHOLE SONIC LOGGING	(BR-8)	EA.	3
518[illegible] 0300	SEALED EXPANSION JOINTS	(BR-1)	L.F.	86.4
523(A) 3200	SEALER CRACK PREPARATION	(BR-1)	L.F.	204.0
523(B) 3300	SEALER RESIN	(BR-1, 9)	GAL.	2.5
601(B) 1230	TYPE I-A PLAIN RIPRAP	(BR-10)	TON	2,560
601(C) 1310	TYPE I-A FILTER BLANKET	(BR-11)	TON	325
613(H) 6205	6" PERFORATED PIPE UNDERDRAIN ROUND	(BR-1, 12)	L.F.	84
613(I) 6310	6" NON-PERF. PIPE UNDERDRAIN RND.	(BR-13)	L.F.	42
619(D) 6700	REMOVAL OF EXISTING BRIDGE STRUCTURE	(BR-14)	L.SUM	1

J.P. NO. 29657(04)
0201 BRIDGE "B"
NBI NO. 32080

PAY QUANTITIES

S.H.29 OVER UNNAMED CREEK
2 - 14' x 8' x 94' R.C.B.
℄ STA. 783+93.40, 0° SKEW

ITEM NO.	ITEM DESCRIPTION		UNIT	TOTAL
202(A) 2210	UNCLASSIFIED EXCAVATION	(BR-1)	C.Y.	160
501(A) 1210	STRUCTURAL EXCAVATION UNCLASSIFIED	(BR-1)	C.Y.	244
502 3100	TEMPORARY EARTH RETAINAGE	(BR-16)	L.SUM	1
509(A) 0210	CLASS AA CONCRETE	(BR-1)	C.Y.	504.7
511(A) 2210	REINFORCING STEEL	(BR-1)	LB.	78,100
[illegible] 6700	REMOVAL OF EXISTING BRIDGE STRUCTURE	(BR-15)	L.SUM	1

J.P. NO. [illegible]657(04)
020[illegible] BRIDGE "C"
[illegible]BI NO. 33361

PAY QUANTITIES

S.H.29 OVER WEST FISH CREEK
3 - 10' x 12' x 105' R.C.B.
℄ STA. 866+52.51, 0° SKEW

ITEM NO.	ITEM DESCRIPTION		UNIT	TOTAL
202(A) 2210	UNCLASSIFIED EXCAVATION	(BR-1)	C.Y.	3,030
501(A) 1210	STRUCTURAL EXCAVATION UNCLASSIFIED	(BR-1)	C.Y.	255
502 3100	TEMPORARY EARTH RETAINAGE	(BR-16)	L.SUM	1
509(A) 0210	CLASS AA CONCRETE	(BR-1)	C.Y.	726.9
511(A) 2210	REINFORCING STEEL	(BR-1)	LB.	113,410
601(A) 1110	TYPE I PLAIN RIPRAP	(BR-10)	TON	270
619(D) 6700	REMOVAL OF EXISTING BRIDGE STRUCTURE	(BR-17)	L.SUM	1

Preliminary Plans

S.H.29 OVER BLACK BEAR, UNNAMED CREEK AND WEST FISH CREEK
BRIDGES "A", "B" & "C"
STEPHENS COUNTY

GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE)
SHEET 2 OF 2

Design	CEG	
Detail	DRB	
Check	RMF	

CEC

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04) | SHEET NO. AB02

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REVISIONS		
REV. NO.	DESCRIPTION	DATE

ENVIRONMENTAL MITIGATION NOTES

EARTHWORK NOTE:
THE CONTRACTOR MUST ENSURE THAT ANY MATERIAL INCORPORATED INTO THE PROJECT IS FREE OF ANY HAZARDOUS, INDUSTRIAL OR CONTAMINATED WASTE, REFER TO SUB-SECTIONS 106.01 AND 202.02 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

IMPORTED MATERIAL (EG. BORROW) - IF MATERIAL IS IMPORTED TO THE PROJECT AND AT ANY POINT THE MATERIAL IS DETERMINED BY THE ENGINEER TO INCLUDE ANY TYPE OF UNACCEPTABLE CONTAMINATION, THE MATERIAL MAY REQUIRE REMOVAL, IN WHOLE, OR IN PART. IF REMOVAL IS REQUIRED, THEN THE INITIAL PLACEMENT, REMOVAL AND PROPER DISPOSAL OF THIS MATERIAL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE DISPOSAL OF THE UNACCEPTABLE MATERIAL SHALL BE APPROVED BY THE ENGINEER, REFER TO SUB-SECTION 107.15 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

TO ASSIST THE CONTRACTOR, THE "OFF PROJECT FACILITY/BORROW SITE HAZARDOUS MATERIALS QUESTIONNAIRE" IS PROVIDED ON THE DEPARTMENT'S WEB SITE:

https://oklahoma.gov/content/dam/ok/en/odot/documents/ok-gov-docs/programs-and-projects/environmental/hazard-questionnaire-2016.pdf

THIS QUESTIONNAIRE IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR SO THAT A CLEARER UNDERSTANDING OF THE CHARACTERISTICS OF THE PROPOSED SITE/ MATERIAL IS ACHIEVED. COMPLETION AND SUBMITTAL OF THIS FORM TO THE ENGINEER DOES NOT EXCUSE THE CONTRACTOR FROM PROVIDING MATERIALS THAT ARE FREE OF HAZARDOUS AND INDUSTRIAL COMPOSITION IN ACCORDANCE WITH SUB-SECTIONS 106.01 AND 202.02 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

NON-COMPLIANCE NOTE:
FAILURE TO IMPLEMENT THE COMMITMENTS SPECIFIED IN THE PLAN NOTES CAN RESULT IN NON-COMPLIANCE ISSUES ON THE PROJECT. WORK ACTIVITIES MAY BE SUSPENDED ON THE PROJECT, FOR AN UNDETERMINED DURATION, WHILE WORKING WITH REGULATORS TO BRING THE PROJECT BACK INTO COMPLIANCE. THE CONTRACTOR WILL NOT BE COMPENSATED FOR TIME LOST.

WATER QUALITY CONVSERVATION NOTE:
APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE IMPACTS FROM STORM WATER DISCHARGES AND SEDIMENTATION IN STREAMS, AS ESTABLISHED BY THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY, SHALL BE CONSCIENTIOUSLY IMPLEMENTED THROUGHOUT THE PROPOSED CONSTRUCTION PERIODS, IN ORDER TO MINIMIZE ANY POTENTIAL IMPACTS TO ANY LISTED SPECIES. THE EFFECTIVENESS OF EROSION CONTROLS SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. HAZARDOUS MATERIALS, CHEMICALS, FUELS, LUBRICATING OILS, AND OTHER SUCH SUBSTANCES SHALL BE STORED AT LEAST 100 FEET FROM THE ORDINARY HIGH WATER MARK (OHWM). REFUELING OF CONSTRUCTION EQUIPMENT SHALL ALSO BE CONDUCTED AT LEAST 100 FEET FROM THE OHWMS. SEDIMENT AND EROSION CONTROLS SHALL BE INSTALLED AROUND STAGING AREAS TO PROHIBIT DISCHARGE OF MATERIALS FROM THESE SITES. CONSTRUCTION WASTE MATERIALS AND DEBRIS SHALL BE STOCKPILED AT LEAST 25 FEET OUTSIDE OF THE OHWMS, AND THESE MATERIALS SHALL BE REMOVED AND DISPOSED OF PROPERLY FOLLOWING COMPLETION OF THE PROJECT. PREVENTATIVE MEASURES MUST BE TAKEN TO PROHIBIT THE DISCHARGE OF CONTAMINANTS INTO ANY SURFACE WATERS.

MIGRATORY BIRD NOTE:
MIGRATORY BIRDS ARE PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. MANY BIRDS COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASON FOR MOST MIGRATORY BIRD SPECIES EXTENDS FROM MARCH 1 TO AUGUST 31. MIGRATORY BIRD NESTING USE OF THE FOLLOWING BRIDGES AND CULVERTS WAS OBSERVED:

RCB 1 (STA # 590+85)
RCB 2 (STA # 616.5)
RCB 4 (STA # 643.86)
RCB 6 (STA # 664+34)
RCB 8 (STA # 682+59)
RCB 9 (STA # 697+5)
RCB 10 (STA # 711+00)
BRIDGE NBI 08723 (STA # 783+93)
RCB 15 (STA # 808+00)
BRIDGE NBI 12957 (STA# 866.49)
RCB 17 (STA# 882+74)

PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGES AND CULVERTS SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND FEBRUARY 28, WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED. IF PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION CANNOT BE COMPLETED BETWEEN SEPTEMBER 1 AND FEBRUARY 28, THE BRIDGES AND CULVERTS SHALL BE PROTECTED FROM NEW NEST ESTABLISHMENT PRIOR TO MARCH 1, BY MEANS THAT DO NOT RESULT IN BIRD DEATH OR INJURY. OPTIONS INCLUDE THE EXCLUSION OF ADULT BIRDS FROM SUITABLE NEST SITES ON OR WITHIN A STRUCTURE BY THE PLACEMENT OF WEATHER-RESISTANT POLYPROPYLENE NETTING WITH 0.25-INCH OR SMALLER OPENINGS, PRIOR TO MARCH 1. METHODS OTHER THAN NETTING MUST BE PRE-APPROVED BY THE ODOT BIOLOGIST.
ALTHOUGH NO NESTS WERE OBSERVED ON ALL OTHER STRUCTURES, THE BIRDS MAY OCCUPY THE STRUCTURES IN THE FUTURE. THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-210-3671 IF ANY BIRD USE OF THESE STRUCTURES IS OBSERVED. IF BIRDS ARE OBSERVED THEN PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGES AND CULVERTS SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND FEBRUARY 28 (WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED).

WHOOPING CRANE PLAN NOTE:
IF WHOOPING CRANES ARE SEEN AT OR WITHIN ONE MILE OF THE PROPOSED WORK SITE, THE RESIDENT ENGINEER SHALL IMMEDIATELY CONTACT THE ODOT BIOLOGIST AT 405-210-3671. IF THERE IS A CONFIRMED SITING AND/OR WHOOPING CRANES ARE OBSERVED WITHIN ONE MILE OF THE PROPOSED WORK SITE, ALL CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL IT IS DETERMINED THAT WHOOPING CRANES HAVE LEFT THE PROJECT VICINITY WITHOUT BEING HARASSED.

ENVIRONMENTAL MITIGATION NOTES

BALD EAGLE NOTE:
THE BALD EAGLE NESTING SEASON IN OKLAHOMA EXTENDS FROM SEPTEMBER 16, THROUGH MAY 31. A BALD EAGLE SURVEY WAS COMPLETED FOR THIS PROJECT IN **FEBRUARY 2024**. NO NESTS WERE OBSERVED WITHIN THE EXPECTED IMPACT AREA. SURVEY RESULTS ARE VALID ONLY FOR THE NESTING SEASON IN WHICH THE SURVEY WAS PERFORMED. IF CONSTRUCTION ACTIVITIES HAVE BEGUN, BUT ARE NOT COMPLETED BY SEPTEMBER 16, 2024, THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST. THE ODOT BIOLOGIST SHALL SCHEDULE ANY ADDITIONAL SURVEYS THAT MAY BE REQUIRED AS SOON AS LEAVES FALL OFF THE TREES (APPROXIMATELY NOVEMBER 1). BECAUSE NO NESTS WERE OBSERVED DURING THE INITIAL SURVEY, AND IT CAN TAKE A PAIR OF EAGLES ONE TO THREE MONTHS TO CONSTRUCT A NEW NEST, IF CONSTRUCTION ACTIVITIES HAVE BEGUN BEFORE OCTOBER 31, 2024, THEY MAY CONTINUE WHILE ADDITIONAL NEST SEARCH SURVEYS ARE CONDUCTED AFTER LEAF-OFF. IF CONSTRUCTION ACTIVITIES HAVE NOT BEGUN BY OCTOBER 31, 2024, A NEW NEST SURVEY SHALL BE COMPLETED BY THE ODOT BIOLOGIST BEFORE CONSTRUCTION ACTIVITIES CAN BEGIN. NEST SEARCH SURVEYS CAN ONLY BE CONDUCTED WHEN LEAVES ARE NOT ON THE TREES TYPICALLY BETWEEN DECEMBER 1ST AND FEBRUARY 28TH. IF NESTS ARE OBSERVED, UP TO A 660-FOOT NO-WORK BUFFER SHALL BE PLACED AROUND THE NEST. THE EXACT DISTANCE OF THE BUFFER ZONE SHALL BE ESTABLISHED BY THE ODOT BIOLOGIST IN CONSULTATION WITH US FISH AND WILDLIFE SERVICES. IF THE BUFFER CANNOT BE MAINTAINED, ALL CLEARING, EXTERNAL CONSTRUCTION AND LANDSCAPING ACTIVITIES WITHIN THE BUFFER SHALL BE CONDUCTED BETWEEN JUNE 1 AND SEPTEMBER 15 (OUTSIDE THE NESTING SEASON).

SPECIES (CHOOSE THOSE THAT APPLY)	SEASONAL RESTRICTION PERIOD
BALD EAGLE	SEPTEMBER 16 – MAY 31
MIGRATORY BIRDS: SWALLOWS AND PHOEBES	MARCH 1 – AUGUST 31

UNDERGROUND STORAGE TANK NOTE:

STATIONS	OCC FACILITY NO.	FACILITY
709+75 TO 710+25 LT 25 FT.	6911535	JOHNNY BYRON WRIGHT
930+75 TO 932+00 RT 25 FT.	6921785	RED BARN

PETROLEUM CONTAMINATION MAY EXIST AT OR NEAR THE REFERENCED UNDERGROUND STORAGE TANK (UST) SITES. BASED ON THE AVAILABLE INFORMATION, CONTAMINATION IS NOT EXPECTED TO AFFECT CONSTRUCTION ACTIVITIES, BUT IS STILL POSSIBLE. IN THE EVENT CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, THE CONTRACTOR SHALL ADHERE TO ODOT'S HAZARDOUS MATERIALS SPECIFICATION 107.15 AND NOTIFY THE RESIDENT ENGINEER, WHO MAY THEN CONTACT THE ENVIRONMENTAL PROGRAMS DIVISION AT (405)521-3050 FOR ASSISTANCE.

Preliminary Plans

ENVIRONMENTAL NOTES	DETAIL		
	REVIEW		
	APPROVED		
	ENVIRONMENTAL DIVISION		
STATE OF OKLAHOMA	DEPARTMENT OF TRANSPORTATION		
	JOB PIECE NO. 29657(04)	SHEET NO. AE01	

STEPHENS COUNTY
JP 29657(04)
0100 ROADWAY

PAY QUANTITIES - ROADWAY

ITEM	DESCRIPTION	UNIT	QUANTITY
201(A)1200	CLEARING AND GRUBBING	LSUM	1
202(A)2200	UNCLASSIFIED EXCAVATION	CY	415,189
202(B)2300	MUCK EXCAVATION (4)	CY	500
202(C)2400	ROCK EXCAVATION (5)	CY	170,776
205(A)6200	TYPE A - SALVAGED TOPSOIL (R-4,6)	LSUM	1
221(B)2300	TEMPORARY SILT FENCE (R-8)	LF	28,547
221(C)2400	TEMPORARY SEDIMENT FILTER (R-8)	EA	6
221(E)2600	TEMPORARY SILT DIKE (R-8)	LF	3,269
221(F)2730	TEMPORARY ROCK FILTER DAM TYPE 4 (R-8)	CY	402
230(A)7200	SOLID SLAB SODDING (R-6,7)	SY	358,908
233(A)0200	VEGETATIVE MULCHING (1) (R-11)	AC	87
241 3100	MOWING (R-15)	AC	238
303(A)1210	AGGREGATE BASE TYPE A, PLANT MIXED (3)	CY	34,029
307(K)4200	STABILIZED SUBGRADE (R-19)	SY	176,729
325 0100	SEPARATOR FABRIC	SY	167,576
402(E)2600	TRAFFIC BOUND SURFACE COURSE TYPE E (12) (R-20)	TON	24,175
407(B)7300	TACK COAT (R-25)	GAL	23,695
408 8100	PRIME COAT (R-23)	GAL	101,545
411(B)1320	SUPERPAVE, TYPE S3 (PG 70-28 OK) (R-26)	TON	13,461
411(B)1330	SUPERPAVE, TYPE S3 (PG 64-22 OK) (R-26)	TON	44,577
411(C)1420	SUPERPAVE, TYPE S4 (PG 70-28 OK) (R-26)	TON	9,198
411(C)1430	SUPERPAVE, TYPE S4 (PG 64-22 OK) (R-26)	TON	8,489
412 3100	COLD MILLING PAVEMENT (R-29)	SY	8,083
501(A)1200	STRUCTURAL EXCAVATION UNCLASSIFIED	CY	286
502 3100	TEMPORARY EARTH RETAINAGE (13)	LSUM	1
509(A)0200	CLASS AA CONCRETE (R-1)	CY	1,000
509(D)0500	CLASS C CONCRETE (R-33)	CY	2,266
511(A)2200	REINFORCING STEEL (R-1)	LB	143,812
601(A)1100	TYPE I PLAIN RIPRAP (2)	TON	744
611(G)0358	INLET (SMD-TYPE 2A) (R-35)	EA	1
611(G)0362	INLET (SMD-TYPE 2B) (R-35)	EA	1
611(G)8048	INLET CDI RCB DES. 13	EA	1
611(G)9008	INLET CDI RCP DES. 3	EA	1
611(G)9016	INLET CDI RCP DES. 5	EA	1
611(H)0568	ADD'L DEPTH IN INLET CDI RCB DES. 13	VF	3
611(H)0688	ADD'L DEPTH IN INLET CDI RCP DES. 3	VF	10
611(H)0696	ADD'L DEPTH IN INLET CDI RCP DES. 5	VF	9
613(A)5216	24" R.C. PIPE CLASS III (11)	LF	98
613(A)5220	30" R.C. PIPE CLASS III (11)	LF	462
613(A)5224	36" R.C. PIPE CLASS III (11)	LF	287
613(A)5280	42" R.C. PIPE CLASS IV (11)	LF	194
613(B)5508	18" CORR. GALV. STEEL PIPE (R-37)	LF	1,714
613(B)5516	24" CORR. GALV. STEEL PIPE (R-37)	LF	3,168
613(B)5524	30" CORR. GALV. STEEL PIPE	LF	998
613(B)5528	36" CORR. GALV. STEEL PIPE	LF	30
613(H)6200	6" PERFORATED PIPE UNDERDRAIN ROUND (4)	LF	1,000
613(I)6305	6" NON-PERF. PIPE UNDERDRAIN RND. (4)	LF	250
613(M)6964	TYPE B4 CULVERT END TREATMENT	EA	1
613(M)6968	TYPE C4 CULVERT END TREATMENT	EA	1
613(M)6972	TYPE D4 CULVERT END TREATMENT	EA	5
613(M)7008	TYPE B6 CULVERT END TREATMENT	EA	64
613(M)7012	TYPE C6 CULVERT END TREATMENT	EA	1
613(M)7016	TYPE D6 CULVERT END TREATMENT	EA	7
613(M)7032	TYPE CC6 CULVERT END TREATMENT	EA	6
613(Q)7500	OUTLET LATERAL HEADWALL (4)	EA	4
613(U)7950	PIPE UNDERDRAIN COVER MAT'L (4)	CY	124
619(A)6200	REMOVAL OF STRUCTURES & OBSTRUCTIONS (6) (39,40)	LSUM	1
619(B)6300	REMOVAL OF HEADWALL (R-40)	EA	2
619(B)6352	REMOVAL OF FENCE (R-40)	LF	33,533
619(B)6364	REMOVAL OF ASPHALT PAVEMENT (R-40,41)	SY	101,146
619(B)6396	REMOVAL OF GUARDRAIL (R-40)	LF	1,665
619(C)6600	SAWING PAVEMENT	LF	6,012
623(A)1200	BEAM GUARDRAIL W-BEAM SINGLE	LF	350
623(G)1820	GUARDRAIL END TREATMENT (31") (10)	EA	4
623(I)2050	GUARDRAIL BRIDGE CONN-THRIE BEAM (31")	EA	4
624(A)3200	FENCE-STYLE WWF (R-43)	LF	4,144
624(B)3370	GATES-STYLE WWF (4.5'HIGH X 18'LONG)	EA	1
624(C)3405	FENCE-STYLE SWF (5 BARBED WIRE) (9) (R-43, 44)	LF	20,142
624(C)3410	FENCE-STYLE SWF (6 BARBED WIRE) (9) (R-43, 44)	LF	5,378
624(E)3600	FENCE-STYLE CLF (4' HIGH, CLASS A) (R-43)	LF	403
629(A)7200	MAILBOX INSTALLATION-SINGLE	EA	18
629(B)7300	MAILBOX INSTALLATION-MULTIPLE	EA	1
629(C)7400	REMOVAL OF MAILBOX INSTALLATION	EA	20
629(E)7600	MAILBOX	EA	20
853 5175	GUARDRAIL DELINEATORS (TYPE 2, CODE 1)	EA	14

STEPHENS COUNTY
JP 29657(04)
0600 STAKING

PAY QUANTITIES - STAKING

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
642(B)3300	CONSTRUCTION STAKING LEVEL II (7)	LSUM	1

STEPHENS COUNTY
JP 29657(04)
0640 CONSTRUCTION

PAY QUANTITIES - CONSTRUCTION

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
220 1100	SWPPP DOCUMENTATION AND MANAGEMENT	LSUM	1
640(A)1210	FIELD OFFICE (8)	LSUM	1
641 2110	MOBILIZATION	LSUM	1

PAY QUANTITY NOTES

(R-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS.

(R-4) AN ESTIMATED QUANTITY OF 49,815 C.Y. TOPSOIL TO BE RESERVED FOR REPLACEMENT OF APPROXIMATELY 5" ON COMPLETED FORESLOPES, DITCHES, AND BACKSLOPES. THIS QUANTITY IS INCLUDED IN THE EARTHWORK BALANCE. ANY ADDITIONAL EXCAVATION REQUIRED IN CUT SECTIONS TO ALLOW FOR PLACEMENT OF TOPSOIL TO FINAL GRADE, SHALL BE INCLUDED IN THE PRICE BID.

(R-6) FOR 205(A) TYPE A - SALVAGED TOPSOIL PRICE BID TO INCLUDE COST OF 18-46-0 FERTILIZER, ESTIMATED AT 150 POUNDS PER ACRE.

FOR 230(A) SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF [illegible]0 FERTILIZER, ESTIMATED AT [illegible]0 POUNDS PER 1000 SQ .YD.

(R-7) FOR 230(A) SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 40 GALLONS PER SQ. YD .

(R-8) PRICE BID TO INCLUDE COST OF ALL NECESSARY MAINTENANCE. MAINTAINING DEVICE IN PROPER UPRIGHT POSITION, REMOVAL OF DEVICE, AND REMOVAL OF SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE DEVICE.

(R-11) THE QUANTITIES ESTIMATED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IS 86.11 ACRES.

(R-15) QUANTITY BASED ON TWO APPLICATIONS.

(R-19) PRICE BID TO INCLUDE THE CHEMICAL ADDITIVE(S) TO ACHIEVE THE RATE SPECIFIED FOR THE APPROPRIATE SOIL CLASSIFICATION AS SPECIFIED IN THE MOST CURRENT ODOT MATERIALS DIVISION OHD L-50. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CLASSIFY THE SOIL AND DETERMINE THE APPROPRIATE ADDITIVE(S).

(R-20) ESTIMATED AT 170 LBS. PER CU. FT.

(R-23) PRIME COAT SHALL BE APPLIED AT AN ESTIMATED RATE OF 0.35 GAL. PER SQ. YD. WHEN APPLIED TO SUBGRADE, AND 0.25 GAL. PER SQ. YD. WHEN APPLIED TO AGGREGATE BASE. THE ACTUAL CUTBACK PRIME COAT REQUIRED FOR PLACEMENT OPERATIONS WILL BE DETERMINED BY THE CONTRACTOR, AND SHALL CONSIDER THE RESIDUE FROM DISTILLATION PERCENTAGE SHOWN IN SECTION 708.03 OF THE STANDARD SPECIFICATIONS.

(R-25) ESTIMATED AT 0.075 GALLONS PER SQUARE YARD OF ORIGINAL EMULSION OF TACK COAT (BEFORE DILUTION FOR APPLICATION) IN ACCORDANCE WITH SECTION 407 OF THE STANDARD SPECIFICATIONS.

(R-26) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.

(R-29) PRICE BID TO INCLUDE COST OF FOG SEAL, MEETING THE REQUIREMENTS OF SECTION 407 OF THE STANDARD SPECIFICATIONS.

(R-33) QUANTITY INCLUDES AN ESTIMATED 25 C.Y. TO BE USED AS DIRECTED BY THE ENGINEER

(R-35) THE PRECAST CONCRETE OPTION MAY BE USED INSTEAD, PER DIRECTION OF THE ENGINEER.

(R-37) ANY DRAINAGE STRUCTURE DESCRIBED AS TEMPORARY, SHALL AFTER COMPLETION OF THE PROJECT, BE REMOVED BY AND BECOME PROPERTY OF THE CONTRACTOR.

(R-39) INCLUDES REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES, HEADWALLS (UNLESS OTHERWISE SPECIFIED), INLETS, FENCES, AND OTHER STRUCTURES WITHIN THE RIGHT OF WAY.

(R-40) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.

(R-41) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SECTION 202.06 UNCLASSIFIED EXCAVATION.

(R-43) INCLUDES 2% FOR GROUND MEASUREMENT.

(R-44) ALL GATES AND GATE END POSTS FOR STRANDED WIRE FENCE (SWF) SHALL BE CONSTRUCTED AT THE SAME WIDTH AS THE EXISTING, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

GENERAL PLAN NOTES

(1) THE 122.86 ACRES OF TEMPORARY EROSION AND SEDIMENT CONTROL INCLUDES 86.11 ACRES OF VEGETATIVE MULCHING AND 36.75 ACRES OF SUBGRADE BEING PRIMED IN THE PERMANENT PAVING AREAS.

(2) QUANTITY SHOWN FOR RIPRAP ESTIMATED AT 170 LB. PER CUBIC FOOT.

(3) AGGREGATE BASE IS TO BE PLANT-MIXED.

GENERAL PLAN NOTES (CONT'D)

(4) QUANTITY SHOWN IS ESTIMATED AND TO BE USED AT THE DISCRETION OF THE ENGINEER.

(5) FOR THE PURPOSES OF ESTIMATING ROCK EXCAVATION, REGIONS WITHIN THE SANDSTONE STRATA, WHERE THE TEXAS CONE VALUES ARE LESS THAN 2 INCHES PER 100 BLOWS, WILL BE CONSIDERED AS ROCK EXCAVATION. THE REMAINING AREAS OF SANDSTONE WILL BE CONSIDERED AND PAID FOR AS UNCLASSIFIED EXCAVATION. FOR ADDITIONAL DETAILS REFER TO THE ROCK CUT ANALYSIS REPORT, AVAILABLE UPON REQUEST.

(6) ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION.

PARCEL NO.	LOCATION (STATION) (ALL MEASUREMENTS FROM ℄ SH-29)	DESCRIPTION OF ITEMS TO BE REMOVED
3	STA. 607+30 LT 160' ℄	2 GARDEN ARCHES W/GATES
8	STA. 658+00 LT 50' ℄	4-RAIL PIPE ENTRY W/PIPE OVERHEAD
8	STA. 658+05.79 LT TO STA. 661+70 LT 50' ℄	330 LF OF PIPE AND CABLE R/W FENCE
13	STA. 739+00 LT 80' TO 200' ℄	120 LF OF 2 RAIL PIPE CROSS FENCE
17	STA. 783+20 RT TO STA. 784+70 RT 50' ℄	150 LF OF PIPE AND CATTLE PANEL R/W FENCE
17	STA. 783+80 RT 120' ℄ TO STA. 784+75 RT 50' ℄	100 LF OF 8SBW CROSS FENCE
17	STA. 787+70 RT 50' ℄	3 METAL GATES, 1 SOLAR GATE OPENER, PIPE & CABLE R/W FENCE AND PIPE & CATTLE PANEL CROSS FENCE
17	STA. 788+00 RT 110' ℄	LANDSCAPING
19	STA. 808+70 LT 125' ℄	6 CATTLE PANELS
19	STA. 809+60 LT 150' ℄	CORAL W/24 CATTLE PANELS
21	STA. 813+00 LT 80' TO 150' ℄	70 LF OF 10 SBW CROSS FENCE
21	STA. 813+70 LT 160' ℄	320 LF OF 11 SBW R/W FENCE
22	STA. 830+20 LT 60' ℄	7 WIRE CATTLE PANELS
26	STA. 862+70 RT 180' ℄	2 METAL PIPES (NO SIGN)
27	STA. 873+70 RT 70' ℄	4'x4' METAL SIGN ON 2 STEEL POSTS "WELCOME TO DOYLE"
28	STA. 884+50 RT TO STA. 887+80 RT 60' ℄	330 LF OF PIPE & CABLE R/W FENCE

(7) IN ADDITION TO SECTION 642.04(B), THE CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING: SURVEY CONTROL POINTS, REFERENCE POINTS AND BENCHMARKS NOTED ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND REFRESHING THE CENTERLINE OF PERMANENT CONSTRUCTION, AND SETTING ALL OTHER CONTROL POINTS AND REFERENCE POINTS REQUIRED FOR CONSTRUCTION AND INSPECTION TO INCLUDE BRIDGE CURVES, CONSTRUCTION REFERENCE LINES (CRL), AND RIGHT □]OF□]WAY. THE SURVEYOR WILL PROVIDE THE RESIDENT ENGINEER WITH A COMPUTERIZED DISK OF SURVEY DATA. THE SURVEYOR WILL IDENTIFY AND VERIFY BENCHMARKS SET AND MAINTAIN ADDITIONAL BENCHMARKS WITHIN THE PROJECT UNITS AT A MINIMUM OF 500' AS REQUIRED TO INSURE CONSTRUCTION OF A SMOOTH PROFILE OF MAINLINE TO INSURE SMOOTH TRANSITIONS A THE BOP, EOP, AND BRIDGES AS REQUIRED IN SECTIONS 642.04(C). THE SURVEYOR WILL PROVIDE A COPY OF CHECKED BENCHMARKS TO THE RESIDENT ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO BEGINNING ANY EARTHWORK PAY ITEMS. THE CONTRACTOR SHALL PROVIDE FOR THE RESIDENT ENGINEERS USE A ROVING CABLE FREE INTEGRATED GPS & RTK SYSTEM WITH FIELD CONTROLLER. THIS SYSTEM SHALL BE COMPATIBLE WITH THE SURVEY BASE STATION USED BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN THE BASE STATION DURING WORK HOURS FROM THE BEGINNING OF EARTHWORK ACTIVITIES UNTIL SUBSTANTIAL COMPLETION IS ACHIEVED. THE CONTRACTOR SHALL PROVIDE A ONE WEEK TRAINING COURSE FOR THIS EQUIPMENT FOR UP TO FOUR ODOT INSPECTORS. THIS TRAINING WILL BE CONDUCTED PRIOR TO COMMENCING EARTHWORK ACTIVITIES. AT A MINIMUM TRAINING SHALL CONSIST OF UNIT OPERATION, SETUP, TAKEDOWN, STATION, OFFSET, ELEVATION, PROJECT LINE WORK, TOC/TOS, CALCULATE AREA, AND DISTANCE. CONTRACTOR SHALL ALSO SET UP TWO (2) POLES AT EACH BASE LOCATION TO ALLOW INSPECTION AND CONTRACTOR TO OPERATE UNITS SIMULTANEOUSLY.

(8) FIELD OFFICE TO BE EQUIPPED WITH ONE TELECOMMUNICATION PHONE LINE FOR AN OPERATIONAL TELEPHONE. IN ADDITION, THE FIELD OFFICE IS TO BE EQUIPPED WITH A HARDWIRED INTERNET LINE FOR USE IN THE FIELD OFFICE, 1 MIFI FOR USE OUTSIDE THE FIELD OFFICE (NEEDS TO WORK AT PROJECT LOCATION), AND SHALL PROVIDE POTABLE DRINKING WATER FOR INSPECTORS. ALL COSTS ASSOCIATED WITH THESE ITEMS, INCLUDING MONTHLY EXPENSES, SHALL BE INCLUDED IN THE PRICE BID FOR FIELD OFFICE.

(9) CORNER, STRETCHER, AND END POSTS SHALL BE CONSTRUCTED OF SCH. 40 STEEL PIPE, AS SPECIFIED IN STANDARD RWF2-3. PIPE WILL BE WELDED AND TENSION WIRES OMITTED. THE "CORNER AND STRETCHER POST DETAIL ALTERNATIVE" WILL NOT BE USED. FOOTING SHALL INCLUDE CLASS 'A' CONCRETE. ROCK MAY BE ENCOUNTERED DURING THE INSTALLATION OF FENCING.

(10) THE GUARDRAIL END TREATMENT (GET) SHALL BE LISTED ON THE OKLAHOMA DEPARTMENT OF TRANSPORTATION'S QUALIFIED PRODUCTS LIST (QPL) AND SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION. FOR A LIST OF THE APPROVED DEVICES GO TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION'S QPL WEBSITE AT: http://www.okladot.state.ok.us/traffic/qpl/index.php

(11) PRICE BID TO INCLUDE COST OF STANDARD BEDDING MATERIAL AND TRENCH EXCAVATION, MEETING THE REQUIREMENTS OF SECTION 613 OF THE STANDARD SPECIFICATIONS.

(12) QUANTITY INCLUDES AN ESTIMATED ADDITIONAL 1,000 TONS TO BE USED TO MAINTAIN ACCESS.

(13) THE FOLLOWING TEMPORARY EARTH RETAINAGE LOCATIONS ARE FOR INFORMATIONAL PURPOSES ONLY AND HAVE NOT BEEN DESIGNED OR DETAILED. EARTH RETAINAGE WOULD BE REQUIRED TO PREVENT A TEMPORARY SLOPE IN EXCESS OF 1:1.5. RETAINAGE SYSTEM, LOCATIONS, AND DIMENSIONS TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

STR. 9 AT STA. 616+70.45
STR. 18 AT STA. 664+34.16
STR. 21 AT STA. 682+59.40
STR. 53 AT STA. 839+78.12
STR. 14 AT STA. 643+86.18
STR. 19 AT STA. 672+40.96
STR. 45 AT STA. 815+52.42

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SUMMARY OF PAY QUANTITIES (ROADWAY)
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO 29657(04) SHEET NO AR01

R:\114574\Drawings\29657(04)\29657(04) PAY QUANTITIES.dwg 5/31/2024 3:50 PM

GENERAL CONSTRUCTION NOTES

IN ACCORDANCE WITH THE OKLAHOMA UNDERGROUND FACILITIES DAMAGE PREVENTION ACT THE CONTRACTOR SHALL NOTIFY THE OKLAHOMA ONE-CALL SYSTEM, INC. 48 HOURS PRIOR TO BEGINNING EXCAVATION. OKLAHOMA ONE-CALL SYSTEM, INC. "CALL OKIE" 1-800-522-6543 OR 811.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING ROAD TO LOCAL AND THROUGH TRAFFIC. SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

MAINTENANCE OF THROUGH TRAFFIC INCLUDES THE MAINTENANCE OF THE EXISTING ROAD IN CLOSE PROXIMITY TO THE NEW CONSTRUCTION AS SHOWN ON THE PLANS.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING SECTION LINE ROADS TO LOCAL AND THROUGH TRAFFIC. SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

FOR PROJECTS THAT INCLUDE WIDENING AND/OR RESURFACING PROJECTS, THE CONTRACTOR SHALL SCHEDULE OPERATIONS TO MINIMIZE POTENTIAL DROP-OFF HAZARDS AND SHALL SUBMIT A SEQUENCE OF CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL, BEFORE OPERATIONS BEGIN. ANY PORTION OF THE CONSTRUCTION OPERATIONS, SUCH AS SUPERPAVE LAYING OPERATIONS, EXCAVATION FOR PAVEMENT WIDENING, OR EXTENSION OF ROADWAY STRUCTURES, SHALL BE LIMITED TO ONE SIDE AT A TIME, AND THE PROCEDURES OUTLINED IN THE PAVEMENT DROP-OFF TREATMENT STANDARDS PDT-I (LATEST REVISION) SHALL BE IMPLEMENTED. ONLY THAT AMOUNT OF OPEN TRENCH WILL BE ALLOWED THAT CAN BE SURFACED IN 1 (ONE) DAY'S TIME WITHOUT APPROVAL BY THE ENGINEER. LIGHTS, SIGNS, AND BARRICADES SHALL BE MOVED AS WORK PROGRESSES.

ALL TREES, BRUSH, AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER IS TO BE CLEANED OUT TO THE RIGHT-OF-WAY LINE, AT EACH STRUCTURE AND BRIDGE, IN A MANNER APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY RIGHT-OF-WAY FENCE AS REQUIRED. WHEN THE PORTION OF THE PROJECT THAT REQUIRED THIS FENCE IS COMPLETED, THE TEMPORARY FENCE SHALL BE REMOVED, AND PERMANENT RIGHT-OF-WAY FENCING SHALL BE RESTORED OR INSTALLED IN A MANNER APPROVED BY THE ENGINEER. ALL COST OF TEMPORARY FENCING SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

ALL FLOWLINES THAT ARE TO BE FILLED SHALL BE THOROUGHLY TAMPED BEFORE CONSTRUCTION OR EXTENSION OF DRAINAGE STRUCTURES. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

IN ORDER TO ALLEVIATE DUST CONDITIONS DURING GRADING OPERATIONS AND BEFORE PAVEMENT WORK IS COMPLETED, THE CONTRACTOR SHALL SPRINKLE GRADING AT INTERVALS APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL NOT WASTE ANY EXCESS EXCAVATION UNTIL ALL PLANNED EMBANKMENTS AND BACKFILLS ARE COMPLETED. EXCESS UNCLASSIFIED EXCAVATION MATERIAL DETERMINED BY THE ENGINEER TO BE SUITABLE FOR BACKFILL SHALL BE USED TO REDUCE ANY UNCLASSIFIED BORROW NEEDED. COST OF SECOND HANDLING SHALL BE INCLUDED IN OTHER ITEMS OF WORK. ANY REMAINING EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

PRIME COAT SHALL BE APPLIED TO THE SUBGRADE IMMEDIATELY AFTER FINAL COMPACTION AND SHAPING TO RETAIN MOISTURE FOR PROPER CHEMICAL REACTION OF THE SOIL ADDITIVE.

THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

VEGETATIVE MULCHING: THE VEGETATIVE MULCH SHALL BE ANCHORED IN ACCORDANCE WITH THE "MULCHING-TILLER METHOD", AS SPECIFIED IN 233.04B(2) OF THE STANDARD SPECIFICATIONS.

AREAS ON WHICH SALVAGED TOPSOIL IS TO BE REPLACED SHALL HAVE 18-46-0 FERTILIZER APPLIED, AT THE RATE OF 150 POUNDS PER ACRE, JUST PRIOR TO THE REPLACEMENT OF SALVAGED TOPSOIL.

AT THE BEGINNING OF TURFING OPERATIONS, ANY AREAS INCLUDED IN PLANNED QUANTITIES THAT HAVE GROWN A SATISFACTORY VOLUNTEER TURF OF PERENNIAL GRASS, AS DETERMINED BY THE ENGINEER, SHALL BE FERTILIZED AND WATERED AS CALLED FOR ON THE PLANS, BUT SHALL NOT BE SEEDED, SODDED, OR SPRIGGED.

PIPE UNDERDRAIN QUANTITIES ESTIMATED ONLY. LOCATION, IF AND WHERE REQUIRED, TO BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL REMOVE AND RESET MAILBOXES AS NECESSARY. MAILBOXES ARE TO BE MAINTAINED IN AN UPRIGHT POSITION AND ACCESSIBLE TO MAIL CARRIER'S CAR DURING CONSTRUCTION. ANY DAMAGE TO BOXES OR SUPPORTS SHALL BE REPAIRED BY THE CONTRACTOR. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

SURFACING OF RETURNS, UNLESS OTHERWISE SHOWN ON THE PLANS, SHALL BE OF THE SAME MATERIAL (BASE AND SURFACE) AS THAT OF THE ABUTTING SHOULDER OF THE MAINLINE. BASE AND SURFACE THICKNESS SHALL BE THE THICKNESS SHOWN ON PLANS.

GENERAL CONSTRUCTION NOTES (CONT'D)

T.B.S.C. SURFACES SHALL BE SPRINKLED WITH WATER AND ROLLED WITH A PNEUMATIC ROLLER IN A MANNER APPROVED BY THE ENGINEER.

EXCESS ASPHALT AT JOINTS AND CRACKS IN EXISTING PAVEMENT SHALL BE REMOVED FLUSH TO TOP OF PAVING INA MANNER APPROVED BY THE ENGINEER.

SUGGESTED SEQUENCE OF CONSTRUCTION

PHASE 1A

- BEGIN CONSTRUCTION OF BRIDGE A.
- CONSTRUCT TEMPORARY WIDENINGS IN THE FOLLOWING LOCATIONS:
  - STA. 660+45.20 TO STA. 668+28.38
  - STA. 678+99.16 TO STA. 686+16.30
  - STA. 811+88.24 TO STA. 819+18.00
  - STA. 836+16.14 TO STA. 843+51.54

PHASE 1B

- BUILD ALL OF BRIDGE C, COMPLETE BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE ASPHALT FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT FOR DETOUR A.
  - A. PLACE TEMPORARY STRIPE FROM 573+00.00 THRU DETOUR

PHASE 2

- FROM BOP THRU DETOUR A SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSTRTUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23.

PHASE 3

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 878+76+18 AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		GENERAL NOTES (ROADWAY)
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. AR02

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SUMMARY OF SURFACING

SHEET NO.	STATION EXTENTS	AGGREGATE BASE TYPE A, PLANT MIXED 303(A)	STABILIZED SUBGRADE 307(K)	SEPARATOR FABRIC 325	TRAFFIC BOUND SURFACE COURSE TYPE E 402(E)	TACK COAT 407(B)	PRIME COAT 408	SUPERPAVE, TYPE S3 (PG 70-28 OK) 411(B)	SUPERPAVE, TYPE S3 (PG 64-22 OK) 411(B)	SUPERPAVE, TYPE S4 (PG 70-28 OK) 411(C)	SUPERPAVE, TYPE S4 (PG 64-22 OK) 411(C)
		CY	SY	SY	TON	GAL	GAL	TON	TON	TON	TON
	SH-29 MAINLINE										
R071	BOP TO STA. 585+00.00					806.67				360.89	238.94
R072	STA. 585+00.00 TO STA. 600+00.00	1,652.89	8,136.12	8,136.12	1,076.46	997.58	4,854.15	665.39	1,918.73	451.12	298.68
R073	STA. 600+00.00 TO STA. 615+00.00	1,709.88	8,650.63	8,416.67	1,116.94	1,040.88	5,021.54	688.34	2,039.70	451.12	317.77
R074	STA. 615+00.00 TO STA. 630+00.00	1,709.88	9,071.13	8,416.67	1,123.06	1,090.03	5,021.54	688.34	2,141.94	451.12	353.63
R075	STA. 630+00.00 TO STA. 645+00.00	1,709.88	8,416.67	8,416.67	1,123.06	1,014.59	5,021.54	688.34	1,984.89	451.12	298.67
R076	STA. 645+00.00 TO STA. 660+00.00	1,709.88	8,416.67	8,416.67	1,136.81	1,014.59	5,021.54	688.34	1,984.89	451.12	298.67
R077	STA. 660+00.00 TO STA. 675+00.00	1,709.88	9,386.42	8,416.67	1,145.98	1,127.84	5,021.54	688.34	2,220.48	451.12	381.30
R078	STA. 675+00.00 TO STA. 690+00.00	1,709.88	9,189.18	8,416.67	1,141.40	1,100.91	5,021.54	688.34	2,158.54	451.12	361.41
R079	STA. 690+00.00 TO STA. 705+00.00	1,709.88	8,416.67	8,416.67	1,141.40	1,014.59	5,021.54	688.34	1,984.89	451.12	298.67
R080	STA. 705+00.00 TO STA. 720+00.00	1,709.88	8,416.67	8,416.67	1,113.13	1,014.59	5,021.54	688.34	1,984.89	451.12	298.67
R081	STA. 720+00.00 TO STA. 735+00.00	1,709.88	8,416.67	8,416.67	1,139.10	1,014.59	5,021.54	688.34	1,984.89	451.12	298.67
R082	STA. 735+00.00 TO STA. 750+00.00	955.65	4,704.03	4,704.03	690.60	588.94	2,806.52	384.71	1,158.38	252.13	199.61
R083	STA. 750+00.00 TO STA. 765+00.00	1,709.88	8,416.67	8,416.67	1,163.03	1,027.32	5,021.54	688.34	2,013.39	451.12	317.67
R084	STA. 765+00.00 TO STA. 780+00.00	1,709.88	8,416.67	8,416.67	1,136.81	1,014.59	5,021.54	688.34	1,984.89	451.12	298.67
R085	STA. 780+00.00 TO STA. 795+00.00	1,709.88	8,416.67	8,416.67	1,117.71	1,014.59	5,021.54	688.34	1,984.89	451.12	298.67
R086	STA. 795+00.00 TO STA. 810+00.00	1,709.88	8,416.67	8,416.67	1,116.19	1,014.59	5,021.54	688.34	1,984.89	451.12	298.67
R087	STA. 810+00.00 TO STA. 825+00.00	1,709.88	9,214.99	8,416.67	1,122.29	1,104.32	5,021.54	688.34	2,172.00	451.12	363.87
R088	STA. 825+00.00 TO STA. 840+00.00	1,709.88	11,458.47	8,416.67	1,116.95	1,403.91	5,849.42	688.34	2,733.52	451.12	585.20
R089	STA. 840+00.00 TO STA. 855+00.00	1,709.88	11,099.42	8,416.67	1,129.17	1,356.71	5,766.78	688.34	2,641.68	451.12	550.38
R090	STA. 855+00.00 TO STA. 870+00.00	1,709.88	8,416.67	8,416.67	1,118.48	1,014.59	5,021.54	688.34	1,984.89	451.12	298.67
R091	STA. 870+00.00 TO STA. 885+00.00	2,226.02	10,980.78	10,980.78	1,241.37	1,408.89	6,545.88	688.34	2,770.95	451.12	662.29
R092	STA. 885+00.00 TO EOP	125.68	671.10	671.10	140.01	157.96	398.52	20.65	150.92	13.54	173.[illegible]
	TOTALS	34,028.20	176,728.97	167,575.42	22,349.95	22,343.27	101,544.37	13,460.87	41,984.24	9,197.84	[illegible]7,491.[illegible]

SUMMARY OF EROSION CONTROL

SHEET NO.	STATION EXTENTS	SOLID SLAB SODDING 230(A)	WATERING	FERTILIZING (10-20-10)	FERTILIZING (18-46-0)	MOWING 241	TYPE I PLAIN RIPRAP 601(A)
		SY	KGAL	TON	TON	AC	TON
R071	BOP TO STA. 585+00.00	4,362.54	174.50	0.44	0.07	3.78	
R072	STA. 585+00.00 TO STA. 600+00.00	15,866.41	634.66	1.59	0.25	5.13	
R073	STA. 600+00.00 TO STA. 615+00.00	16,727.28	669.09	1.67	0.26	5.45	
R074	STA. 615+00.00 TO STA. 630+00.00	19,481.40	779.26	1.95	0.30	6.25	
R075	STA. 630+00.00 TO STA. 645+00.00	15,446.67	617.87	1.54	0.24	5.17	
R076	STA. 645+00.00 TO STA. 660+00.00	18,313.19	732.53	1.83	0.28	5.82	
R077	STA. 660+00.00 TO STA. 675+00.00	19,969.66	798.79	2.00	0.31	5.98	
R078	STA. 675+00.00 TO STA. 690+00.00	20,024.11	800.96	2.00	0.31	5.61	
R079	STA. 690+00.00 TO STA. 705+00.00	16,047.98	641.92	1.60	0.25	5.27	
R080	STA. 705+00.00 TO STA. [illegible]	15,419.56	616.78	1.54	0.24	4.86	
R081	STA. 720+00.00 TO ST[illegible]735+00.00	17,415.95	696.64	1.74	0.27	5.74	
R082	STA. 735+00.00 TO ST[illegible]	19,210.01	768.40	1.92	0.30	3.25	
R083	STA. 750+[illegible]00 T[illegible]STA. 765+00.00	14,449.95	578.00	1.44	0.22	5.96	
R084	STA. 765[illegible]0.00 TO STA. 7[illegible]00	20,372.68	814.91	2.04	0.32	6.29	
R085	STA. 780+[illegible]00 TO S[illegible]795+00.00	18,180.59	727.22	1.82	0.28	5.67	26.72
R08[illegible]	STA. [illegible]05+00.00 TO STA. 810+00.00	15,978.57	639.14	1.60	0.25	4.93	
R08[illegible]	STA. 8[illegible]00.00 TO STA. 825+00.00	18,348.99	733.96	1.83	0.28	5.97	59.57
R088	STA. 8[illegible]00.00 TO STA. 840+00.00	18,786.18	751.45	1.88	0.29	5.44	
R[illegible]89	STA. [illegible]840+00.00 TO STA. 855+00.00	19,259.33	770.37	1.93	0.30	6.74	
R[illegible]	STA. 855+00.00 TO STA. 870+00.00	16,494.02	659.76	1.71	0.26	6.42	656.72
R091	STA. 870+00.00 TO STA. 885+00.00	16,301.81	652.07	1.63	0.25	5.56	
R092	STA. 885+00.00 TO EOP	2,450.82	98.03	0.25	0.04	3.27	
	TOTALS	358,907.70	★ 14,356.31	★ 35.89	★ 5.56	118.56	743.01

★ FOR INFORMATIONAL PURPOSES ONLY.

SUMMARY OF FENCE

SHEET NO.	STATION AND LOCATION	LT.	RT.	FENCE-STYLE WWF 624(A)	GATES-STYLE WWF (4.5' HIGH X 18' LONG) 624(B)	FENCE-STYLE SWF (5 BARBED WIRE) 624(C)	FENCE-STYLE SWF (6 BARBED WIRE) 624(C)	FENCE-STYLE CLF (4' HIGH, CLASS A) 624(D)
				LF	EA	LF	LF	LF
R072	STA. 588+00.00 TO STA. 591+72.68	X				372		
R072-R073	STA. 592+01.16 TO STA. 604+53.33	X				[illegible]3		
R073	STA. 605+08.92 TO STA. 607+15.92	X						
R073-R074	STA. 608+30.45 TO STA. 618+77.06	X		1,0[illegible]				
R074-R075	STA. 619+42.89 TO STA. 631+35.33	X				1,198		
R075-R076	STA. 631+35.33 TO STA. 651+41.47	X					2,009	
R076	STA. 651+41.47 TO STA. 657+80.16	X				639		
R077	STA. 664+41.01 TO STA. 674+12.23	X				976		
R078	STA. 679+08.81 TO STA. 684+18.18	X				517		
R078-R079	STA. 684+18.18 TO STA. 703+02.15	X					1,894	
R079-R080	STA. 703+02.15 TO STA. 710+14.49	X				712		
R080	STA. 711+17.36 TO STA. 716+32.59	X		515				
R080	STA. 716+41.56	X			1			
R080-R082	STA. 716+50.52 TO STA. 736+45.83	X		1,997				
R082-R083	STA. 736+98.87 TO STA. 757+20.00	X				2,021		
R083	STA. 757+66.77 TO STA. 763+09.05	X				535		
R083-R087	STA. 763+78.78 TO STA. 814+49.94	X				5,095		
R085	STA. 783+23.15 TO STA. 784+74.92		X			152		
R087	STA. 814+99.92 TO STA. 821+65.87	X				683		
R087-R088	STA. 822+03.75 TO STA. 835+80.95	X					1,369	
R088-R089	STA. 835+80.95 TO STA. 847+47.29	X				1,156		
R088	STA. 836+73.19 TO STA. 839+55.09		X	283				
R088-R090	STA. 839+55.09 TO STA. 862+19.26		X			2,276		
R090-R091	STA. 863+10.41 TO STA. 884+66.01		X			2,161		
R092	STA. 885+29.85 TO STA. 889+24.91		X					395
	TOTALS			4,062	1	19,747	5,272	395

★ NOTE: EXTENTS TO INCLUDE LF OF SWF FOR GATES.

SUMMARY OF GUARDRAIL

SHEET NO.	STATION EXTENTS	LT.	RT.	BEAM GUARDRAIL W-BEAM SINGLE 623(A)	GUARDRAIL END TREATMENT (31") 623(G)	GUARDRAIL BRIDGE CONN-THRIE BEAM (31") 623(I)	GUARDRAIL DELINEATORS (TYPE 2, CODE 1) 853	TOTAL PANEL LENGTH INCLUDING ANCHOR UNITS
				LF	EA	EA	EA	LF
R082	STA. 740+69.64 TO STA. 742+84.66		X	150.00	1	1	5	215.02
R082	STA. 741+94.64 TO STA. 742+84.66	X		25.00	1	1	2	90.02
R082-R083	STA. 749+45.12 TO STA. 751+60.14	X		150.00	1	1	5	215.02
R082-R083	STA. 749+45.12 TO STA. 750+35.14		X	25.00	1	1	2	90.02
	TOTALS			350.00	4	4	14	

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SUMMARIES (ROADWAY)
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. AR03

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SUMMARY OF DRIVES & SECTION LINE RETURNS

SHEET NO.	LOCATION STATION	LT.	RT.	TYPE	WIDTH	LENGTH	DRIVE RADII R1 FT	DRIVE RADII R2 FT	TRAFFIC BOUND SURFACE COURSE TYPE E 402(E) TON	TACK COAT 407(B) GAL	SUPERPAVE TYPE S3 (PG 64-22 OK) 411(B) TON	SUPERPAVE TYPE S4 (PG 64-22 OK) 411(C) TON
R071	STA. 578+15.35		X	DRIVE	14'	26.30'	15'	15'	2.42	5.33	10.44	3.90
R071	STA. 578+63.00		X	DRIVE	12'	28.34'	15'	15'	2.46	4.83	9.50	3.53
R072	STA. 585+67.48		X	DRIVE	12'	90'	15'	15'	13.79	4.83	9.50	3.53
R072	STA. 591+43.28	X		DRIVE	12'	70'	15'	15'	10.11	4.83	9.50	3.53
R072	STA. 591+85.28	X		DRIVE	12'	70'	15'	15'		16.13	31.32	11.85
R072	STA. 594+48.84		X	DRIVE	12'	115'	15'	15'	18.38	4.70	8.96	3.48
R072	STA. 596+37.80		X	DRIVE	16'	115'	15'	15'		33.05	63.48	24.39
R072	STA. 597+82.75		X	DRIVE	18'	115'	15'	15'		36.88	70.64	27.25
R073	STA. 604+83.74	X		℄ RETURN	20'	60'	25'	25'		25.03	47.99	18.48
R073	STA. 604+83.74		X	℄ RETURN	20'	90'	25'	25'		35.19	67.36	26.01
R073	STA. 607+77.89	X		DRIVE	18'	75'	15'	15'		24.66	47.30	18.21
R073	STA. 614+77.60		X	DRIVE	18'	115'	15'	15'		36.88	70.64	27.25
R074	STA. 618+06.97		X	DRIVE	17'	90'	15'	15'		27.74	53.25	20.48
R075	STA. 630+15.00	X		DRIVE	14'	75'	15'	15'	12.83	5.33	10.44	3.90
R075	STA. 631+52.98		X	DRIVE	14'	90'	15'	15'	16.04	5.33	10.44	3.90
R075	STA. 635+74.02	X		DRIVE	14'	80.50'	15'	15'	13.72	5.33	10.44	3.90
R075	STA. 640+65.29		X	DRIVE	18'	90'	15'	15'		29.24	56.05	21.60
R076	STA. 651+28.58	X		DRIVE	12'	100'	15'	15'	15.62	4.83	9.50	3.53
R076	STA. 657+95.68	X		DRIVE	12'	100'	15'	15'		22.30	43.22	16.40
R078	STA. 676+55.37	X		DRIVE	12'	140'	15'	15'		30.52	59.09	22.45
R079	STA. 704+56.28	X		DRIVE	12'	75'	15'	15'		17.16	33.30	12.61
R080	STA. 708+00.00	X		DRIVE	12'	75'	15'	15'		17.16	33.30	12.61
R080	STA. 710+57.48	X		℄ RETURN	30'	70'	25'	25'		40.08	76.23	29.70
R080	STA. 710+57.74		X	℄ RETURN	30'	90'	25'	25'		50.19	95.36	37.21
R080	STA. 716+41.56	X		DRIVE	14'	71'	15'	15'	11.97	5.33	10.44	3.90
R081	STA. 733+76.26		X	DRIVE	18'	90'	15'	15'	20.54	6.33	12.30	4.65
R082	STA. 736+70.69	X		DRIVE	14'	100'	15'	15'		25.63	49.44	18.89
R082	STA. 738+25.00	X		DRIVE	14'	105'	15'	15'	19.24	5.33	10.44	3.90
R083	STA. 757+09.05	X		DRIVE	14'	106'	15'	15'		27.07	52.19	19.94
R083	STA. 763+25.44		X	DRIVE	12'	105.60'	15'	15'	16.65	4.83	9.50	3.53
R083	STA. 763+43.26	X		℄ RETURN	22'	85'	25'	25'		36.33	69.42	26.8
R084	STA. 767+62.91		X	DRIVE	12'	90'	15'	15'	13.79	4.83	9.50	3.53
R084	STA. 776+17.20		X	DRIVE	12'	90'	15'	15'		20.24	39.25	14.88
R085	STA. 780+62.08	X		DRIVE	22'	255.60'	50'	50'	70.29	35.07	67.0	25.3
R085	STA. 787+24.24		X	DRIVE	12'	151.50'	15'	15'		35.18	1	25.5
R085	STA. 787+76.45		X	DRIVE	12'	152'	15'	15'	25.18	4.83	9.	3.53
R085	STA. 788+00.00	X		DRIVE	16'	110'	15'	15'	23.16	5	11.3	4.27
R085	STA. 790+13.52		X	DRIVE	12'	90'	15'	15'	13.79	4.8	9.50	3.53
R086	STA. 797+42.26		X	DRIVE	12'	90'	15'	15'		0.24	39.25	14.88
R086	STA. 799+44.69		X	DRIVE	12'	90'	15'	15'		83	9.50	3.53
R086	STA. 804+67.00		X	DRIVE	12'	90'	15'	15'	3.79	4.8	9.50	3.53
R086	STA. 805+92.75		X	DRIVE	30'	90'		50'		43.60	83.05	32.29
R086	STA. 809+09.57	X		DRIVE	12'	60'	50'	50'		28.60	55.05	21.09
R087	STA. 811+29.61	X		DRIVE	12'		15'	15'		22.30	43.22	16.40
R087	STA. 814+75.45	X		DRIVE	12'	100.6	15'	15'		22.46	43.54	16.52
R087	STA. 816+94.29		X	DRIVE	12'	205'	15'	15'	31.20	4.83	9.50	3.53
R087	STA. 821+00.00		X	DRIVE	12'	100'	15'	15'		22.30	43.22	16.40
R087	STA. 821+35.00	X		DRIVE	14'	126.90'	15'	15'	23.92	5.33	10.44	3.90
R088	STA. 826+95.05		X	DRIVE	12'	100'	15'	15'	15.62	4.83	9.50	3.53
R088	STA. 829+30.02		X	DRIVE	24'	145'	25'	25'		87.27	165.64	64.73
R088	STA. 829+80.86	X		DRIVE	20'	187.65'	50'	50'	41.82	35.27	67.49	26.07
R088	STA. 834+85.40		X	DRIVE	20'	72.80'	15'	15'		28.66	54.58	21.23
R089	STA. 842+83.17	X		DRIVE	12'	95'	15'	15'		21.27	41.24	15.64
R089	STA. 843+75.32	X		DRIVE	20'	97.60'	15'	15'	25.99	6.83	13.24	5.02
R089	STA. 854+38.74	X		DRIVE	12'	140'	15'	15'		30.52	59.09	22.45
R090	STA. 862+66.60		X	℄ RETURN	26'	150'	25'	25'		70.53	134.09	52.27
R090	STA. 862+82.37	X		DRIVE	20'	110'	15'	15'	28.86	6.83	13.24	5.02
R090	STA. 869+78.41	X		℄ RETURN	26'	100'	25'	25'		48.58	92.48	35.99
R091	STA. 875+45.31		X	DRIVE	12'	100.50'	15'	15'	15.72	4.83	9.50	3.53
R091	STA. 882+20.44		X	DRIVE	18'	220'	15'	15'	56.12	6.33	12.30	4.65
R092	STA. 885+06.57	X		DRIVE	36'	64.60'	50'	50'	8.22	48.30	91.81	35.80
R092	STA. 885+06.57		X	DRIVE	36'	100'	25'	25'		62.30	117.89	46.26
								TOTALS	615.04	1,350.88	2,592.23	996.83

UNLESS OTHERWISE NOTED STD. DRIVES CALLED FOR ON P&P SHEETS ARE BASED ON ODOT STANDARD RDI-4-0 WITH 15' RADII.

SUMMARY OF DITCH TREATMENT

SHEET NO.	STATION EXTENTS AND LOCATION	LT.	RT.	LENGTH LF	BOTTOM WIDTH FT	CURTAIN WALLS EA	CLASS C CONCRETE 509(D) CY	DESIGN NO.
R072	STA. 590+77 TO STA. 591+07	X		28.00	8.00	2	5.41	2A
R073	STA. 612+00 TO STA. 613+00		X	103.00	8.00	3	18.90	2A
R073-R074	STA. 612+00 TO STA. 616+81	X		490.00	8.00	6	88.00	2A
R074	STA. 617+23 TO STA. 624+00	X		716.00	8.00	9	128.64	2A
R075	STA. 636+12 TO STA. 641+00	X		489.00	8.00	6	87.82	2A
R075	STA. 642+00 TO STA. 643+73	X		176.00	8.00	3	31.80	2A
R075-R076	STA. 644+00 TO STA. 646+00	X		202.00	8.00	4	36.63	2A
R076	STA. 647+66 TO STA. 648+13		X	47.00	8.00	2	8.77	2A
R076	STA. 647+73 TO STA. 650+92	X		321.00	8.00	5	57.89	2A
R077	STA. 660+00 TO STA. 664+29	X		434.00	8.00	6	78.10	2A
R077	STA. 663+00 TO STA. 666+00		X	315.00	8.00	5	56.83	2A
R077	STA. 664+42 TO STA. 667+50	X		315.00	8.00	5	56.83	2A
R077-R078	STA. 671+50 TO	X		467.00	8.00	6	83.93	2A
R078	STA. 679+ TO STA. 683+	X		318.00	8.00	5	57.36	2A
R079	STA. 691+00 TO STA. 699+50	X		856.00	8.00	10	153.62	2A
R07	STA. 691+00 TO STA. 695+00		X	400.00	8.00	5	71.86	2A
079	STA. 697+32 TO STA. 698+53		X	123.00	8.00	3	22.43	2A
R080	STA. 7 +00 TO STA. 710+24	X		127.00	8.00	3	23.14	2A
R0	STA. 721+00 TO STA. 725+05	X		405.00	8.00	6	72.97	2A
R0	STA. 737+12 TO STA. 737+75	X		64.00	8.00	2	11.77	2A
R083	STA. 757+59 TO STA. 760+00	X		242.00	8.00	4	43.70	2A
R084	STA. 776+00 TO STA. 779+80	X		384.00	8.00	5	69.03	2A
R085-R086	STA. 788+52 TO STA. 801+00	X		1,250.00	8.00	14	224.19	2A
R086	STA. 796+00 TO STA. 797+07		X	107.00	8.00	3	19.60	2A
R086	STA. 797+77 TO STA. 799+07		X	130.00	8.00	3	23.67	2A
R086	STA. 799+83 TO STA. 801+00		X	117.00	8.00	3	21.37	2A
R086	STA. 805+03 TO STA. 805+66		X	63.00	8.00	2	11.59	2A
R087	STA. 812+94 TO STA. 814+06	X		114.00	8.00	3	20.84	2A
R087	STA. 815+72 TO STA. 820+10	X		443.00	12.00	6	101.86	2A
R087	STA. 820+10 TO STA. 820+97	X		86.00	8.00	2	15.66	2A
R087	STA. 821+79 TO STA. 822+30	X		51.00	8.00	2	9.47	2A
R088	STA. 837+00 TO STA. 839+68	X		285.00	8.00	4	51.30	2A
R089	STA. 852+00 TO STA. 853+95	X		195.00	8.00	3	35.16	2A
R089-R090	STA. 852+00 TO STA. 861+84		X	986.00	8.00	11	176.84	2A
R089-R090	STA. 854+83 TO STA. 858+00	X		317.00	8.00	5	57.19	2A
R090	STA. 863+50 TO STA. 866+36		X	288.00	8.00	4	51.83	2A
R090-R091	STA. 867+18 TO STA. 873+00		X	583.00	8.00	7	104.67	2A
R091	STA. 877+60 TO STA. 879+00		X	140.00	8.00	3	25.44	2A
R091	STA. 883+52 TO STA. 884+79		X	133.00	8.00	3	24.20	2A
						TOTALS	2,240.31	

SUMMARY OF EARTHWORK QUANTITIES

CONSTRUCTION PHASE	UNCLASSIFIED EXCAVATION 202(A) CY	ROCK EXCAVATION 202(C) CY	EMBANKMENT +15% COMP. CY	EXCESS EXCAVATION CY
PHASE 1	295,183	121,042	313,685	102,540
PHASE 2	102,617	36,511	80,058	59,070
PHASE 3	17,389	13,223	6,511	24,101
TOTALS	415,189	170,776	400,254	185,711

FOR THE PURPOSES OF ESTIMATING ROCK EXCAVATION, REGIONS WITHIN THE SANDSTONE STRATA, WHERE THE TEXAS CONE VALUES ARE LESS THAN 2 INCHES PER 100 BLOWS, WILL BE CONSIDERED AS ROCK EXCAVATION. THE REMAINING AREAS OF SANDSTONE WILL BE CONSIDERED AND PAID FOR AS UNCLASSIFIED EXCAVATION. FOR ADDITIONAL DETAILS REFER TO THE ROCK CUT ANALYSIS REPORT, AVAILABLE UPON REQUEST.

Preliminary Plans

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SUMMARIES (ROADWAY)

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. AR04

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SUMMARY OF TEMPORARY SEDIMENT CONTROLS

SHEET NO.	STATION	TEMPORARY SILT FENCE 221(B)	TEMPORARY SEDIMENT FILTER 221(C)	TEMPORARY SIL T DIKE 221(E)	TEMPORARY ROCK FILTER DAM TYPE 4 221(F)
		LF	EA	LF	CY
R004, R014	BOP TO STA. 585+00.00	1,197			
R004, R014	STA. 585+00.00 TO STA. 600+00.00	401		210	2.79
R005, R015	STA. 600+00.00 TO STA. 615+00.00	547		168	
R005, R015	STA. 615+00.00 TO STA. 630+00.00	1,428	1	203	2.79
R006, R016	STA. 630+00.00 TO STA. 645+00.00	1,501		231	6.28
R006, R016	STA. 645+00.00 TO STA. 660+00.00	1,518		301	3.14
R007, R017	STA. 660+00.00 TO STA. 675+00.00	1,479	2	315	6.98
R007, R017	STA. 675+00.00 TO STA. 690+00.00	1,293	1	259	6.28
R008, R018	STA. 690+00.00 TO STA. 705+00.00	1,322		238	4.89
R008, R018	STA. 705+00.00 TO STA. 720+00.00	1,456	1	182	3.84
R009, R019	STA. 720+00.00 TO STA. 735+00.00	1,495		154	21.99
R009, R019	STA. 735+00.00 TO STA. 750+00.00	2,049		77	6.98
R010, R020	STA. 750+00.00 TO STA. 765+00.00	2,262		21	34.90
R010, R020	STA. 765+00.00 TO STA. 780+00.00	1,953		70	53.04
R011, R021	STA. 780+00.00 TO STA. 795+00.00	1,566			60.36
R011, R021	STA. 795+00.00 TO STA. 810+00.00	612	1	245	49.90
R012, R022, R025	STA. 810+00.00 TO STA. 825+00.00	687		168	5.59
R012, R022, R025	STA. 825+00.00 TO STA. 840+00.00	940		210	6.28
R013, R023, R026	STA. 840+00.00 TO STA. 855+00.00	300		105	37.68
R013, R023, R026	STA. 855+00.00 TO STA. 870+00.00	1,688		28	60.72
R024, R027	STA. 870+00.00 TO STA. 885+00.00	2,080		63	26.87
R024, R027	STA. 885+00.00 TO EOP	773		21	
	TOTALS	28,547	6	3,269	401.30

SUMMARY OF REMOVALS

SHEET NO.	STATION EXTENTS	COLD MILLING PAVEMENT 412	REMOVAL OF HEADWALL 619(B)	REMOVAL OF FENCE 619(B)	REMOVAL OF ASPHALT PAVEMENT 619(B)	REMOVAL OF GUARDRAIL 619(B)	SAWING PAVEMENT 619(C)
		SY	EA	LF	SY	LF	LF
	SH-29 MAINLINE						
R057	BOP TO STA. 585+00.00	5,333.32			2,516.35		1,200
R057	STA. 585+00.00 TO STA. 600+00.00	213.28		1,228	5,365.94		48
R058	STA. 600+00.00 TO STA. 615+00.00			1,709	4,959.13		242
R058	STA. 615+00.00 TO STA. 630+00.00			1,809	4,773.43		437
R059	STA. 630+00.00 TO STA. 645+00.00			1,469	4,158.35		
R059	STA. 645+00.00 TO STA. 660+00.00			1,725	4,110.12		
R060	STA. 660+00.00 TO STA. 675+00.00			1,412	4,914.45		550
R060	STA. 675+00.00 TO STA. 690+00.00			1,095	4,856.83		493
R061	STA. 690+00.00 TO STA. 705+00.00			1,574	4,154.76		
R061	STA. 705+00.00 TO STA. [illegible]0.00			1,513	6,074.07		362
R062	STA. 720+00.00 TO ST[illegible]735+00.00			1,500	4,227.23		
R062	STA. 735+00.00 TO ST[illegible]			1,856	4,383.91	553	
R063	STA. 750+[illegible]00 TO STA. 765+00.00			1,823	4,490.31		113
R063	STA. 765[illegible].00 TO STA. [illegible]			1,639	4,334.26		
R064	STA. 780+[illegible]00 TO STA. 795+00.00			1,542	4,820.17	557	
R06[illegible]	STA. [illegible]5+00.00 TO STA. 810+00.00			1,904	4,937.74		
R06[illegible]	STA. 8[illegible]00.00 TO STA. 825+00.00			1,697	6,140.94		820
R065	STA. 8[illegible]00.00 TO STA. 840+00.00			1,956	5,592.83		384
R066	STA. [illegible]840+00.00 TO STA. 855+00.00			2,337	5,678.77		438
R[illegible]	STA. 855+00.00 TO STA. 870+00.00		1	1,593	6,452.04	555	142
R067	STA. 870+00.00 TO STA. 885+00.00	1,288.68	1	1,657	4,129.27		675
R067	STA. 885+00.00 TO EOP	1,246.88		495	74.16		108
	TOTALS	8,082.16	2	33,533	101,145.06	1,665	6,012

SUMMARY OF MAILBOX

SHEET NO.	STATION	LT.	RT.	TYPE	MAILBOX INSTALLATION-SINGLE 629(A)	MAILBOX INSTALLATION-MULTIPLE 629(B)	REMOVAL OF MAILBOX INSTALLATION 619(C)	MAILBOX 629(E)
					EA	EA	EA	EA
R074	615+03.60		21.50'	1	1		1	1
R074	618+26.52		21.50'	1	1		1	1
R075	630+06.47		21.50'	1	1		1	1
R075	640+39.29		21.50'	1	1		1	1
R076	657+22.68		21.50'	1	1		1	1
R078	676+32.37		21.50'	1	1		1	1
R080	708+24.00		21.50'	1		1	2	2
R081	733+50.26		21.50'	1	1		1	1
R084	775+94.20		21.50'	1	1		1	1
R085	787+01.24		21.50'	1	1		1	1
R086	797+65.26		21.50'	1	1		1	1
R087	811+52.61	21.50'		1	1		1	1
R087	814+52.45	21.50'			1		1	1
R087	821+23.00		21.50'	1	1		1	1
R088	829+69.02		21.50'	1	1		1	1
R088	834+58.40		21.50'	1	1		1	1
R089	843+48.32	21.50'		1	1		1	1
R089	854+61.74	21.50'		1	1		1	1
R091	884+61.71	32.70'		1	1		1	1
				TOTALS	18	1	20	20

SUMMARY OF TEMPORARY DRIVES & SECTION LINE RETURNS

SHEET NO.	LOCATION			TYPE	WIDTH	LENGTH	DRIVE RADII		TRAFFIC BOUND SURFACE COURSE TYPE E 402 (E)
	STATION	LT.	RT.				R1	R2	
							FT	FT	TON
R072	STA. 591+90.76		X	DRIVE	18'	27'	15'	15'	8.84
R073	STA. 607+77.89		X	DRIVE	18'	25.50'	15'	15'	8.43
R075	STA. 635+74.02		X	DRIVE	14'	27'	15'	15'	7.22
R076	STA. 651+28.58		X	DRIVE	12'	27.30'	15'	15'	6.47
R076	STA. 657+95.68		X	DRIVE	12'	26.75'	15'	15'	6.37
R078	STA. 676+55.37		X	DRIVE	12'	27'	15'	15'	6.41
R079	STA. 704+56.28		X	DRIVE	12'	29'	15'	15'	6.78
R080	STA. 708+00.00		X	DRIVE	12'	29'	15'	15'	6.78
R080	STA. 716+41.56		X	DRIVE	14'	28.30'	25'	25'	7.50
R082	STA. 736+70.69		X	DRIVE	14'	27.35'	15'	15'	7.30
R082	STA. 738+25.00		X	DRIVE	14'	27.20'	15'	15'	7.27
R083	STA. 757+09.05		X	DRIVE	12'	27'	15'	15'	6.41
R083	STA. 763+37.35		X	DRIVE	36'	26'	0'	0'	14.14
R084	STA. 776+48.70		X	DRIVE	75'	27'	0'	0'	30.48
R085	STA. 787+50.35		X	DRIVE	36'	27.30'	15'	15'	16.30
R086	STA. 809+09.57		X	DRIVE	12'	25'	50'	50'	18.88
R087	STA. 811+29.61		X	DRIVE	12'	24.70'	15'	15'	5.99
R087	STA. 814+75.45		X	DRIVE	12'	24'	15'	15'	5.86
R087	STA. 821+35.00		X	DRIVE	12'	24.60'	15'	15'	5.97
R088	STA. 829+80.86		X	DRIVE	20'	21'	15'	15'	7.83
R090	STA. 862+73.38	X		DRIVE	36'	22'	0'	0'	11.97
R091	STA. 875+45.31	X		DRIVE	20'	15'	15'	15'	6.01
							TOTALS		209.21

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		SUMMARIES (ROADWAY)
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. AR05

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DESCRIPTION	REVISIONS	DATE

SUMMARY OF DRAINAGE STRUCTURES

STRUCTURE NO.	SHEET NO.	STATION	DESCRIPTION	DESIGN	TOP OF GRATE	SIDE DRAIN AND CROSS DRAIN FLOW		UNCLASSIFIED EXCAVATION 202(A)	STRUCTURAL EXCAVATION, UNCLASSIFIED 501(A)	CLAS AA CONCRETE 509(A)	REINFORCING STEEL 511(A)	INLET (SMD-TYPE 2A) 611(G)	INLET (SMD-TYPE 2B) 611(G)	INLET CDI RCB DES. 13 611(G)	INLET CDI RCP DES. 3 611(G)	INLET CDI RCP DES. 5 611(G)	ADD'L DEPTH IN INLET CDI RCB DES. 13 611(H)	ADD'L DEPTH IN INLET CDI RCP DES. 3 611(H)	ADD'L DEPTH IN INLET CDI RCP DES. 5 611(H)	R.C. PIPE CLASS III 613(A)			42"R.C. PIPE CLASS IV 613(A)	CORR. GALV. STEEL PIPE 613(B)			CET 613(M)							STANDARD BEDDING MATERIAL CLASS C *	TRENCH EXCAVATION *
																				24"	30"	36"		24"	30"	36"	TYPE B4	TYPE C4	TYPE D4	TYPE B6	TYPE C6	TYPE D6	TYPE CC6	
						FL IN	FL OUT	CY	CY	CY	LB	EA	EA	EA	EA	EA	VF	VF	VF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	CY	CY
1	R072	585+67.48	CONST. 24"X70' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1249.69	1247.67																	70						2				
2	R072	590+87.75	CONST. 3'x3'x86' RCB 43' LG. LT. & 43' LG. RT. W/STD. HDWL. WINGS & APRON.	SBI-5-2, RCB-C1-3&4&5(2-20)-01E, RCB- E1-H3-0-1-01E, RCB-E1-H3-0-2-01E, RCB-CW1-D4-0-01E		1241.05	1240.83	176.64	12.09	49.72	7,240.20																			2					
3	R072	591+64.28	CONST. 24"X114' LG. CGSP SD 54.98' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1244.94	1241.32																	114						2				
4	R072	594+48.84	CONST. 24"X66' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1247.92	1247.17																	66						2				
5	R072	596+37.80	CONST. 24"X76' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1248.87	1248.72																	76						2				
6	R073	604+83.74	CONST. 24"X68' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1235.57	1233.80																	68						2				
7	R073	607+77.89	CONST. 24"X88' LG. CGSP SD 50.93' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1228.18	1225.89																	88						2				
8	R073	614+80.24	CONST. 2-30"X98' LG. CGSP SD 88.81' RT. W/2 TYPE CC6 CETS	CET6D-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1207.20	1205.29																		196							2			
9	R074	616+70.45	CONST. 6'x6'x194.76' LG. RCB 119' LT. & 71.85' RT SKWD LT. FWD 11.5° W/CDIB DESIGN 13 W/11.5° SKEW 80.5' RT W/STD 0° SKEW HDWL WINGS & APRON LT	CDIB-2-2, SBI-5-2, RCB-C1-6(14-20)-01E, RCB- E1-H6-0-1-01E, RCB-E1-H6-0-2-01E, RCB-CW1-D4-0-01E	1200.61	1190.27	1179.00	3,084.47	55.92	191.31	29,454.00			1			2.84																		
10	R074	618+06.97	CONST. 30"X76' LG. CGSP SD 92.75' RT. W/2 TYPE C6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1208.15	1205.16																		76					2				
11	R075	631+52.98	CONST. 24"X82' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1229.54	1228.60																	82						2				
12	R075	635+74.02	CONST. 24"X68' LG. CGSP SD 49.70' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1221.48	1219.44																	68						2				
13	R075	639+57.48	CONST. 3'x3'x93' LG. RCB 50' LT. & 43' RT. W/STD. HDWL. WINGS & APRON.	SBI-5-2, RCB-C1-3&4&5(2-20)-01E, RCB- E1-H3-0-1-01E, RCB-E1-H3-0-2-01E, RCB-CW1-D4-0-01E		1205.66	1203.12	81.07	12.81	[illegible]	7,525.10																							
14	R075	643+86.18	CONST. 5'x4'x126' LG. RCB 66' LT. & 60' RT. W/PI @ 36' RT. W/STD. HDWL. WINGS & APRON.	SBI-5-2, RCB-C1-3&4&5(2-20)-01E, RCB- E1-H4-0-1-01E, RCB-E1-H4-0-2-01E, RCB-CW1-D4-0-01E		1197.00	1188.37	115.77	31.09	101.9[illegible]	16,643.00																							
15	R076	647+77.58	CONST. 36"x137' LG. RCP 74.33' LT. & 62.33' RT. SKWD RT. FWD 8° W/TYPE D4 CET LT. & D6 CET RT.	CET4S-4-2, CET6S-4-2, SPI-5-2, PBB-1-2, FHTCP-4-1		12[illegible].92	119[illegible].6															137							1		1		134.20	187.85
16	R076	651+28.58	CONST. 24"X70' LG. CGSP SD 50.93' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1209.[illegible]	120[illegible].13																	70						2				
17	R076	657+95.68	CONST. 24"X80' LG. CGSP SD 50.93' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		12[illegible].70	[illegible]004.84																	80						2				
18	R077	664+34.16	CONST. DES. 5 CDIP 82.33' RT STUB 42"x194' LG CLASS IΣ RCP LT. W/TYPE D4 CET	CET4S-4-2, CDIP-2-2, SPI-5-2, PBB-1-2, [illegible]HTCP-4-1	1187	1174.	1170.00									1			8.93				194						1			399.32	501.17
19	R077	672+40.96	CONST. SMD TYPE 2A 57.21' RT. STUB 30"x128' LG RCP LT. W/TYPE C4 CET	CET4S-4-2, SMD-4-2, SPI-5-2, PBB-1-2, FH[illegible]P-4-1	1198.31	1194.67	1190.04					1									128							1				82.40	117.69
20	R078	676+55.37	CONST. 24"X80' LG. CGSP SD 50.93' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, F[illegible]MMP-[illegible]		1199.89	1199.40																	80						2				
21	R078	682+59.40	CONST. DES 3 CDIP 48.18' RT. W/9.94' ADD'L DEPTH STUB 155' OF 30" RCP SKWD LT. FWD 20.5° W/TYPE C4 CET	CET4S-[illegible]DIP-2-[illegible]PI-5-2-[illegible]1-2, FH[illegible]CP-4-1	1192.16	1179.18	1173.38								1			9.94			155							1				228.95	271.70
22	R079	697+64.40	CONST. 4'X4'X129.19' LG RCB 57' LT & 55' RT. SKWD 30° RT. FWD W/STD. HDWL. WINGS & APRON.	[illegible]-5-2, RCB-C[illegible]X4&5([illegible]0)-01E, R[illegible]-30-1-01E, R[illegible]E1-H4-30-[illegible]E, RCB-[illegible]H4-30-3-01E, RCB-CW1-D4-30-01E		1143.74	1142.91	659.31	29.41	112.49	14,342.59																							
23	R079	704+56.28	CONST. 24"X82' LG. CGSP SD 50.93' LT. W/2 TYPE B6 CETS	CET[illegible]E, SPI-5-2, PBB-1-2, FHTMMP-2-1		1142.05	1141.23																	82						2				
24	R080	708+00.00	CONST. 30"X80' LG. CGSP SD 50.93' LT. W/2 TYPE C6 CETS	CET6S-[illegible]P, SPI-5-2, PBB-1-2, FHTMMP-2-1		1138.62	1137.78																		80					2				
25	R080	710+07.80	CONST. 36"x150' LG. RCP 53' LT. & 97' RT. SKEWED 8° RT. FWD W/2 TYPE D4 CET'S	CET4S-4-2, SPI-5-2, PBB-1-2, FHTCP-4-1		1134.25	1130.11															150							2				146.93	205.67
26	R080	715+09.40	EXTEND 24"X65.70' RCP 98' LG 56' LT. W/TYPE B6 CET LT. & TYPE B4 CET RT.	CET4S-4-2, CET6S-4-2, SPI-5-2, PBB-1-2, FHTCP-4-1		1129.07	1124.49													98								1		1			45.14	70.13
27	R081	724+91.06	CONST. 4'X4'X109' LG. RCB 44' LT. & 65' RT. W/STD. HDWL. WINGS & APRON.	SBI-5-2, RCB-C1-3&4&5(2-20)-01E, RCB- E1-H4-0-1-01E, RCB-E1-H4-0-2-01E, RCB-CW1-D4-0-01E		1104.45	1103.21	557.31	24.09	89.19	11,325.70																							
28	R081	733+76.26	CONST. 24"X78' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1101.31	1100.49																	78						2				
29	R082	736+70.69	CONST. 30"X78' LG. CGSP SD 50.93' LT. W/2 TYPE C6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1097.82	1095.77																		78					2				
30	R082	738+25.00	CONST. 36"X96' LG. CGSP SD 64.41' LT. W/2 TYPE D6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1092.40	1090.16																			96					2				
				TOTALS THIS SHEET (SHEET AR06)				4,674.57	165.41	596.65	86,530.59	1	0	1	1	1	2.84	9.94	8.93	98	283	287	194	1,022	430	96	1	2	4	27	6	3	2	1,036.94 *	1,354.21 *

Preliminary Plans

★ FOR INFORMATIONAL PURPOSES ONLY.

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DRAINAGE SUMMARY

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. AR06

R:\114574\DRAWINGS\29657(04)\29657(04) DRAINAGE SUMMARY.DWG 10/24/2022 10:44 AM

DESCRIPTION	REVISIONS	DATE

SUMMARY OF DRAINAGE STRUCTURES

STRUCTURE NO.	SHEET NO.	STATION	DESCRIPTION	DESIGN	TOP OF GRATE	SIDE DRAIN AND CROSS DRAIN FLOW		UNCLASSIFIED EXCAVATION 202(A)	STRUCTURAL EXCAVATION, UNCLASSIFIED 501(A)	CLAS AA CONCRETE 509(A)	REINFORCING STEEL 511(A)	INLET (SMD-TYPE 2A) 611(G)	INLET (SMD-TYPE 2B) 611(G)	INLET CDI RCB DES. 13 611(G)	INLET CDI RCP DES. 3 611(G)	INLET CDI RCP DES. 5 611(G)	ADD'L DEPTH IN INLET CDI RCB DES. 13 611(H)	ADD'L DEPTH IN INLET CDI RCP DES. 3 611(H)	ADD'L DEPTH IN INLET CDI RCP DES. 5 611(H)	R.C. PIPE CLASS III 613(A)			42" R.C. PIPE CLASS III 613(A)	CORR. GALV. STEEL PIPE 613(B)			CET 613(M)								★ STANDARD BEDDING MATERIAL CLASS C	★ TRENCH EXCAVATION
																				24"	30"	36"		24"	30"	36"	TYPE B4	TYPE C4	TYPE D4	TYPE B6	TYPE C6	TYPE D6	TYPE CC6		
						FL IN	FL OUT	CY	CY	CY	LB	EA	EA	EA	EA	EA	VF	VF	VF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	CY	CY
31	R083	757+09.05	CONST. 36"X82' LG. CGSP SD 64.83' LT. W/2 TYPE D6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1085.87	1084.11																		82						2				
32	R083	763+25.44	CONST. 24"X72' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1103.95	1102.07																	72						2					
33	R083	763+43.26	CONST. 2-30"X80' LG. CGSP SD 50.93' LT. W/2 TYPE CC6 CETS	CET6D-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1104.51	1102.43																		160								2			
34	R084	767+62.91	CONST. 24"X94' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1115.61	1113.16																	94						2					
35	R084	776+17.20	CONST. 24"X74' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1120.59	1117.58																	74						2					
36	R085	780+62.05	CONST. 24"X160' LG. CGSP SD 85.22' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1099.26	1098.48																	160						2					
37	R085	787+50.35	CONST. 2-30"X130' LG. CGSP SD 93.00' RT. W/2 TYPE CC6 CETS	CET6D-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1106.22	1103.10																		260								2			
37A	R085	787+90.95	CONST. 36"X122' LG. CGSP SD 93.00' LT. W/2 TYPE D6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1102.75	1099.73																		122						2					
38	R085	790+13.52	CONST. 30"X58' LG. CGSP SD 88.16' RT. W/2 TYPE C6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1114.77	1112.98																		58								2			
39	R086	797+42.26	CONST. 24"X66' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1144.80	1142.49																	66						2					
40	R086	799+44.69	CONST. 24"X72' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1151.27	1149.21																	72						2					
41	R086	804-67.00	CONST. 24"X68' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1159.34	1158.96																	68						2					
42	R086	808+52.72	CONST. SMD TYPE 2B 50.93' LT. W/30"X179' LG RCP SKWD 30° LT. FWD W/TYPE D4 CET RT.	CET4S-4-2, SMD-4-2, SPI-5-2, PBB-1-2, FHTCP-4-1	1158.01	1153.82	1149.45						1							179										1					115.22	164.58
43	R087	811+29.61	CONST. 24"X80' LG. CGSP SD 50.93' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1154.03	1152.23																	80						2					
44	R087	814+75.45	CONST. TYPE B6 CET 60.24' LT W/24"X140' LG. CGSP SD STUBBED INTO STR. 45	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1134.19	1134.[illegible]																	140						1					
45	R087	815+52.42	CONST. 6'X6'X153' LG. RCB 62' LT. & 91' RT. W/ STD. HDWL, WINGS & APRON	SBI-5-2, RCB-C1-6(14-20)-01E, RCB- E1-H6-0-1-01E, RCB-E1-H6-0-2-01E, RCB-CW1-D4-0-01E		1134.[illegible]	112[illegible].00	810.0[illegible]	51.61	188.66	28,846.30																										
46	R087	816+67.81	CONST. 30"X90' LG. CGSP SD 110.80' RT. W/2 TYPE C6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1[illegible].30	1[illegible]32.4[illegible]																		90						2					
47	R087	821+00.00	CONST. 24"X70' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1156.[illegible]	1154.68																	70						2					
48	R087	821+35.00	CONST. 24"X78' LG. CGSP SD 50.93' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1157.53	1155.49																	78						2					
49	R088	826+95.05	CONST. 24"X84' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1169.03	1167.89																	84						2					
50	R088	829+30.02	CONST. 24"X104' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1171.16	1170.47																	104						2					
51	R088	829+80.86	CONST. 24"X88' LG. CGSP SD 50.93' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1171.34	1170.90																	88						2					
52	R088	834+85.40	CONST. 24"X72' LG. CGSP SD 50.93' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1170.24	1169.55																	72						2					
53	R088	839+78.12	CONST. 3'X3'X173' LG. RCB 90' LT. & 83' RT. W/STD. HDWL. WINGS & APRON.	SBI-5-2, RCB-C1-3&4&5(2-20)-01E, RCB- E1-H3-0-1-01E, RCB-E1-H3-0-2-01E, RCB-CW1-D4-0-01E		1156.36	1147.46	700.61	21.04	77.56	10,781.10																										
54	R089	843+75.32	CONST. 24"X88' LG. CGSP SD 50.93' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1161.70	1160.85																	88						2					
55	R089	854+38.74	CONST. 24"X84' LG. CGSP SD 50.93' LT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1139.88	1137.02																	84						2					
56	R090	862+66.60	CONST. 24"X162' LG. CGSP SD 82.64' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1099.53	1093.24																	162						2					
57	R091	882+20.44	CONST. 24"X162' LG. CGSP SD 86.18' RT. W/2 TYPE B6 CETS	CET6S-4-2, SPI-5-2, PBB-1-2, FHTMMP-2-1		1101.30	1100.67																	162						2					
58	R091	882+78.11	EXTEND EX. 8'x5' RCB 105' LG. FROM 41' LT. TO 59' RT. SKWD. 30° RT. FWD W/STD. HDWL. WINGS & APRON.	SBI-5-2, RCB-C1-8(2-14)-01E, RCB- E1-H5-30-1-01E, RCB-E1-H5-30-2-01E, RCB-E1-H5-30-3-01E, RCB-CW1-D4-30-01E		1103.89	1101.18	563.40	47.68	136.85	17,653.50																										
TOTALS THIS SHEET (SHEET AR07)								2,074.04	120.33	403.07	57,280.90	0	1	0	0	0	0	0	0	0	179	0	0	1,818	568	204	0	0	1	37	4	4	4	115.22	164.58
TOTALS SHEET AR06								4,674.57	165.41	596.65	86,530.59	1	0	1	1	1	2.84	9.94	8.93	98	283	287	194	1,022	430	96	1	2	4	27	6	3	2	1,036.94	1,354.21
TOTALS								6,748.61	285.74	999.72	143,811.49	1	1	1	1	1	2.84	9.94	8.93	98	462	287	194	2,840	998	300	1	2	5	64	10	7	6	1,152.16	1,518.79
																																	★	★

Preliminary Plans

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DESIGN	
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SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DRAINAGE SUMMARY

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. AR07

R:\114574\DRAWINGS\29657(04)\29657(04) DRAINAGE SUMMARY.DWG 10/24/2022 10:44 AM

DESCRIPTION	REVISIONS	DATE

SUMMARY OF TEMPORARY DRAINAGE STRUCTURES

STRUCTURE NO.	SHEET NO.	STATION	DESCRIPTION	DESIGN	SIDE DRAIN & CROSS DRAIN FLOW		CORR. GALV. STEEL PIPE 613(B)	
							18"	24"
					℄ IN	℄ OUT	LF	LF
T1	R072	585+67.48	CONST. 18"X42' LG CGSP SD 37.49' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1250.70	1249.83	42	
T2	R072	591+90.76	CONST. 18"X64' LG CGSP SD 31.14' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1244.04	1243.00	64	
T3	R072	594+48.84	CONST. 18"X56' LG CGSP SD 31.57' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1247.92	1247.04	56	
T4	R072	596+36.24	CONST. 18"X56' LG CGSP SD 31.64' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1248.23	1248.15	56	
T5	R073	604+83.74	CONST. 18"X42' LG CGSP SD 40.94' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1236.04	1235.39	48	
T6	R073	607+77.89	CONST. 18"X50' LG CGSP SD 29.67' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1230.98	1229.99	50	
T7	R073	614+77.60	CONST. 18"X58' LG CGSP SD 40.94' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1207.48	1205.87	58	
T8	R074	618+03.52	CONST. 18"X90' LG CGSP SD 36.87' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1208.34	1205.58	90	
T9	R075	631+52.98	CONST. 18"X54' LG CGSP SD 36.87' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1231.00	1230.38	54	
T10	R075	635+73.88	CONST. 18"X38' LG CGSP SD 37.75' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1222.64	1221.59	38	
T11	R076	651+28.58	CONST. 24"X56' LG CGSP SD 27.50' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1214.62	1213.54		56
T12	R076	657+95.68	CONST. 24"X56' LG CGSP SD 27.31' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1211.96	1210.07		56
T13	R077	676+55.37	CONST. 24"X56' LG CGSP SD 27.39' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1204.10	1203.72		56
T14	R079	704+56.28	CONST. 18"X38' LG CGSP SD 40.98' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1141.66	1141.18	38	
T15	R080	708+00.00	CONST. 18"X38' LG CGSP SD 41.95' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1137.71	1137.21	38	
T16	R081	733+76.26	CONST. 18"X54' LG CGSP SD 32.55' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1103.04	1102.23	54	
T17	R082	736+70.69	CONST. 18"X38' LG CGSP SD 36.63' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1099.52	1098.71	38	
T18	R082	738+25.00	CONST. 24"X52' LG CGSP SD 35.63' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1094.67	1092.72	42	
T19	R083	757+09.05	CONST. 24"X52' LG CGSP SD 36.08' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1085.24	1084.66		52
T20	R083	763+37.35	CONST. 18"X66' LG CGSP SD 32.98' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1105.78	1104.09		52
T21	R084	767+62.91	CONST. 18"X56' LG CGSP SD 26.79' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1116.72	1115.27	56	
T22	R084	776+48.70	CONST. 18"X100' LG CGSP SD 35.64' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1122.49	1120.28	100	
T23	R085	787+50.54	CONST. 18"X128' LG CGSP SD 37.85' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1106.40	1103.19	128	
T24	R085	790+13.52	CONST. 18"X54' LG CGSP SD 36.82' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1115.55	1113.20	54	
T25	R086	797+42.26	CONST. 18"X36' LG CGSP SD 36.82' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1145.89	1144.61	36	
T26	R086	799+44.69	CONST. 18"X42' LG CGSP SD 32.93' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1152.46	1151.27	42	
T27	R086	804+67.00	CONST. 18"X58' LG CGSP SD 32.45' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1159.50	1158.10	58	
T28	R087	811+29.61	CONST. 18"X50' LG CGSP SD 34.58' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1151.10	1149.55	50	
T29	R087	814+75.45	CONST. 18"X54' LG CGSP SD 34.81' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1143.64	1143.09	54	
T30	R087	816+94.29	CONST. 18"X52' LG CGSP SD 35.28' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1145.06	1144.21	52	
T31	R087	821+35.00	CONST. 18"X42' LG CGSP SD 31.86' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1158.71	1157.57	42	
T32	R088	826+95.05	CONST. 18"X56' LG CGSP SD 26.00' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1170.54	1169.68	56	
T33	R088	829+80.86	CONST. 18"X74' LG CGSP SD 31.93' RT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1173.82	1173.44	74	
T34	R089	843+75.32	CONST. 24"X56' LG CGSP SD 81.57' LT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1169.91	1169.51		8
T35	R089	854+38.74	CONST. 18"X52' LG CGSP SD 25.91' LT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1141.49	1139.19	52	
T36	R089	862+73.38	CONST. 18"X76' LG CGSP SD 31.44' LT.	SPI-5-2, PBB-1-2, FHTMPP-2-1	1107.93	1104.96	76	
				TOTALS			1	28

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		DRAINAGE SUMMARY
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. AR08

R:\114574\DRAWINGS\29657(04)\29657(04) DRAINAGE SUMMARY.DWG 10/24/2022 10:44 AM

DESCRIPTION	REVISIONS	DATE

TRAFFIC GENERAL CONSTRUCTION NOTES

REMOVED MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND IT SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY STRUCTURES, ROADWAY SURFACES, STRIPING, RAISED PAVEMENT MARKERS, GUARDRAIL, SLOPES, AND SIGNS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BARRICADES, LIGHTS, AND SIGNING WITHIN THE LIMITS OF CONSTRUCTION. ALL CONSTRUCTION SIGNING WILL BE DONE ACCORDING TO STANDARDS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION", AND AS SHOWN ON TCS STANDARD DRAWINGS.

ALL FIELD MEASUREMENTS PREVAIL ON INSTALLATION AND REMOVAL.

ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL MEET ODOT'S "QUALITY STANDARDS FOR TEMPORARY TRAFFIC CONTROL DEVICES." CHANNELIZING DEVICES SHALL HAVE A MINIMUM HEIGHT OF 36 INCHES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE TEMPORARY TRAFFIC CONTROL DEVICES, AND SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY DEVICE DURING CONSTRUCTION.

ALL WASTE MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THE DISPOSAL OF THIS MATERIAL.

ALL REGULATORY SIGNS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE III SHEETING.

ALL WARNING SIGNS SHALL HAVE FLUORESCENT YELLOW SHEETING. THE FLUORESCENT YELLOW SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) REQUIREMENTS FOR TYPE VIII SHEETING.

ALL GREEN AND BLUE SIGNS ON CONVENTIONAL HIGHWAYS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE III SHEETING.

ALL PANEL AND OVERHEAD SIGNS SHALL HAVE TYPE III HIGH INTENSITY BACKGROUND WITH TYPE VIII LEGENDS AND BORDERS. THE TYPE III BACKGROUND AND THE TYPE VIII LEGENDS AND BORDERS SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION).

THE MANUFACTURER SHALL FURNISH A TYPE 'A' CERTIFICATION IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS, LATEST EDITION, AND SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON THE MATERIAL SUBMITTED FOR APPROVAL.

ALL BROKEN CONCRETE INCLUDING OLD SIGN FOOTINGS WITH STUBS, WASTE MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THE DISPOSAL OF THIS MATERIAL. ANY PIPE POST OR WIDE FLANGE POST ABOVE THE OLD SIGN FOOTINGS SHALL BE CUT AND HANDLED AS PROPERTY OF THE STATE AND SHALL BE NEATLY STACKED ON THE JOB SITE, AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

NO SPLICES SHALL BE PERMITTED IN ANY PIPE OR WIDE FLANGE SIGN POSTS.

ALL ANCHOR BOLTS SHALL BE GRADE A-36 STEEL.

THE STATIONS AND LOCATIONS OF THE SIGN PLACEMENT, AS SHOWN ON THE PLAN SHEETS, ARE APPROXIMATE. EXACT STATIONS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH DEPARTMENT STANDARDS AND THE MUTCD IN ORDER TO PROVIDE OPTIMUM VISIBILITY TO THE ONCOMING/APPROACHING MOTORIST. IF A PROPOSED LOCATION CONFLICTS WITH OTHER SIGNS, UTILITIES OR OTHER ROADWAY FEATURES, THE ENGINEER SHALL BE NOTIFIED.

POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE, EXACT LENGTH SHALL BE DETERMINED BY FIELD SURVEY BY THE CONTRACTOR.

ALL EXISTING AND NEW BREAKAWAY SIGN POSTS, PIPES AND WIDE FLANGE BEAMS SHALL HAVE SHEET METAL BOLT RETAINER PLATES AS SPECIFIED IN O.D.O.T. STD. FGS1-1-(LATEST REVISION). REPLACEMENT COST OF MISSING OR DAMAGED BOLT RETAINER PLATES AND ALL ASSOCIATED HARDWARE AND LABOR SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

AFTER REMOVAL OF ANY SIGN FOOTINGS, THE HOLES SHALL BE FILLED WITH SOIL AND TAMPED AND SHAPED IN A MANNER APPROVED BY THE ENGINEER.

FOR NEW OR EXISTING GROUND MOUNTED SIGNS, MAXIMUM STUB POST PROJECTION ABOVE FOOTING/GROUND LINE SHALL BE 1-3/4" + /- 1/4". MAXIMUM FOOTING PROJECTION ABOVE GROUND LINE SHALL BE NO MORE THAN 2" SHOULD ADDITIONAL SOIL BE REQUIRED, THE ENGINEER WILL DESIGNATE AN AREA TO OBTAIN ADDITIONAL SOIL. ALL ASSOCIATED COSTS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

"THE CONTRACTOR SHALL PROVIDE A PERSON TO BE ON 24 HOUR CALL AS NEEDED AS DETERMINED BY THE ENGINEER. THIS PERSON SHALL HOLD A CURRENT CERTIFICATION FROM THE AMERICAN TRAFFIC SAFETY ASSOCIATION (ATSSA) OR THE OKLAHOMA TRAFFIC ENGINEERING ASSOCIATION (OTEA) AS A TRAFFIC CONTROL TECHNICIAN OR TRAFFIC CONTROL SUPERVISOR."

TRAFFIC CONSTRUCTION PAY QUANTITY NOTES

(TC-1) THE CONTRACTOR SHALL FURNISH AND INSTALL SUCH LIGHTS, SIGNS, BARRICADES, AND PROVIDE FLAGGERS NECESSARY FOR THE CONTROL, SAFETY, AND MAINTENANCE OF TRAFFIC WHEN INSTALLING, RELOCATING OR DELIVERING PORTABLE LONGITUDINAL BARRIER.

(TC-2) QUANTITY INCLUDES SUFFICIENT LENGTH OF PORTABLE LONGITUDINAL BARRIER TO PROVIDE FOR THE LONGEST SECTION SHOWN ON THE PLANS. THIS SAME BARRIER WILL BE USED ON OTHER DETOUR PHASES.

(TC-17) INCLUDES AN ESTIMATED 27,550 LF (PAINT) (4" WIDE) WHITE 27,550 LF (PAINT) (4" WIDE) YELLOW STRIPE.

(TC-19) THIS ITEM INCLUDES AN ESTIMATED 1,000 L.F. (4" WIDE) WHITE AND 1,000 L.F. (4" WIDE) YELLOW STRIPE. THE CONTRACTOR SHALL PROVIDE AND INSTALL AN O.D.O.T. APPROVED REMOVABLE PAVEMENT MARKING TAPE. COST FOR REMOVAL OF THIS TAPE SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. NON-REMOVABLE MARKING TAPE (FOIL BACK) SHALL NOT BE CONSIDERED AN APPROVED EQUAL FOR THIS ITEM.

(TC-20) ALL STRIPING TO BE PLACED ON TEMPORARY SURFACES OR ON SURFACES SCHEDULED TO BE REMOVED SHALL BE DONE WITH PAINT UNLESS OTHERWISE NOTED ON THE PLANS OR STANDARD DRAWINGS. TEMPORARY PAVEMENT MARKINGS PLACED ON FINISHED PAVEMENT OR EXISTING PAVEMENT TO REMAIN IN PLACE SHALL USE ONE OF THE FOLLOWING METHODS:
* REMOVABLE PAVEMENT MARKING TAPE
* CLASS A PAVEMENT MARKERS

(TC-21) INCLUDED IN THE COST OF THIS ITEM SHALL BE INSTALLATION, MAINTENANCE, AND REMOVAL. THIS ITEM SHALL BE BID ACCORDINGLY.

(TC-20) ALL STRIPING TO BE PLACED ON TEMPORARY SURFACES OR ON SURFACES SCHEDULED TO BE REMOVED SHALL BE DONE WITH PAINT UNLESS OTHERWISE NOTED ON THE PLANS OR STANDARD DRAWINGS. TEMPORARY PAVEMENT MARKINGS PLACED ON FINISHED PAVEMENT OR EXISTING PAVEMENT TO REMAIN IN PLACE SHALL USE ONE OF THE FOLLOWING METHODS:
* REMOVABLE PAVEMENT MARKING TAPE
* CLASS A PAVEMENT MARKERS

(TC-21) INCLUDED IN THE COST OF THIS ITEM SHALL BE INSTALLATION, MAINTENANCE, AND REMOVAL. THIS ITEM SHALL BE BID ACCORDINGLY.

(TC-22) AMOUNT SHOWN IS AN APPROXIMATION AND THE ACTUAL AMOUNT OF REMOVAL, IF NECESSARY, SHALL BE DETERMINED BY THE ENGINEER. PRICE BID FOR PAVEMENT MARKING REMOVAL SHALL INCLUDE THE COST OF REMOVING STRIPE, ARROWS, WORDS AND SYMBOLS, AS SHOWN IN THE PLANS. THESE ITEMS MAY CONSIST OF PLASTIC, PAINT, OR NON-REMOVABLE MARKING TAPE.

(TC-24) QUANTITIES SHOWN FOR CONSTRUCTION SIGNING AND STRIPING HAVE BEEN INCREASED TO ALLOW FOR TRAFFIC CONTROL ON CROSS STREETS NOT SHOWN ON THE PLANS.

(TC-26) ALL CONSTRUCTION TRAFFIC CONTROL WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS, AND INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES REQUIRED FOR COMPLETION OF THE PROJECT.

ALL SIGNS AND BARRICADES WHICH ARE SHOWN WITH TYPE 'A' LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS.

(TC-33) ALL CONSTRUCTION WORK ZONE SIGNS SHALL HAVE FLUORESCENT SHEETING. THE FLUORESCENT SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST REVISION)

THE MANUFACTURER SHALL FURNISH A TYPE "D" CERTIFICATION IN ACCORDANCE WITH O.D.O.T. STANDARD SPECIFICATIONS (CURRENT EDITION) SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON MATERIAL SUBMITTED FOR APPROVAL.

(TC-39) THE CONTRACTOR SHALL PROVIDE A PERSON, 24 HOURS A DAY, SEVEN DAYS A WEEK, AT THE CONSTRUCTION SITE TO MAINTAIN AND KEEP ALL TRAFFIC CONTROL DEVICES IN POSITION ANYTIME TRAFFIC IS DIRECTED AWAY FROM THE NORMAL TRAFFIC LANES OR ANYTIME THE ENGINEER DEEMS IT NECESSARY. THIS PERSON SHALL HOLD A CURRENT CERTIFICATION FROM THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) OR OKLAHOMA TRAFFIC ENGINEERING ASSOCIATION (OTEA) AS A TRAFFIC CONTROL TECHNICIAN OR TRAFFIC CONTROL SUPERVISOR.

(TC-52) ANY USED TRUCK MOUNTED ATTENUATORS, CHANGEABLE MESSAGE SIGNS AND CONSTRUCTION ZONE IMPACT ATTENUATOR TO BE PLACED ON THIS PROJECT SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION, TO ASSURE THAT THEY ARE IN GOOD WORKING CONDITION, PRIOR TO PLACEMENT ON THE PROJECT.

(TC-61) ANY DAMAGE TO A FINISHED OR EXISTING SURFACE RESULTING FROM THE CONTRACTOR'S NEGLIGENCE IN THE REMOVAL OF CONSTRUCTION ZONE PAVEMENT MARKERS OR CHANNELIZING DEVICES AND THE BITUMINOUS ADHESIVE USED IN THEIR INSTALLATION, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.

(TC-70) THIS ITEM IS AN ESTIMATED QUANTITY TO BE USED AS DIRECTED NECESSARY BY THE ENGINEER.

(TC-73) QUANTITY SHOWN INCLUDES 0 EA (WHITE) AND 0 EA (YELLOW) CONSTRUCTION ZONE PAVEMENT MARKERS (FLEX TAB). THESE CONSTRUCTION ZONE PAVEMENT MARKERS SHALL BE EITHER "DAVIDSON PLASTICS: MODEL TOM", OR AN APPROVED EQUAL. INSTALLATION AND REMOVAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON STANDARD DRAWING TCS21-1-(LATEST REVISION).

(TC-75) TEMPORARY PAVEMENT MARKINGS SHALL BE IN PLACE THE SAME DAY THAT EXISTING PAVEMENT MARKINGS ARE REMOVED FROM ANY ROADWAY OPEN TO TRAFFIC. ALSO, ALL TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED PRIOR TO THE INSTALLATION OF FINAL STRIPING.

(TC-76) ANY TRUCK MOUNTED ATTENUATOR USED ON THIS PROJECT SHALL HAVE PASSED ALL MANDATORY AND OPTIONAL TESTS LISTED IN NCHRP 350, TL-3 CRITERIA. THIS ITEM IS TO BE USED WHERE SHOWN IN THE STANDARD DRAWINGS OR AT THE DISCRETION OF THE ENGINEER ON SHADOW VEHICLES PROTECTING THE WORK AREAS AND TEMPORARY ROADSIDE HAZARDS.

(TC-77) TRUCK MOUNTED ATTENUATORS ARE TO BE INSTALLED ON NON-STATE OWNED TRUCKS HAVING A MINIMUM GROSS WEIGHT RATING OF 15,000 POUNDS. EACH OF THESE TRUCKS SHALL ALSO BE EQUIPPED WITH AN ARROW DISPLAY (TYPE B).

(TC-78) REPLACEMENT MODULES FOR TRUCK MOUNTED ATTENUATORS SHALL CORRESPOND TO THE BRAND AND MODEL OF THE UNIT PURCHASED FOR USE ON THIS PROJECT. UPON COMPLETION OF THE PROJECT, THESE REPLACEMENT MODULES SHALL BECOME THE PROPERTY OF THE STATE AND BE DELIVERED TO A STORAGE LOCATION DESIGNATED BY THE ENGINEER.

(TC-80) INCLUDED IN THIS ITEM SHALL BE ONE (1) ADDITIONAL UNIT TO BE USED AS A STAND-BY OR REPLACEMENT. THIS STANDBY UNIT SHALL BE IMMEDIATELY ACCESSIBLE TO REPLACE A DAMAGED, STOLEN OR MALFUNCTIONING UNIT. THE AMOUNT OF TIME BETWEEN THE REMOVAL OF THE DAMAGED UNIT AND THE INSTALLATION OF THE STANDBY UNIT SHALL BE NO MORE THAN TWENTY-FOUR (24) HOURS.

(TC-84) 300 CONSTRUCTION CALENDAR DAYS WERE USED TO COMPUTE THE SIGN DAY PAY ITEMS. THE AMOUNT OF CALENDAR DAYS USED TO COMPUTE THE SIGN DAY PAY ITEMS IS AN ESTIMATED QUANTITY ONLY, BASED ON THE CURRENT ODOT STANDARDS AND SUGGESTED CONSTRUCTION SEQUENCE FOR THIS PROJECT. THESE ESTIMATED SIGN DAY QUANTITIES MAY CHANGE AS THE PROJECT'S CONSTRUCTION TRAFFIC CONTROL IS MODIFIED DURING CONSTRUCTION.

(TC-85) THESE SIGNS MUST BE ON THE OKLAHOMA DEPARTMENT OF TRANSPORTATION LIST OF APPROVED CHANGEABLE MESSAGE SIGNS. FOR AN APPROVED LIST, GO TO THE QUALIFIED PRODUCT LIST WEBSITE AT http: // www.okladot.state.ok.us / traffic /qpl / index.php .

TRAFFIC SIGNING PAY QUANTITY NOTES

(TS-1) "REMOVAL OF SIGN FOOTINGS" SHALL MEAN THE REMOVAL OF AN EXISTING FOOTING WITH OR WITHOUT STUBS AND SHALL BE DISPOSED OF AS NOTED IN GENERAL CONSTRUCTION NOTES.

(TS-25) QUANTITY SHOWN INCLUDES 63,800 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE) AND 50,870 L.F. TRAFFIC STRIPE(MULTI-POLYMER)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF SIX INCH (6") WIDE TRAFFIC STRIPE.

(TS-28) QUANTITY SHOWN INCLUDES 93 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWENTY-FOUR INCH (24") WIDE TRAFFIC STRIPE.

STEPHENS COUNTY
JP 29657(04)
300 TRAFFIC CONTROL

PAY QUANTITIES - TRAFFIC CONTROL

ITEM	DESCRIPTION		UNIT	QUANTITY
857(A)9200	CONSTRUCTION TRAFF. STR. (PAINT) (4" WIDE)	(TC-17,70)	LF	55,100
857(A)9400	REMOVABLE PAVEMENT MARKING TAPE(4" WIDE)	(TC-19,70)	LF	2,000
857(E)9630	(PL) CONST. ZONE PAV. MKRS (FLEX TAB) TYP. 2-2	(SP-2)(TC-20,21,61,70,73,75)	EA	12,300
857(F)9700	PAVEMENT MRKNG. REMOVAL (TRAF. STRP)	(TC-22,70)	LF	55,100
871(B)2300	(SP) CONST. ZONE IMPACT ATTEN.	(SP-6,7)	SD	1,320
871(C)2400	RELOCATION OF IMPACT ATTENUATOR		EA	29
876(A)3210	(PL)TRUCK MOUNTED ATTENUATOR	(SP-7)(TC-70,76,77,84)	SD	330
876(B)3300	TRUCK MOUNTED ATTENUATOR (REPLACEMENT PKG.)	(TC-76,78)	EA	1
877(B)4300	DELIVER PORTABLE LONGITUDINAL BARRIER	(TC-1,2)	LF	650
877(C)4400	RELOCATION PORTABLE LONGITUDINAL BARRIER	(TC-1)	LF	4,200
880(B)6300	CONSTRUCTION SIGNS 0 TO 6.25 SF	(SP-7)(TC-26,33,84)	SD	13,200
880(B)6310	CONSTRUCTION SIGNS 6.26 SF TO 15.99 SF	(SP-7)(TC-26,33,84)	SD	50,490
880(B)6320	CONSTRUCTION SIGNS 16.0 SF TO 32.99 SF	(SP-7)(TC-26,33,84)	SD	11,880
880(C)6010	CONSTRUCTION BARRICADES (TYPE III)	(SP-7)(TC-26,84)	SD	62,700
880(D)6420	WING BARRICADES	(SP-7)(TC-26,84)	SD	1,320
880(D)6500	VERTICAL PANELS	(SP-7)(TC-26,84)	SD	29,700
880(E)6600	WARNING LIGHTS (TYPE A)	(SP-7)(TC-26,84)	SD	136,620
880(F)6700	DRUMS	(SP-3,7)(TC-26,84)	SD	16,500
880(G)6805	CHANNELIZER CONES	(SP-7)(TC-26,84)	SD	19,800
882(A)8210	PORTABLE CHANGEABLE MESSAGE SIGN	(SP-1,4,6,7)(TC-26,52,80,85)	SD	691

STEPHENS COUNTY
JP 29657(04)
302 SIGNING & STRIPING

PAY QUANTITIES - SIGNING & STRIPING

ITEM	DESCRIPTION		UNIT	QUANTITY
413(A)4210	RUMBLE STRIP-CENTERLINE HMA-CON		LF	27,060
413(B)4310	RUMBLE STRIP-METHOD HMA-CYC		LF	54,120
805(D)3528	(PL) REMOVE & RESET EXISTING SIGNS	(SP-5)(TS-1)	EA	8
850(A)1200	SHEET ALUMIMUM SIGNS	(TS-33)	SF	269
851(C)2415	2" SQUARE TUBE POST	(TS-34)	LF	519
851(C)2430	2 1/2" SQUARE TUBE POST	(TS-34)	LF	359
856(A)8204	TRAFFIC STRIPE (MULTI-POLY.) (6" WIDE)	(TS-25)	LF	114,670
856(A)8216	TRAFFIC STRIPE (MULTI-POLY.) (24" WIDE)	(TS-28)	LF	93
880(C)6425	PERMANENT BARRICADE UNIT		EA	1

(TS-33) INCLUDED IN THIS PAY ITEM IS ALL HARDWARE ASSOCIATED WITH PROPERLY ANCHORING AND MOUNTING THE HIGHWAY SIGN IN ACCORDANCE WITH O.D.O.T. PLANS AND STANDARD DRAWINGS SSA1-1 AND SSP1-1-(LATEST REVISION).

(TS-34) INCLUDED IN THIS PAY ITEM IS THE REMOVAL OF ANY EXISTING SIGNS TO BE REPLACED BY NEW ASSEMBLIES AND THE REMOVAL OF ANY EXISTING SIGNS THAT WILL BE IN CONFLICT WITH THE NEW ROADWAY OR NEW SIGNAGE.

TRAFFIC SPECIAL PAY QUANTITY NOTES

(SP-1) SIGN PLACEMENT LOCATIONS WILL BE AT THE DISCRETION OF THE ENGINEER.

(SP-2) PRICE BID FOR THIS PAY ITEM INCLUDES THE INITIAL PLACEMENT AND SUBSEQUENT REPLACEMENT DURING CONSTRUCTION TO MAINTAIN THE ADEQUATE DELINEATIONS.

(SP-3) TYPE 'C' LIGHTS ARE NOT REQUIRED.

(SP-4) CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ON THE PROJECT 14 DAYS IN ADVANCE OF THE START DATE.

(SP-5) PRICE BID FOR THIS ITEM IS FOR REMOVAL AND RESET ROAD INFORMATION SIGN ON BACK OF R1-1.

(SP-6) 314 CONSTRUCTION CALENDAR DAYS WERE USED TO COMPUTE THIS SIGN DAY PAY ITEMS.

(SP-7) SIGN DAY PAY ITEMS INCLUDE AN ESTIMATED 10% ADDITIONAL TIME.

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SUMMARY OF PAY QUANTITIES AND NOTES (TRAFFIC)

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. AT01

Preliminary Plans

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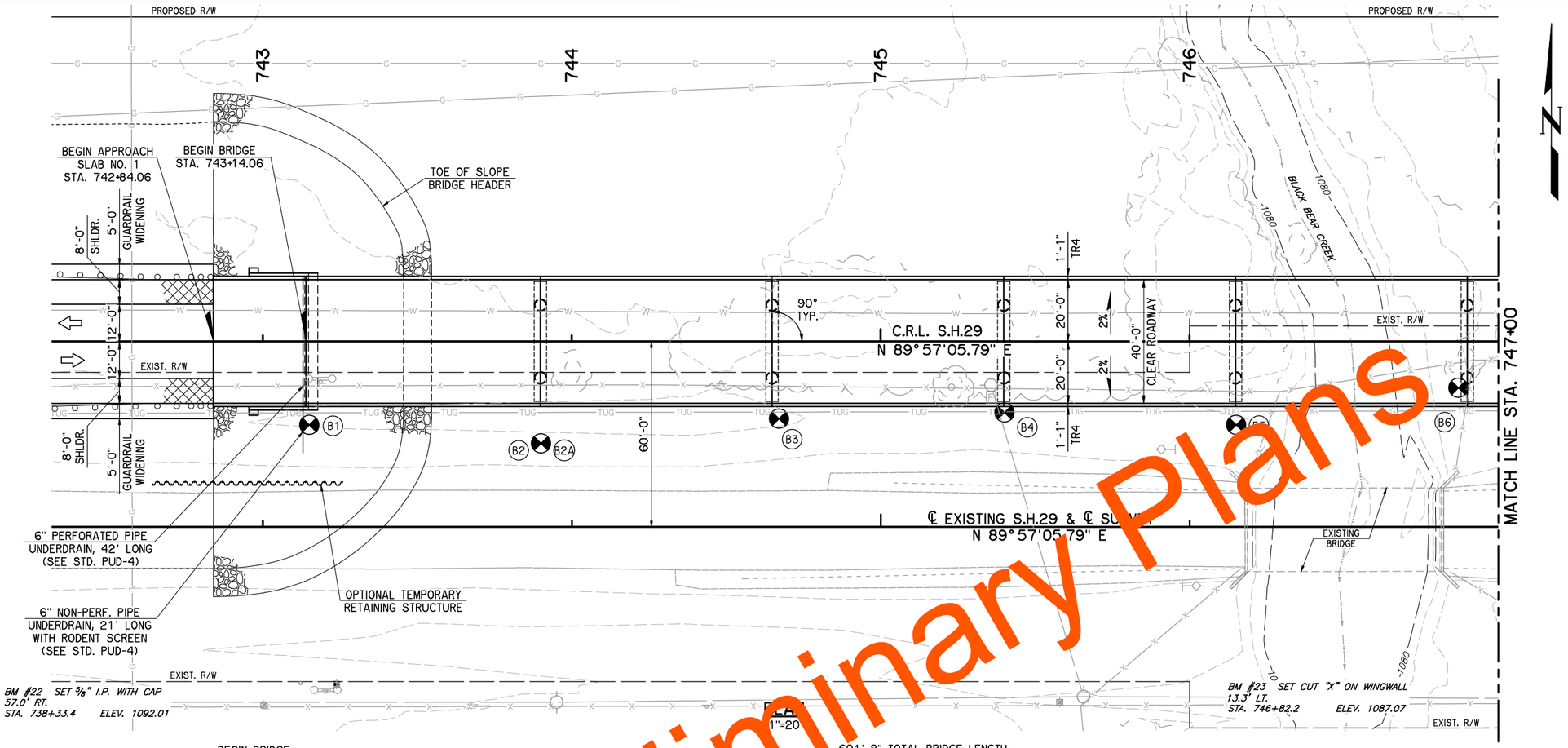
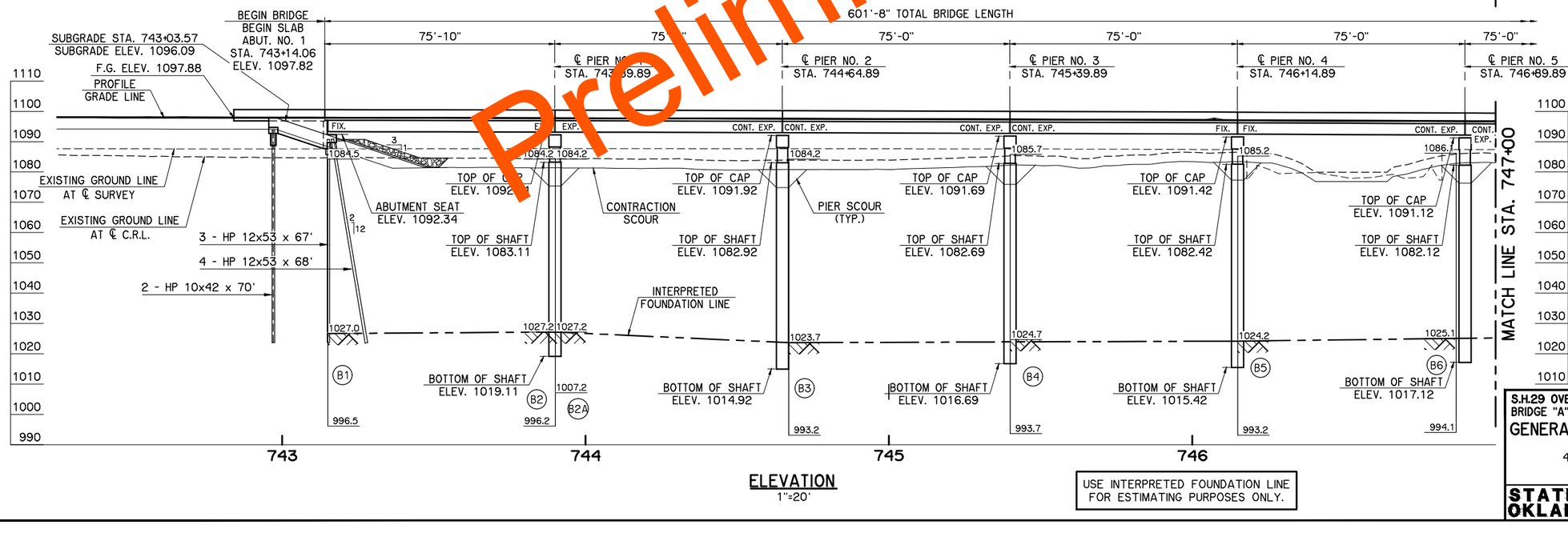
REVISIONS		
REV NO	DESCRIPTION	DATE



Preliminary



ELEVATION
1"=20'

USE INTERPRETED FOUNDATION LINE FOR ESTIMATING PURPOSES ONLY.

S.H.29 OVER BLACK BEAR CREEK
BRIDGE "A"
STEPHENS COUNTY

GENERAL PLAN AND ELEVATION (SHEET 1 OF 3)

(8)75' TYPE III P.C.B. SPANS
40'-0" CL. RDWY. WITH TR4 TRAFFIC RAILS
℄ STA. 746+14.89, 0° SKEW

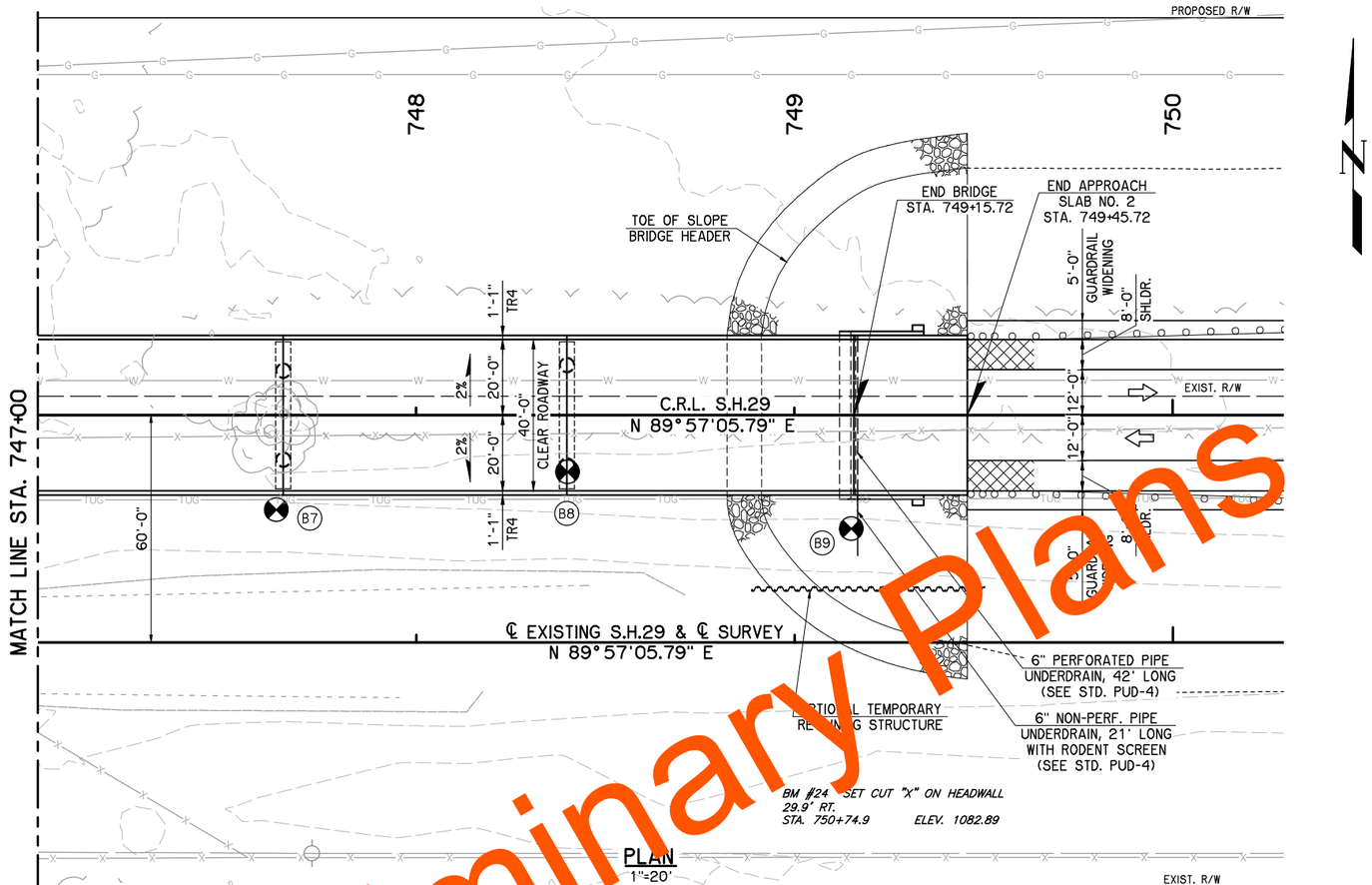
Design	CEG	
Detail	DRB	
Check	RMF	

CEC

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 29657(04) | SHEET NO. B001

REVISIONS		
REV NO	DESCRIPTION	DATE



Preliminary Plans

S.H.29 OVER BLACK BEAR CREEK — STEPHENS COUNTY
BRIDGE "A"

GENERAL PLAN AND ELEVATION (SHEET 2 OF 3)

(8)75' TYPE III P.C.B. SPANS
40'-0" CL. RDWY. WITH TR4 TRAFFIC RAILS
℄ STA. 746+14.89, 0° SKEW

Design	CEG	
Detail	DRB	
Check	RMF	

CEC

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 29657(04) — SHEET NO. B002

REVISIONS		
REV NO	DESCRIPTION	DATE

SUMMARY OF BRIDGE QUANTITIES - BRIDGE "A"

	ITEM DESCRIPTION	UNIT	ABUTMENTS	PIERS	SUPERSTR.	APPR. SLABS	TOTAL
	SUBSTRUCTURE EXCAVATION COMMON	C.Y.	170				170
	CLSM BACKFILL	C.Y.	180				180
	TEMPORARY EARTH RETAINAGE	L.SUM					1
	PRESTRESSED CONCRETE BEAMS (TYPE III)	L.F.			2,392.0		2,392.0
	APPROACH SLAB	S.Y.				281.2	281.2
	SAW-CUT GROOVING	S.Y.			2,673.8	266.6	2,940.4
	CONCRETE RAIL (TR4)	L.F.			1,203.4	120.0	1,323.4
	STRUCTURAL STEEL	LB.			3,600		3,600
	STAINLESS STEEL FIXED BEARING ASSEMBLY	EA.			16		16
	STAINLESS STEEL EXPANSION BEARING ASSEMBLY	EA.			48		48
	CLASS AA CONCRETE	C.Y.			694.0		694.0
	CLASS A CONCRETE	C.Y.	82.2	191.1			273.3
	REINFORCING STEEL	LB.		1,120			1,120
	EPOXY COATED REINFORCING STEEL	LB.	10,740	32,900	153,080		196,720
(1)	PILES, FURNISHED (HP 10x42)	L.F.	278				278
(2)	PILES, FURNISHED (HP 12x53)	L.F.	939				939
	PILES, DRIVEN (HP 10x42)	L.F.	278				278
	PILES, DRIVEN (HP 12x53)	L.F.	939				939
	PILE SPLICE, H-PILE (NON-BIDDABLE)	EA.	1				1
	WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	90	406	1,970	56	2,522
	DRILLED SHAFTS 48" DIAMETER	L.F.		918			918
	CROSSHOLE SONIC LOGGING	EA.		3			3
	SEALED EXPANSION JOINT	L.F.			86.4		86.4
	SEALER CRACK PREPARATION	L.F.			204.0		204.0
	SEALER RESIN	GAL.			2.5		2.5
(3)	TYPE I-A PLAIN RIPRAP	TON	2,560				2,560
(4)	TYPE I-A FILTER BLANKET	TON	325				325
(5)	6" PERFORATED PIPE UNDERDRAIN ROUND	L.F.	84				84
(6)	6" NON-PERF. PIPE UNDERDRAIN RND.	L.F.	42				
	REMOVAL OF EXISTING BRIDGE STRUCTURE	L.SUM					1

(1) TOTAL INCLUDES 140 L.F. FOR ABUTMENT NO. 1 AND 138 L.F. FOR ABUTMENT NO. 2

(2) TOTAL INCLUDES 473 L.F. FOR ABUTMENT NO. 1 AND 466 L.F. FOR ABUTMENT N

(3) TOTAL INCLUDES 1470 TONS ABUTMENT NO. 1 AND 1090 TONS FOR ABU ENT NO. 2

(4) TOTAL INCLUDES 190 L.F. FOR ABUTMENT NO. 1 AND 135 L.F. FOR ABUTME NO.

(5) TOTAL INCLUDES 42 L.F. FOR EACH ABUTMENT.

(6) TOTAL INCLUDES 21 L.F FOR EACH ABUTMENT.

EXPANSION JOINT SETTING SCHEDULE

EXP. JOINT OPENING	TEMPERATURE °F PIER NOS. 1 & 7
2⅞"	2
2¾"	8
2⅝"	14
2½"	20
2⅜"	26
2¼"	31
2⅛"	37
2"	43
1⅞"	49
1¾"	55
1⅝"	60
1½"	66
1⅜"	72
1¼"	78
1⅛"	84
1"	89
⅞"	95
¾"	101
⅝"	107
½"	113
⅜"	8

FOUNDATION DATA

HP 10x42 PILING		
DESIGN CRITERIA	ABUTMENT 1	ABUTMENT 2
FACTORED PILE REACTION PILE LENGTH	82.7 TONS 70 FT.	82.7 TONS 69 FT.

HP 12x53 PILING		
DESIGN CRITERIA	ABUTMENT 1	ABUTMENT 2
FACTORED PILE REACTION PILE LENGTH	82.7 TONS 68 FT.	82.7 TONS 67 FT.

48" DIAMETER DRILLED SHAFTS	
DESIGN CRITERIA	PIER NOS. 1 THRU 7
MINIMUM DEPTH INTO ROCK DEPTH OF ROCK NEGLECTED FOR FRICTION	8 FT. 3 FT.
UNIT BEARING RESISTANCE BEARING RESISTANCE FACTOR FACTORED BEARING RESISTANCE	60 T.S.F. 0.7 527.8 TONS
UNIT FRICTION RESISTANCE FRICTION RESISTANCE FACTOR FACTORED FRICTION RESISTANCE	[illegible] T.S.F. 0.4 [illegible] TONS
TOTAL FACTORED RESISTANCE TOTAL FACTORED REACTION	782.3 TONS 537.9 TONS

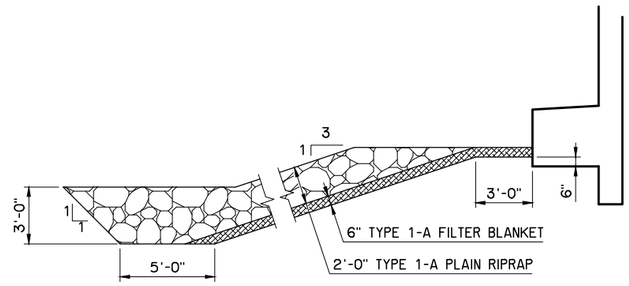
FACTORED PILE RESISTANCE:
DRIVE PILING THROUGH THE COMPACTED FILL AND TO A POINT BEARING ON SOLID FOUNDATION MATERIAL AT THE APPROXIMATE ELEVATION SHOWN ON THE PLANS. IF A FACTORED AXIAL LOAD RESISTANCE EQUAL TO OR GREATER THAN THE FACTORED PILE REACTION IS NOT OBTAINED AT THIS ELEVATION, CONTINUE DRIVING UNTIL SUCH IS OBTAINED. THE LENGTH OF STEEL PILING SHOWN ON THE PLANS IS FOR ESTIMATING PURPOSES ONLY.

HYDRAULIC SUMMARY

TOTAL DRAINAGE AREA = 12.75 SQ. MILES
CONTROLLED DRAINAGE AREA = 0.00 SQ. MILES
EFFECTIVE DRAINAGE AREA = 12.75 SQ MILES

FREQUENCY (YEARS)	DISCHARGE (CFS)	WATER SURFACE ELEVATION (FT)	VELOCITY (FPS)	CONTR. SCOUR (FT)	PIER SCOUR (FT)	TOTAL SCOUR (FT)
2	988	1086.58	0.70			
5	2,070	1088.16	0.92			
10	3,150	1089.34	1.09			
25	4,950	1090.88	1.33			
50	6,270	1091.92	1.50			
100	7,800	1093.32	1.72	3.83	5.92	9.75
54 (OT)	6,710	1092.31	1.57	13.71	5.84	19.55

LOW BEAM ELEVATION = 1090.63



SECTION THRU RIPRAP AT BRIDGE SEAT

DESIGN DATA

LOAD AND RESISTANCE FACTOR DESIGN

CONCRETE CLASS AA	f'c = 4 K.S.I.
CONCRETE CLASS A	f'c = 3 K.S.I.
REINFORCING STEEL (GRADE 60)	fy = 60 K.S.I.
STRUCTURAL STEEL M270 (GRADE 50W)	Fy = 50 K.S.I.
STAINLESS STEEL A240 (TYPE 316)	Fy = 30 K.S.I.

LOADING:
HL-93 OR OKLAHOMA OVERLOAD TRUCK
20 PSF FUTURE WEARING SURFACE
5 PSF STAY-IN-PLACE FORMS

DESIGN:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION WITH 2009 INTERIMS, EXCEPT PIERS WHICH SATISFY AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION
ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE
ANSI/AWS D1.6 STRUCTURAL WELDING CODE - STAINLESS STEEL

LFD OPERATING RATING: HS 39.6

INDEX OF SHEETS

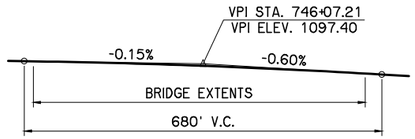
AB01 - AB02	GENERAL NOTES & SUMMARY OF PAY QUANTITIES (BRIDGE)
B001 - B003	GENERAL PLAN AND ELEVATION - BRIDGE "A"
B004 - B008	SUBSURFACE PROFILE
B009	SUBSTRUCTURE LAYOUT
B010 - B011	PIER DETAILS

2009 STANDARDS

TR4-2-00E
EJ-SQ-04E
EJ-DTL-02E
HP1-2-01E
B40-C-ABUT-PC3-1-01E
B40-C-ABUT-PC3-2-01E
B40-C-ABUT-MISC-01E
B40-C-XSECT-PC234-01E
B40-C-LSECT-PCB-04E
B40-C-SPR-BLIST-PCB-01E
B40-C-PCB-III-75-00E
B40-C-PCB-DTL-01E
B40-C-DIA-END-PC234-1-02E
B40-C-DIA-END-PC234-2-03E
B40-C-DIA-INT-PCB-01E
B40-C-BRG-PC3-02E
B40-C-SPR-QUAN-PCB-III-03E
B40-C-AS-03E
B40-C-TR4-0-1-01E
B40-C-TR4-0-2-01E

2019 STANDARDS

LECS-5-1
PUD-4-0



VERTICAL CURVE DATA

PREPARED BY:

5/22/24
DATE

RYAN FRANCKA
OKLAHOMA LICENSE NO. 26497

LICENSED PROFESSIONAL ENGINEER
RYAN FRANCKA
26497
OKLAHOMA
CA 32
6-30-24

S.H.29 OVER BLACK BEAR CREEK STEPHENS COUNTY
BRIDGE "A"
GENERAL PLAN AND ELEVATION (SHEET 3 OF 3)
(8)75' TYPE III P.C.B. SPANS
40'-0" CL. RDWY. WITH TR4 TRAFFIC RAILS
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Design	CEG	
Detail	DRB	
Check	RMF	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04)
SHEET NO. B003

Preliminary Plans

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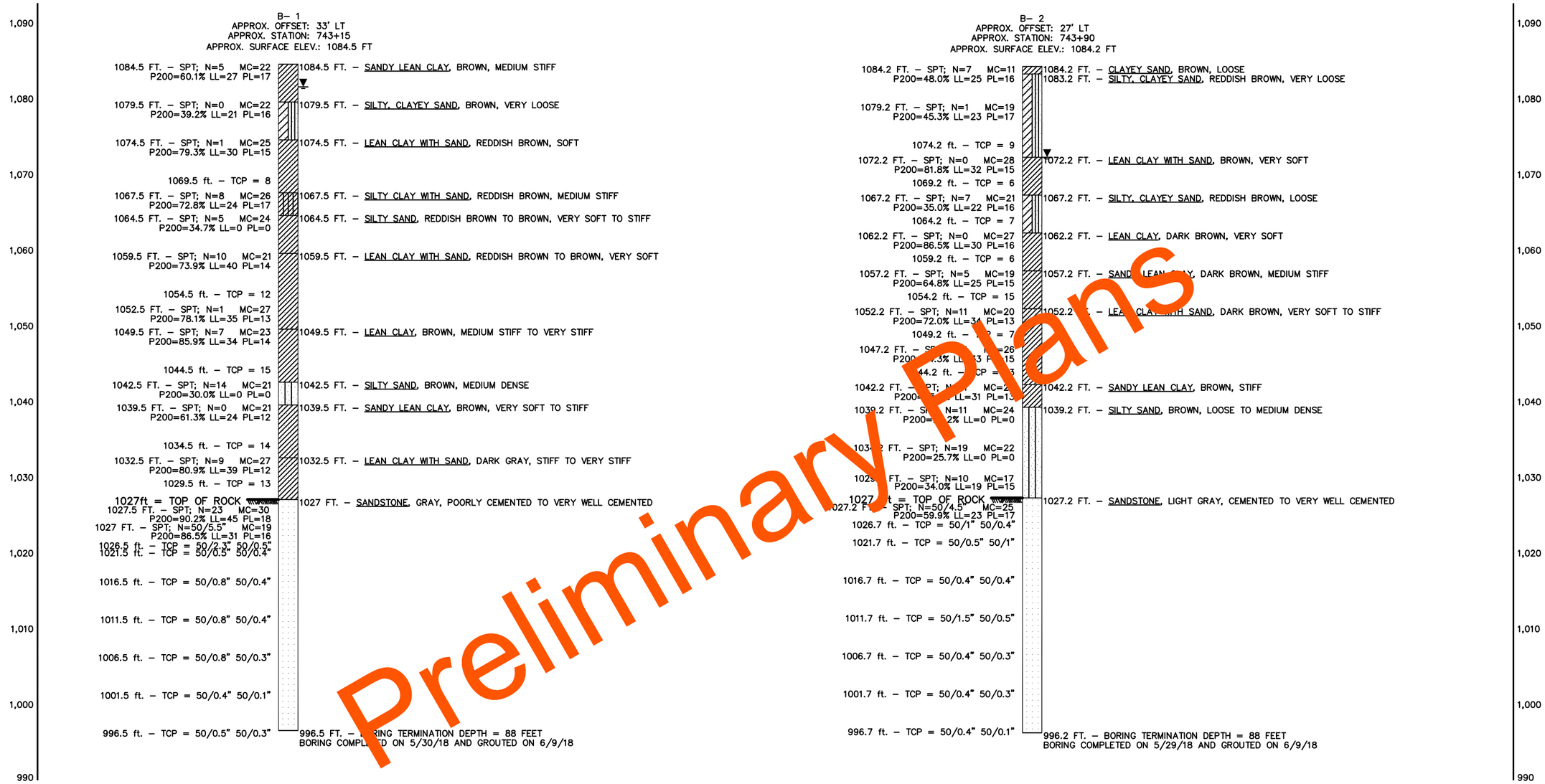

Preliminary Plans

SITE GEOLOGY

ODOT PUBLICATION

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The El Reno unit consists of a heterogeneous mixture of sandstones, shale, siltstone, and siltstone conglomerate. In northeastern Stephens County, the lowermost 40 to 100 feet of the unit consists dominantly of sandstones which are coarse-grained, nearly white to buff, and moderately soft; but a few hard massive sandstone beds up to six feet thick occur near the base of the unit. Northward, across Grady County, the sandstones of this lower section become red, progressively finer grained, and moderately hard to hard.

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RED ROCK CONSULTING

SH 29 Bridge over Black Bear Creek — Stephens County, Oklahoma

SUBSURFACE PROFILE
SHEET 1 OF 5

Design	DMB	7/19
Detail	DMB	7/19
Check	DMB	7/19
Squad: Engr.:		

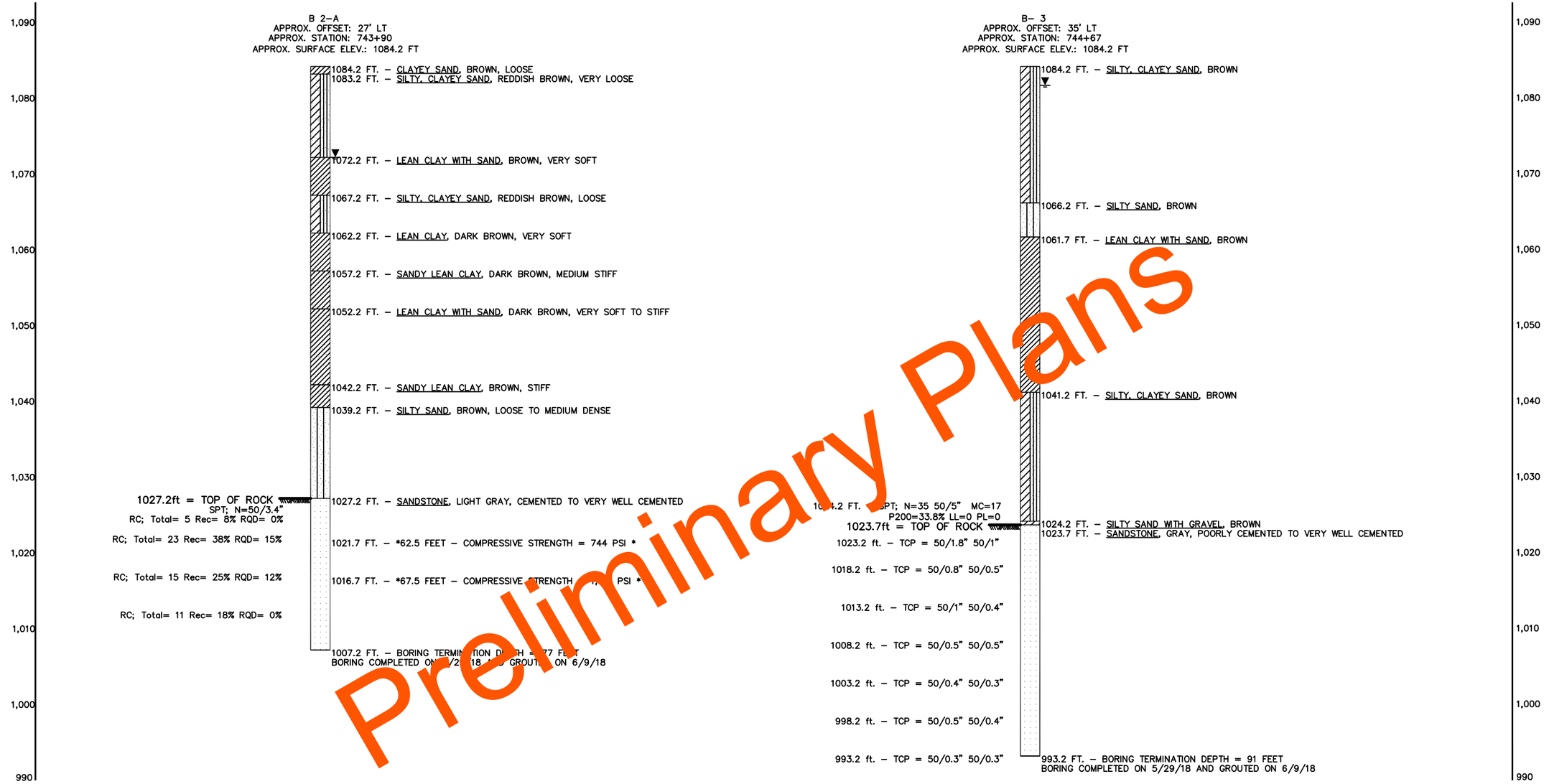
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 29657(04) — SHEET NO. B004

Preliminary Plans

REVISIONS

REV. NO.	DESCRIPTION	DATE



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Squad:		
Engr.:		

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 29657(04) — SHEET NO. B005

REVISIONS
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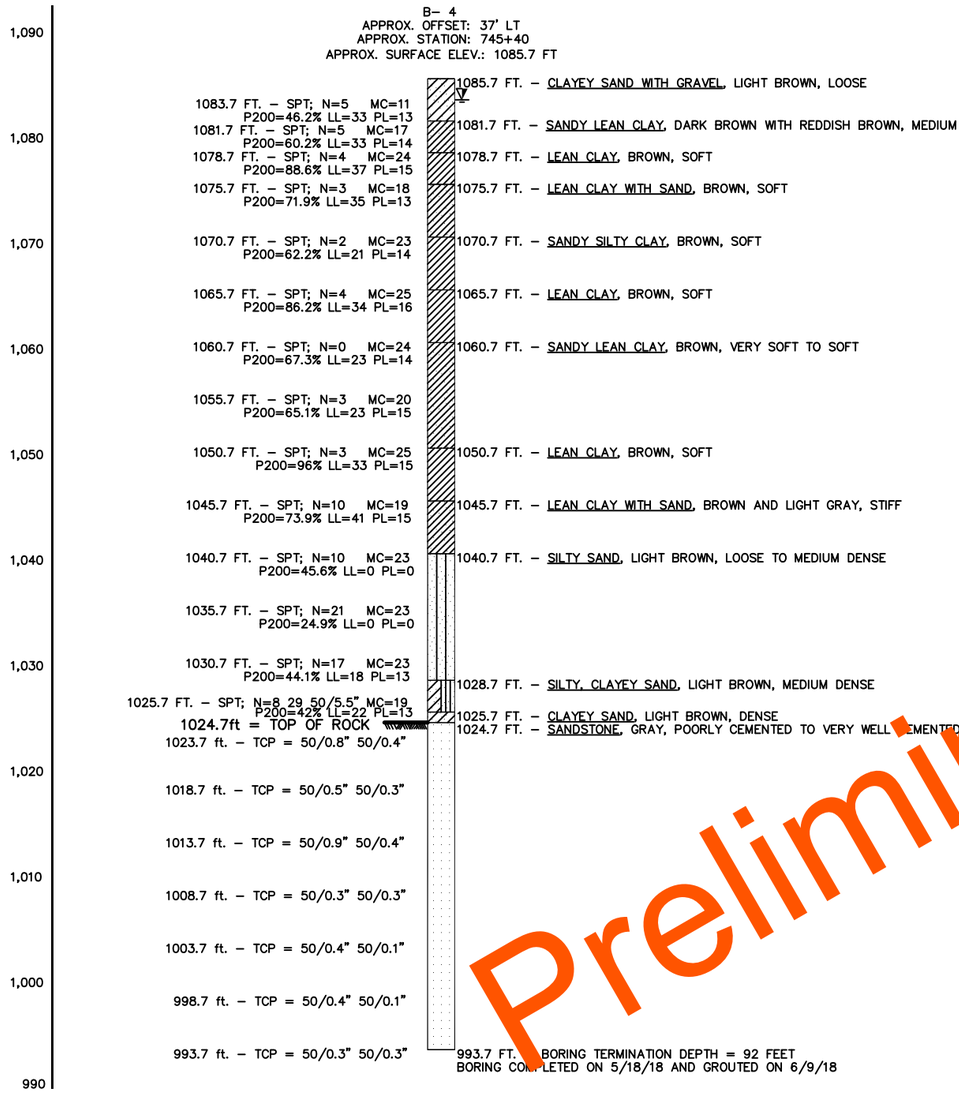

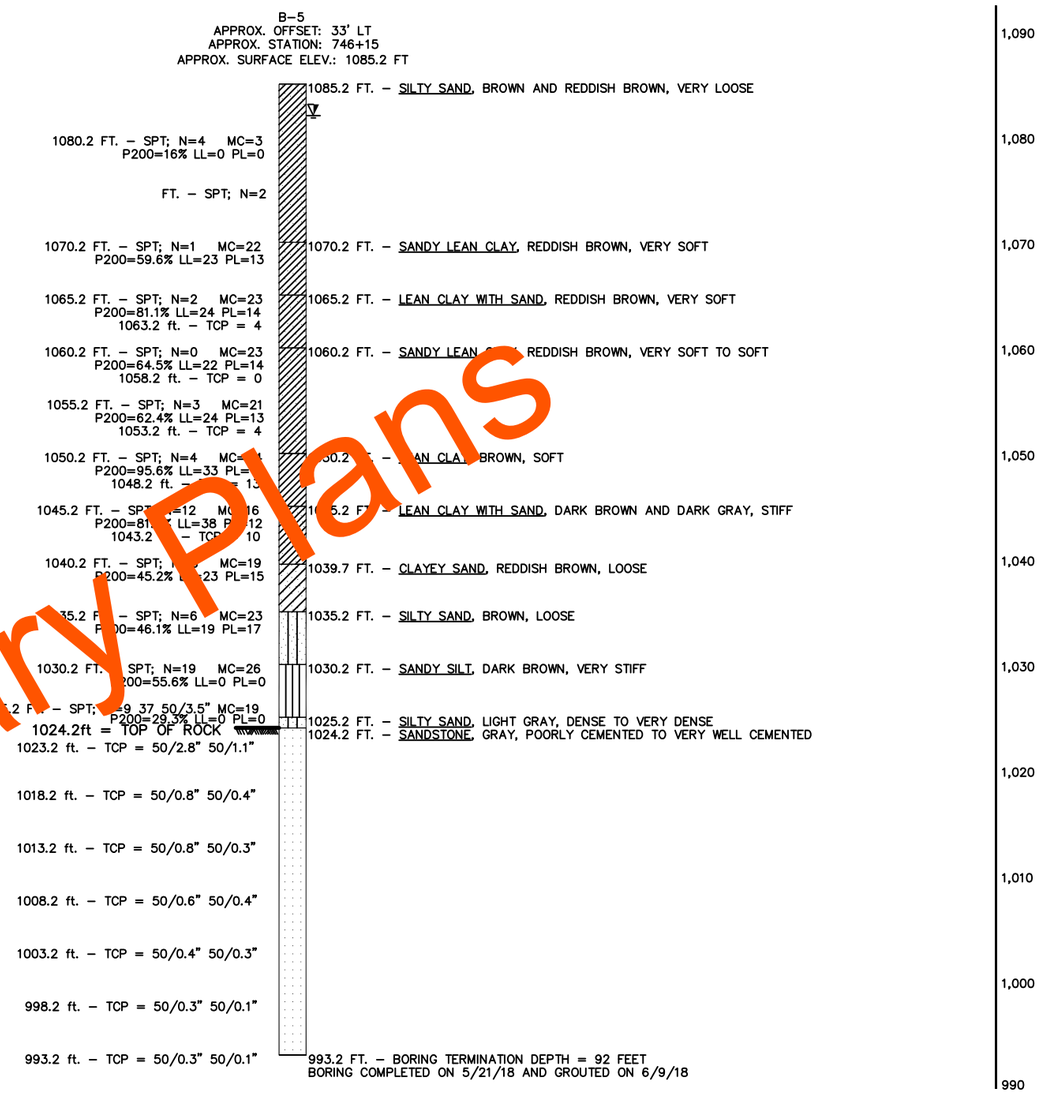

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RED ROCK CONSULTING

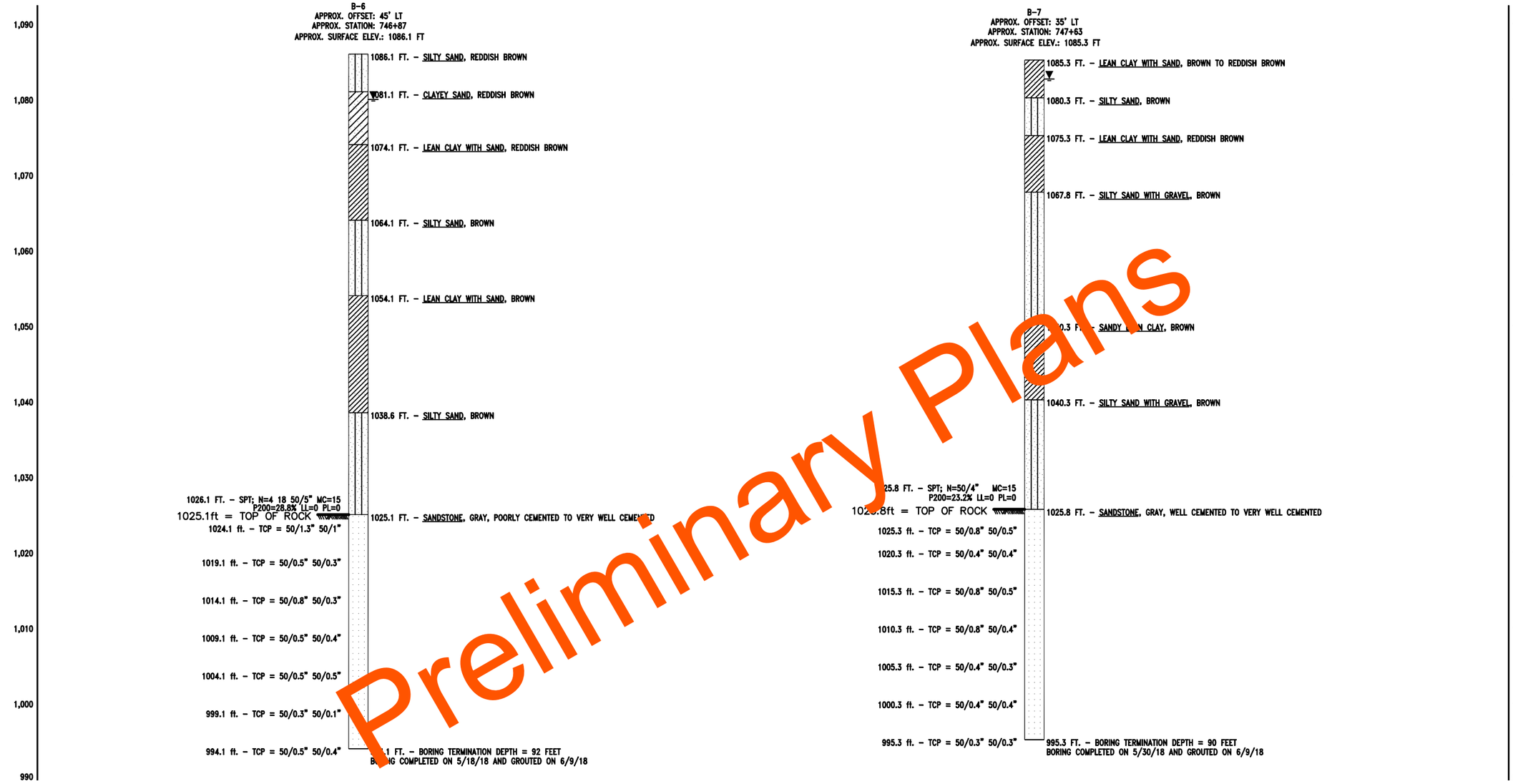
SH 29 Bridge over Black Bear Creek — Stephens County, Oklahoma

SUBSURFACE PROFILE
SHEET 3 OF 5

Design	DMB	7/19
Detail	DMB	7/19
Check	DMB	7/19
Suprvt: Engr.:		

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04) | SHEET NO. B006

REVISIONS		
REV. NO.	DESCRIPTION	DATE



Preliminary Plans

SITE GEOLOGY

ODOT PUBLICATION

The ODOT publication indicates the project site is underlain by the El Reno Unit (Per).

The El Reno unit consists of a heterogeneous mixture of sandstones, shale, siltstone, and siltstone conglomerate. In northeastern Stephens County, the lowermost 40 to 100 feet of the unit consists dominantly of sandstones which are coarse-grained, nearly white to buff, and moderately soft; but a few hard massive sandstone beds up to six feet thick occur near the base of the unit. Northward, across Grady County, the sandstones of this lower section become red, progressively finer grained, and moderately hard to hard.

The upper portion of the unit is known as "The Purple Series" in Stephens and Grady Counties. Here, some 80 feet of soft purple sandstone, 50 feet of soft pink sandstones, and 50 feet of moderately soft purple mudstone conglomerate are present in descending order. Westward, in Comanche and southern Caddo counties, the sandstones grade into red shales with minor amounts of gypsum and siltstones. Locally, in southeastern Grady County, near Cox City, a few sandstone beds in the upper portion are hard, limy, and occur in beds up to seven feet thick.

The unit thickens northward from 420 feet in Stephens County to 460 feet in Western Caddo County to 660 feet in northern Grady County.

The El Reno unit outcrops in a four to eight mile wide northwest-southeast band across southern Caddo, northeastern Comanche, and northwestern Stephens Counties. The outcrop then circles the southeastern end of the Anadarko basin in northern Stephens County and covers a broad area up to eighteen miles wide across northeastern Stephens and Grady Counties of Division 7. In Grady and eastern Caddo Counties, north of T4N, the upper 0 to 230 feet is mapped separately as the Dog Creek-Blaine subunits undifferentiated. Northward, in Division 4, and westward from Caddo County, in Division 5, the rock strata of the El Reno unit are separable and are mapped as the Flowerpot, Blaine, and Dog Creek units.

Topographically, the unit generally forms rolling hills with a pronounced escarpment at the base in Stephens and southern Grady Counties where the sandstones are thickest. Northwestward, the topography is rolling with gently rolling topography dominant in western Caddo County where the shales are thickest. The sandstone ridges are usually marked by oak vegetation and erosional gullies in the sandy soils. The shales generally form the valleys and gently rolling hills and support the growth of short grass. Some mesquite and prickly pear are evident in the salty or gypsiferous areas.

USGS MAP

According to the USGS geologic map, the project site is underlain by the Duncan Sandstone Member (Pd) of the El Reno Group.

Sandstone, white to buff, fine- to coarse-grained, moderately indurated, with interbedded mudstone conglomerates and siltstones; thickness, 100 to 400 feet, decreasing southeastward. Yields small to moderate amounts of water of fair quality.

LEGEND

SPT	DENOTES STANDARD PENETRATION TEST, ASTM D1586
N	DENOTES NUMBER OF BLOW COUNTS PER 12 INCHES
TCP	DENOTES TEXAS CONE PENETRATION TESTS
REC	DENOTES RECOVERY IN ROCK CORING
RQD	DENOTES ROCK QUALITY DESIGNATION
MC	DENOTES MOISTURE CONTENT TESTS
P200	DENOTES PERCENT PASSING NO 200 SIEVE
LL	DENOTES LIQUID LIMIT TESTS (NV=NO VALUE)
PL	DENOTES PLASTIC LIMIT TESTS (NP=NO PLASTICITY)
▽	DENOTES WATER ELEVATION IMMEDIATELY AFTER DRILLING
▼	DENOTES WATER ELEVATION HOURS AFTER DRILLING
	DENOTES TOP OF ROCK

■ NOTE: WATER ELEVATIONS SHOWN WERE OBTAINED AT THE TIME BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHOUT THE YEAR.

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RED ROCK CONSULTING

SH 29 Bridge over Black Bear Creek — Stephens County, Oklahoma

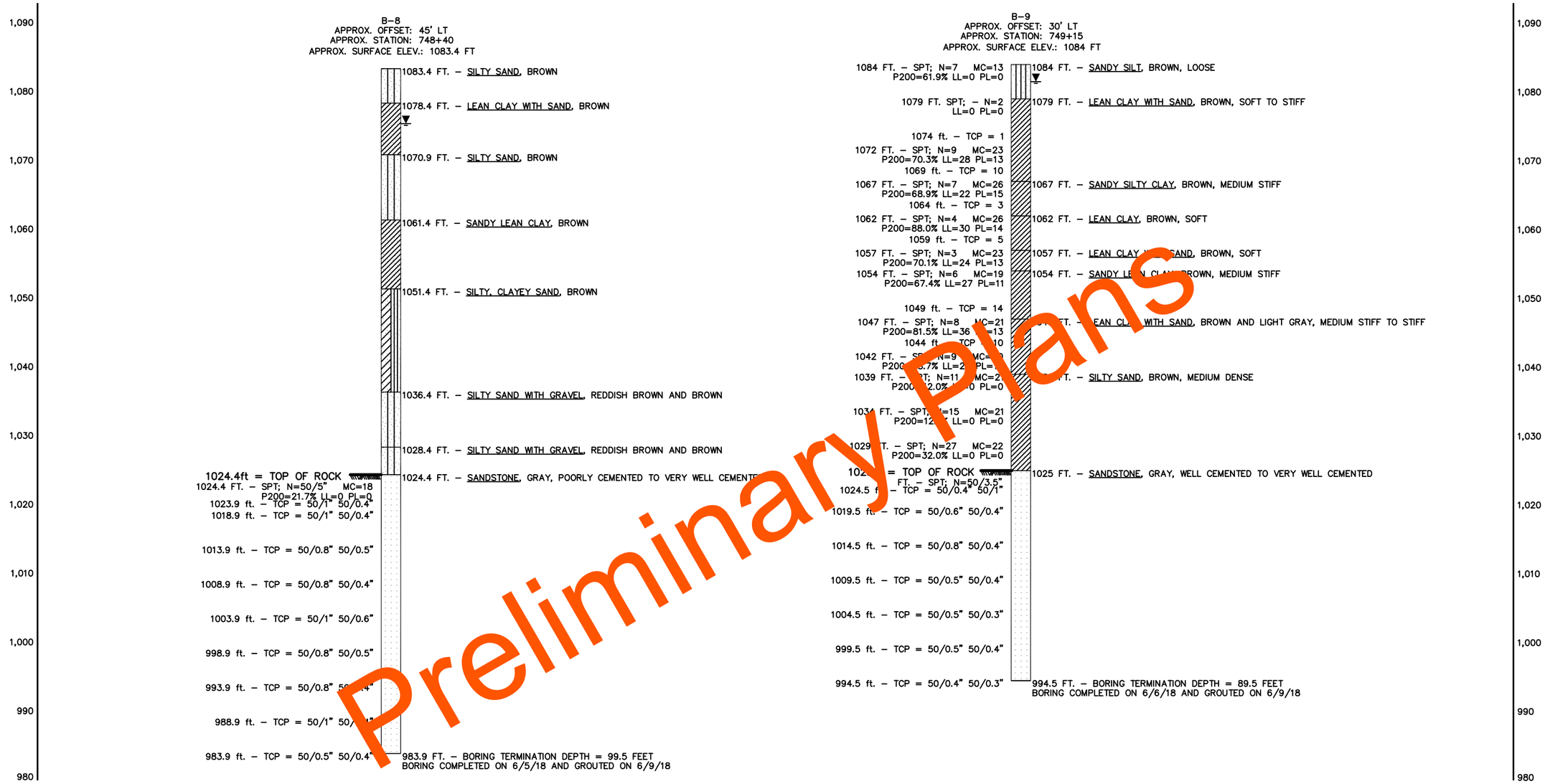
SUBSURFACE PROFILE
SHEET 4 OF 5

Design	DMB	7/19
Detail	DMB	7/19
Check	DMB	7/19
Suprvr: Engr.:		

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 29657(04) | SHEET NO. B007

REVISIONS		
REV. NO.	DESCRIPTION	DATE



Preliminary Plans

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RED ROCK CONSULTING

SH 29 Bridge over Black Bear Creek — Stephens County, Oklahoma

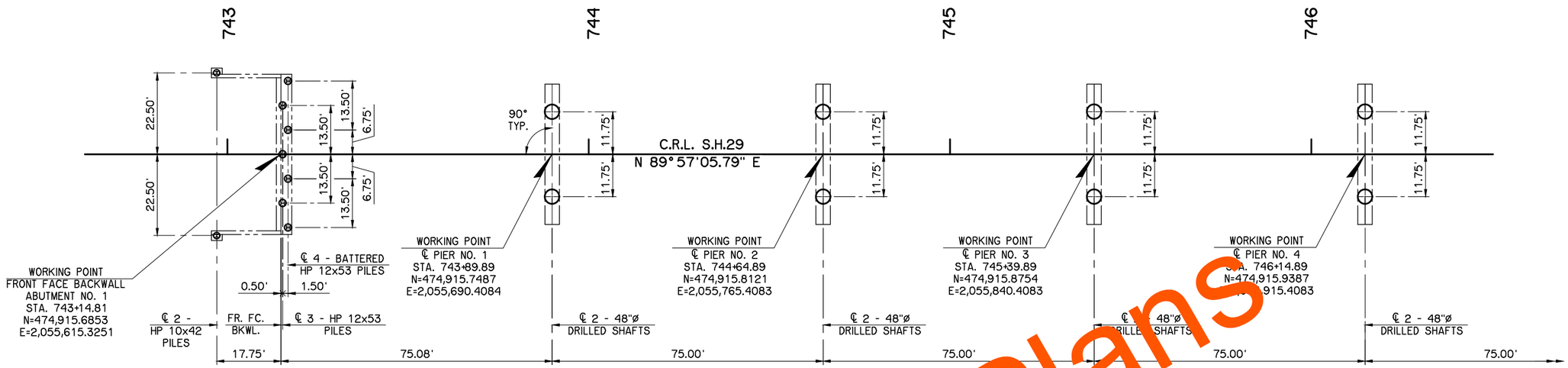
SUBSURFACE PROFILE
SHEET 5 OF 5

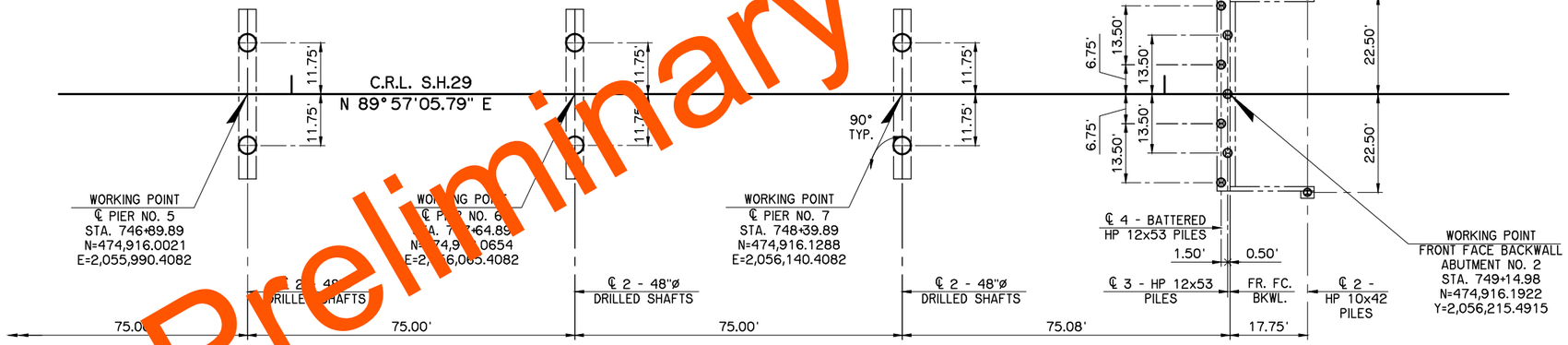
Design	DMB	7/19
Detail	DMB	7/19
Check	DMB	7/19
Squad: Engr.:		

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 29657(04) — SHEET NO. B008

REVISIONS		
REV NO	DESCRIPTION	DATE





Preliminary Plans

SUBSTRUCTURE LAYOUT

NOTES:
ALL PILES ARE DRIVEN VERTICAL EXCEPT AS NOTED.

PILE ENCASEMENTS NOT SHOWN FOR CLARITY. PROVIDE ON ALL WING PILES. SEE STD. HP1-2.

ORIENT WEB FACE OF SEAT FOOTING PILES TO BE PERPENDICULAR TO FACE OF SEAT.

ORIENT WEB FACE OF WING PILES TO BE PERPENDICULAR TO THE FACE OF THE WING.

S.H.29 OVER BLACK BEAR CREEK
BRIDGE "A"
STEPHENS COUNTY

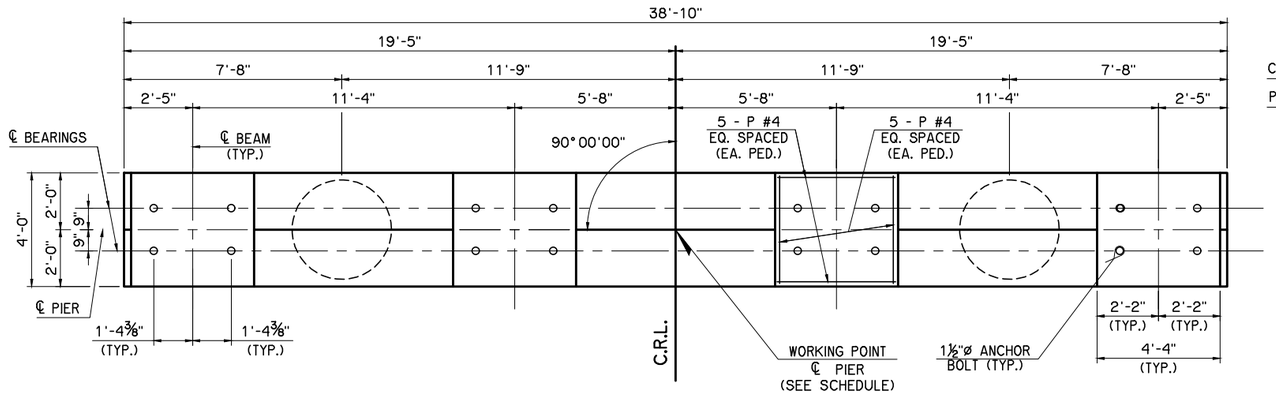
SUBSTRUCTURE LAYOUT

Design	ADT	
Detail	DRB	
Check	RMF	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04)
SHEET NO. B009

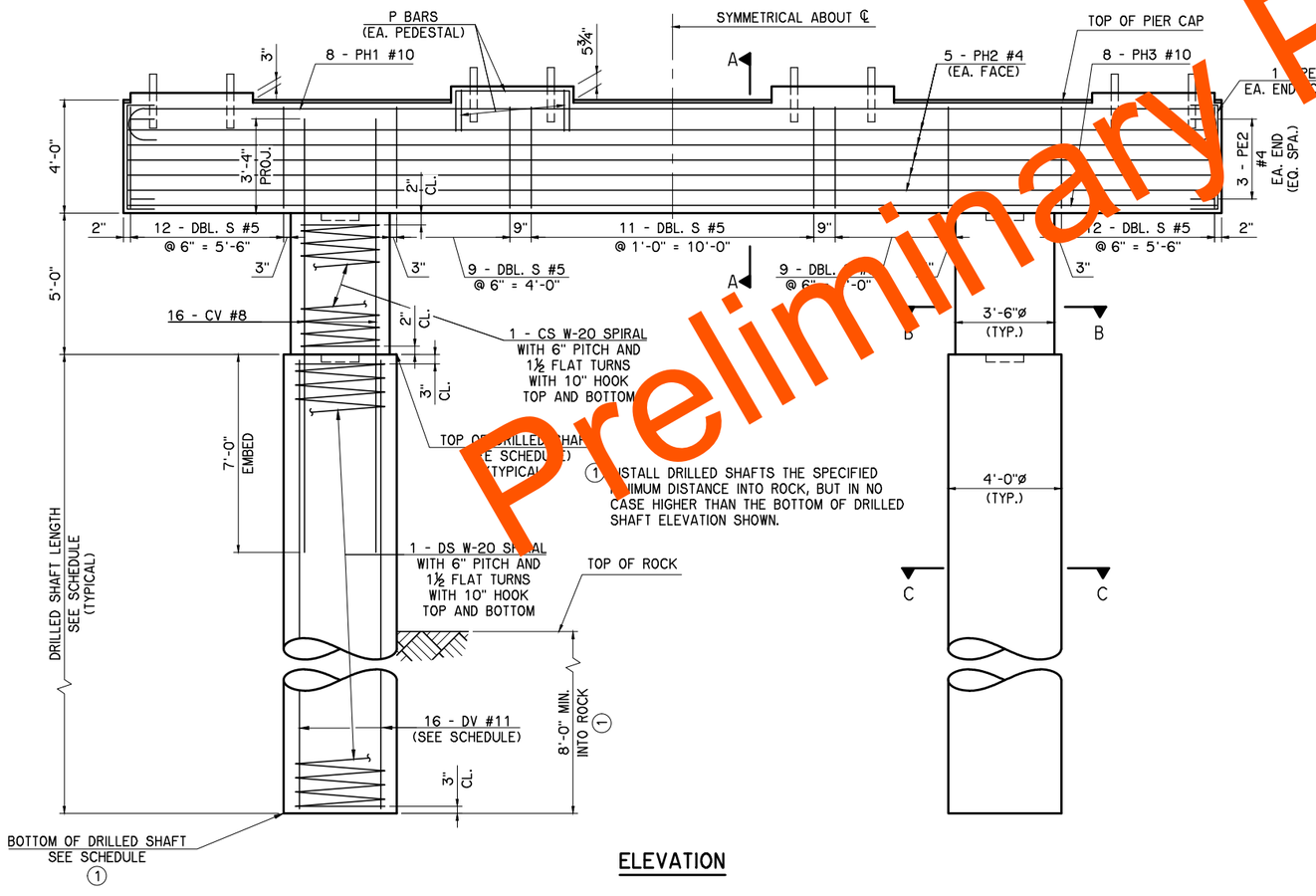
REVISIONS		
REV NO	DESCRIPTION	DATE



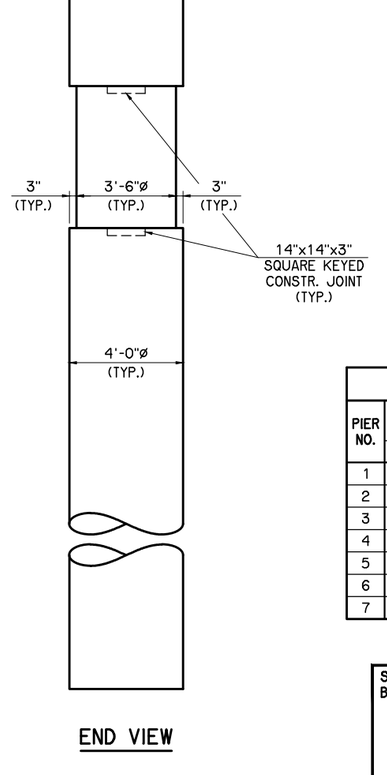
PLAN

COLUMN AND DRILLED SHAFT SPACING

PEDESTAL SPACING



ELEVATION



END VIEW

NOTES:
FOR BAR BENDS, QUANTITIES, WATER REPELLENT TREATMENT DETAIL AND SECTIONS A-A, B-B AND C-C, SEE SHEET B011.

PIER SCHEDULE

PIER NO.	WORKING POINT STATION	DRILLED SHAFTS TOP ELEVATION	DRILLED SHAFTS BOTTOM ELEVATION	DRILLED SHAFTS LENGTH	TOP OF PIER CAP ELEVATIONS
1	743+89.89	1083.11	1019.11	64'-0"	1092.11
2	744+64.89	1082.92	1014.92	68'-0"	1091.92
3	745+39.89	1082.69	1016.69	66'-0"	1091.69
4	746+14.89	1082.42	1015.42	67'-0"	1091.42
5	746+89.89	1082.12	1017.12	65'-0"	1091.12
6	747+64.89	1081.78	1017.78	64'-0"	1090.78
7	748+39.89	1081.40	1016.40	65'-0"	1090.40

Preliminary Plans

S.H.29 OVER BLACK BEAR CREEK — STEPHENS COUNTY
BRIDGE "A"

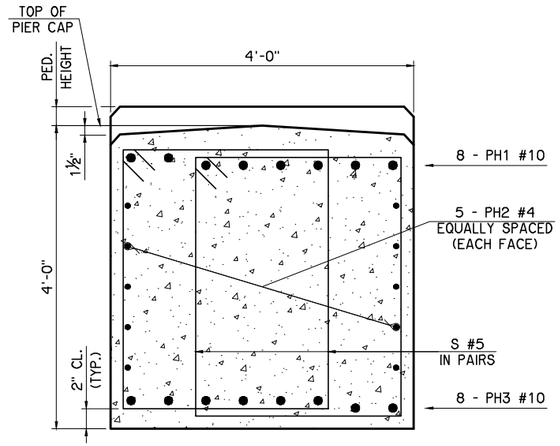
PIER DETAILS
SHEET 1 OF 2

Design	RMF
Detail	RAP
Check	ADT

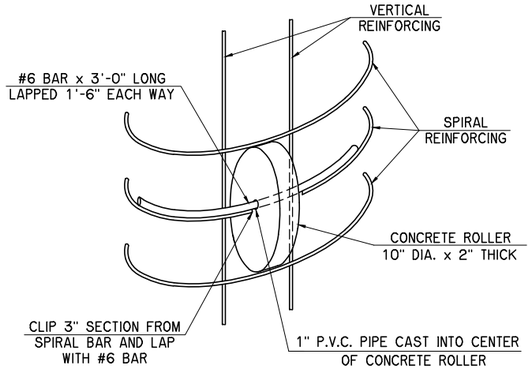
CEC

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04) — SHEET NO. B010

REVISIONS		
REV NO	DESCRIPTION	DATE



SECTION A-A



DRILLED SHAFT ROLLER DETAIL

NOTE:
USE CONCRETE IN THE ROLLER WITH A MINIMUM 28 DAY COMPRESSION STRENGTH OF 4,000 PSI. DO NOT SUBSTITUTE SLAB BOLSTERS OR HIGH CHAIRS FOR THE CONCRETE ROLLERS.

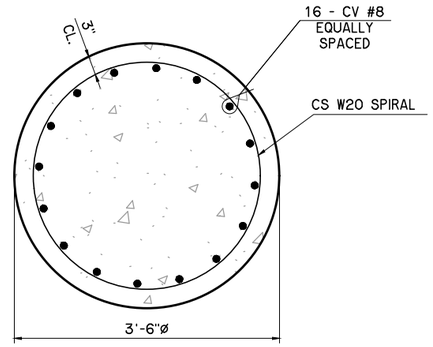
PIER CAP AND COLUMN BAR LIST (ONE SHOWN, SEVEN REQUIRED)				
MARK	SIZE	NO.	FORM	LENGTH
EPOXY COATED REINFORCING				
P	#4	40	BNT.	7'-0"
PE1	#4	2	BNT.	4'-9"
PE2	#4	6	BNT.	4'-10"
PH1	#10	8	BNT.	41'-4"
PH2	#4	10	STR.	38'-6"
PH3	#10	8	STR.	38'-6"
S	#5	106	BNT.	13'-5"
PLAIN REINFORCING				
CS	W20	2	BNT.	116'-9"

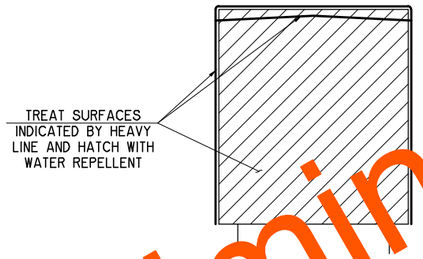
(1) LENGTH SHOWN DOES NOT ACCOUNT FOR SPLICES. CONTRACTOR MAY ADD SPLICES AS NECESSARY, BUT PAYMENT WILL NOT BE MADE FOR EXTRA LENGTH REQUIRED FOR SPLICES.

(2) INCLUDED IN CONTRACT UNIT PRICE OF "DRILLED SHAFTS 48" DIAMETER".

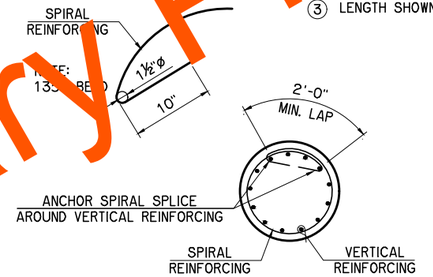
(3) LENGTH SHOWN INCLUDES 1 - 4'-9" LAP

DRILLED SHAFT BAR LIST					
MARK	SIZE	NO.	FORM	LENGTH	
PIER NO. 1					
EPOXY COATED REINFORCING					
(2) CV	#8	32	STR.	15'-4"	
PLAIN REINFORCING					
(1)(2) DS1	W20	2	BNT.	1,214'-0"	
(2)(3) DV1	#11	32	STR.	68'-3"	
PIER NO. 2					
EPOXY COATED REINFORCING					
(2) CV	#8	32	STR.	15'-4"	
PLAIN REINFORCING					
(1)(2) DS2	W20	2	BNT.	1,288'-9"	
(2)(3) DV2	#11	32	STR.	72'-3"	
PIER NO. 3					
EPOXY COATED REINFORCING					
(2) CV	#8	32	STR.	15'-4"	
PLAIN REINFORCING					
(1)(2) DS3	W20	2	BNT.	1,251'-3"	
(2)(3) DV3	#11	32	STR.	70'-3"	
PIER NO. 4					
EPOXY COATED REINFORCING					
(2) CV	#8	32	STR.	15'-4"	
PLAIN REINFORCING					
(1)(2) DS4	W20	2	BNT.	1,270'-0"	
(2)(3) DV4	#11	32	STR.	71'-3"	
PIER NO. 5					
EPOXY COATED REINFORCING					
(2) CV	#8	32	STR.	15'-4"	
PLAIN REINFORCING					
(1)(2) DS5	W20	2	BNT.	1,232'-9"	
(2)(3) DV5	#11	32	STR.	69'-3"	
PIER NO. 6					
EPOXY COATED REINFORCING					
(2) CV	#8	32	STR.	15'-4"	
PLAIN REINFORCING					
(1)(2) DS6	W20	2	BNT.	1,214'-0"	
(2)(3) DV6	#11	32	STR.	68'-3"	
PIER NO. 7					
EPOXY COATED REINFORCING					
(2) CV	#8	32	STR.	15'-4"	
PLAIN REINFORCING					
(1)(2) DS7	W20	2	BNT.	1,232'-9"	
(2)(3) DV7	#11	32	STR.	69'-3"	



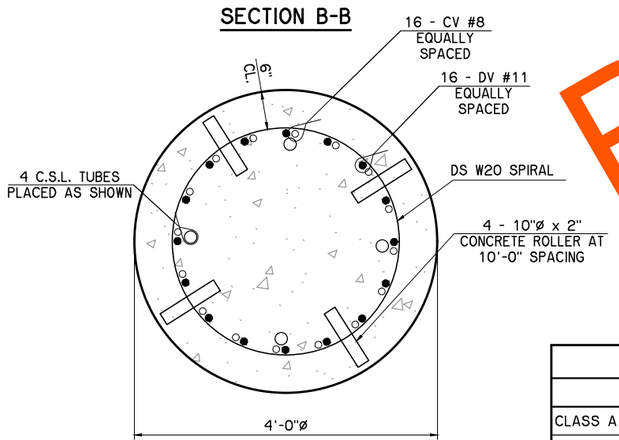


WATER REPELLENT TREATMENT DETAIL

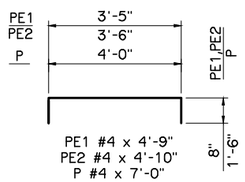


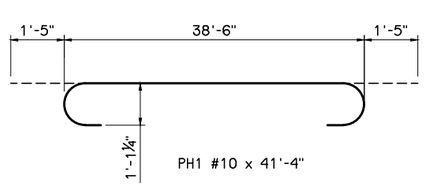
SPIRAL REINFORCING SPLICE DETAIL

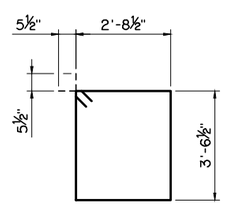
SECTION B-B



SECTION C-C







PIER QUANTITIES									
	UNIT	PIER NO. 1	PIER NO. 2	PIER NO. 3	PIER NO. 4	PIER NO. 5	PIER NO. 6	PIER NO. 7	TOTAL
CLASS A CONCRETE	C.Y.	27.3	27.3	27.3	27.3	27.3	27.3	27.3	191.1
REINFORCING STEEL	LB.	160	160	160	160	160	160	160	1,120
EPOXY COATED REINFORCING STEEL	LB.	4,700	4,700	4,700	4,700	4,700	4,700	4,700	32,900
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	58	58	58	58	58	58	58	406
DRILLED SHAFTS 48" DIAMETER	L.F.	128	136	132	134	130	128	130	918
CROSSHOLE SONIC LOGGING	EA.								3

Preliminary Plans

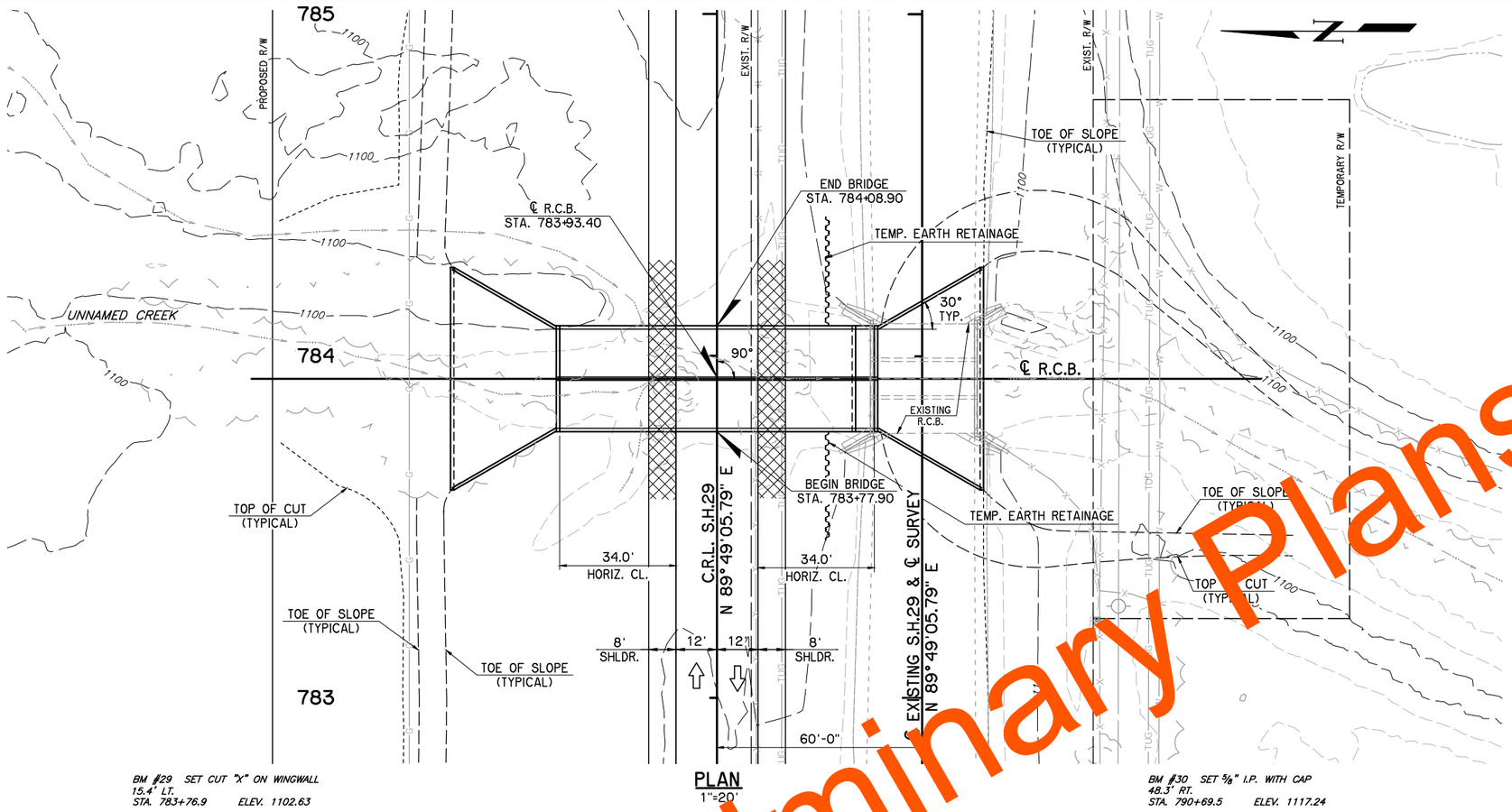
S.H.29 OVER BLACK BEAR CREEK — STEPHENS COUNTY
BRIDGE "A"

PIER DETAILS
SHEET 2 OF 2

Design	RMF	
Detail	RAP	
Check	ADT	

CEC

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04) — SHEET NO. B011



PLAN
1"=20'

BM #29 SET CUT "X" ON WINGWALL
15.4' LT.
STA. 783+76.9 ELEV. 1102.63

BM #30 SET 5/8" I.P. WITH CAP
48.3' RT.
STA. 790+69.5 ELEV. 1117.24

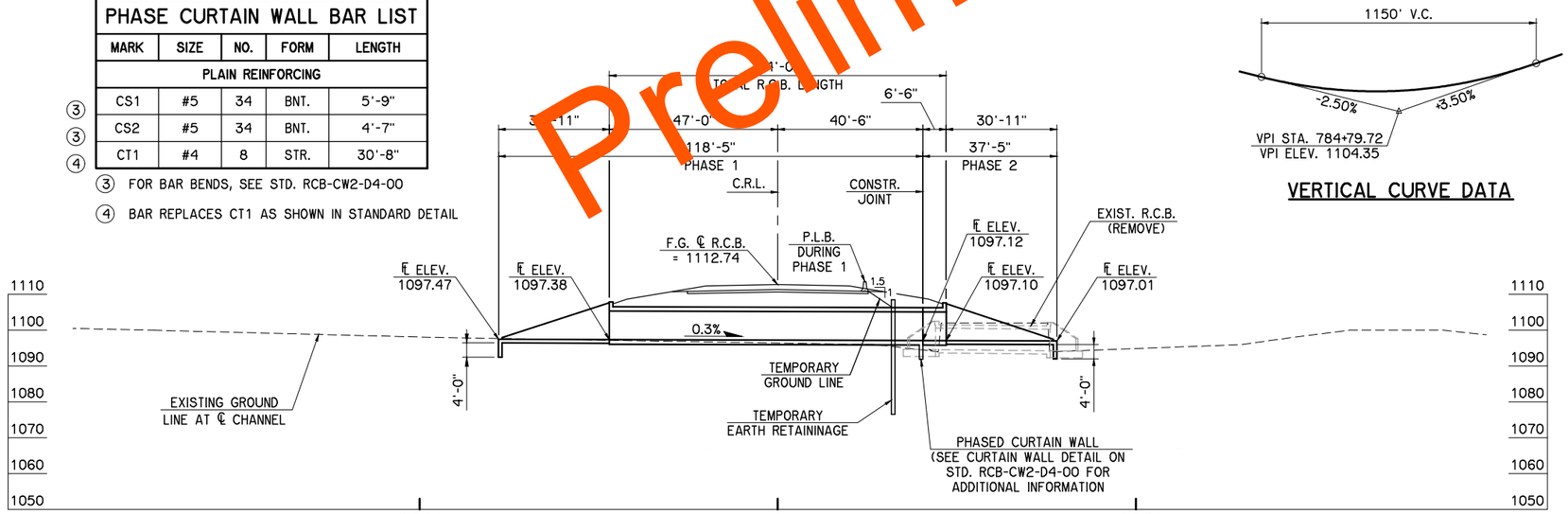
Preliminary Plans

PHASE CURTAIN WALL BAR LIST

	MARK	SIZE	NO.	FORM	LENGTH
	PLAIN REINFORCING				
③	CS1	#5	34	BNT.	5'-9"
③	CS2	#5	34	BNT.	4'-7"
④	CT1	#4	8	STR.	30'-8"

③ FOR BAR BENDS, SEE STD. RCB-CW2-D4-00

④ BAR REPLACES CT1 AS SHOWN IN STANDARD DETAIL



ELEVATION
1"=20'

VERTICAL CURVE DATA

DESIGN DATA

LOAD AND RESISTANCE FACTOR DESIGN

CONCRETE CLASS AA f'c = 4 K.S.I.
REINFORCING STEEL (GRADE 60) fy = 60 K.S.I.

LOADING:
HL-93 OR OKLAHOMA OVERLOAD TRUCK

DESIGN:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION WITH 2008 INTERIMS

HL93 INVENTORY RATING FACTOR: 1.89
HL93 OPERATING RATING FACTOR: 2.44

INDEX OF SHEETS

AB01 - AB02	GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE)
B012	GENERAL PLAN AND ELEVATION

2009 STANDARDS

RCB-C2-14(2-10)-01E
RCB-E2-H8-0-1-01E
RCB-E2-H8-0-2-01E
RCB-CW2-D4-0-01E

2019 STANDARDS

SB1-5-1

HYDRAULIC SUMMARY

TOTAL DRAINAGE AREA = 1.12 SQ. MILES
CONTROLLED DRAINAGE AREA = 0.00 SQ. MILES
EFFECTIVE DRAINAGE AREA = 1.12 SQ MILES

FREQUENCY (YEARS)	DISCHARGE (CFS)	WATER SURFACE ELEVATION (FT)	VELOCITY (FPS)
2	232	1100.98	4.91
5	499	1101.67	7.36
10	771	1102.38	9.33
25	1,230	1104.17	11.22
50	1,530	1105.15	12.07
100	1,960	1106.48	13.11
500	3,060	1110.62	20.12
OT > 500			

SUMMARY OF BRIDGE QUANTITIES - BRIDGE "B"

	ITEM DESCRIPTION	UNIT	PHASE 1	PHASE 2	TOTAL
	UNCLASSIFIED EXCAVATION	C.Y.	160		160
	STRUCTURAL EXCAVATION UNCLASSIFIED	C.Y.	180	64	244
	TEMPORARY EARTH RETAINAGE	L.SUM	1		1
①	CLASS AA CONCRETE	C.Y.	402.9	101.8	504.7
②	REINFORCING STEEL	LB.	64,150	13,950	78,100
	REMOVAL OF EXISTING BRIDGE STRUCTURE	L.SUM		1	1

① TOTAL INCLUDES 4.6 C.Y. FOR CURTAIN WALL IN PHASE 1

② TOTAL INCLUDES 510 LB. FOR CURTAIN WALL IN PHASE 1

REVISIONS

REV NO	DESCRIPTION	DATE

PREPARED BY:

5/22/24
DATE

RYAN FRANCKA
OKLAHOMA LICENSE NO. 26497

LICENSED PROFESSIONAL ENGINEER
RYAN FRANCKA
26497
OKLAHOMA
CA 32
6-30-24

S.H.29 OVER UNNAMED CREEK STEPHENS COUNTY
BRIDGE "B"

GENERAL PLAN AND ELEVATION
2 - 14' x 8' x 94' R.C.B.
℄ STA. 783+93.40, 0° SKEW

Design	CEG	
Detail	DRB	
Check	RMF	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04)
SHEET NO. B012

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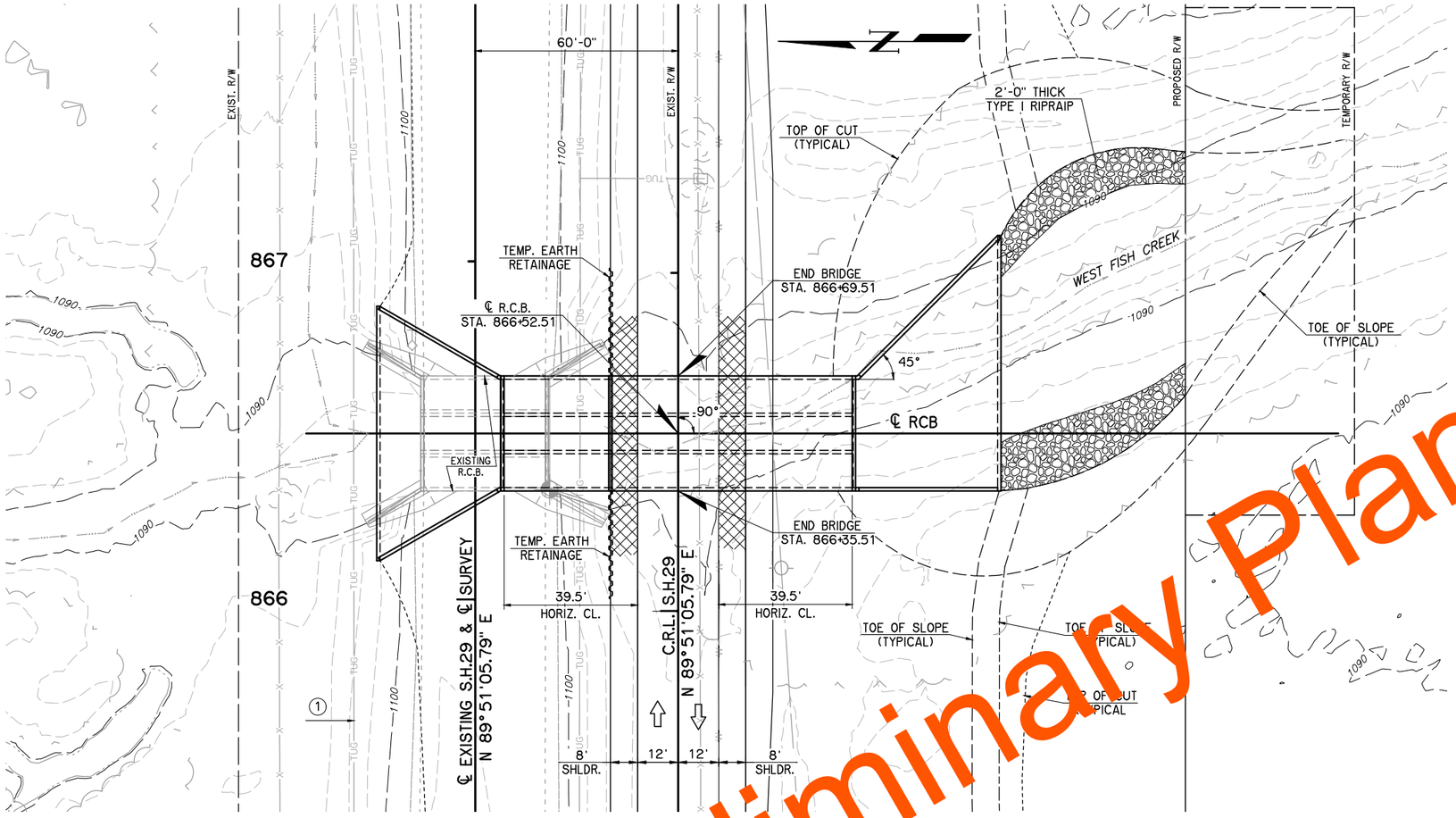
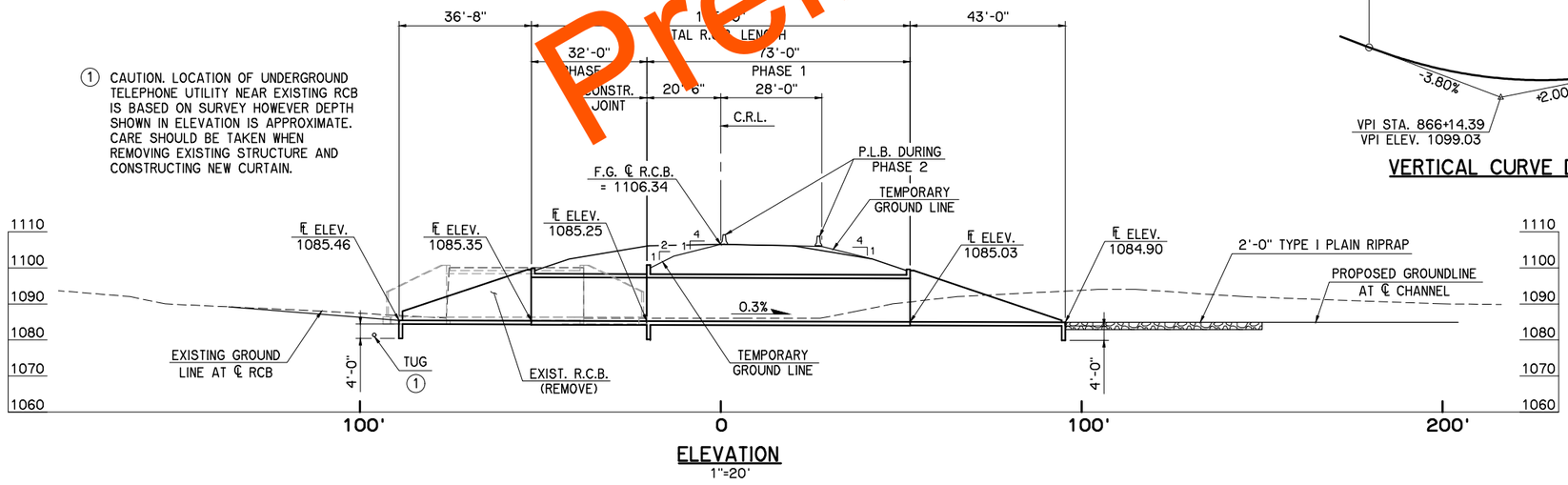


PLAN
1"=20'

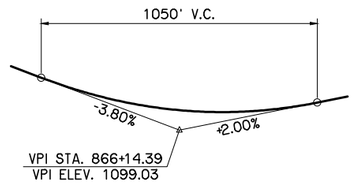
BM #42 SET CUT "X" ON HEADWALL
22.0' RT.
STA. 866+32.5
ELEV. 1101.04

BM #43 SET 5/8" IRON PIN W/ CAP
63.2' RT.
STA. 873+15.2
ELEV. 1115.48

1. CAUTION. LOCATION OF UNDERGROUND TELEPHONE UTILITY NEAR EXISTING RCB IS BASED ON SURVEY HOWEVER DEPTH SHOWN IN ELEVATION IS APPROXIMATE. CARE SHOULD BE TAKEN WHEN REMOVING EXISTING STRUCTURE AND CONSTRUCTING NEW CURTAIN.



ELEVATION
1"=20'



VERTICAL CURVE DATA

Preliminary Plans

REVISIONS		
REV NO	DESCRIPTION	DATE

DESIGN DATA

LOAD AND RESISTANCE FACTOR DESIGN

CONCRETE CLASS AA — f'c = 4 K.S.I.
REINFORCING STEEL (GRADE 60) — fy = 60 K.S.I.

LOADING:
HL-93 OR OKLAHOMA OVERLOAD TRUCK

DESIGN:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION

HL93 INVENTORY RATING FACTOR: 1.81
HL93 OPERATING RATING FACTOR: 2.33

INDEX OF SHEETS

AB01 - AB02	GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE)
B013	GENERAL PLAN AND ELEVATION
B014	R.C.B. DETAILS
B015 - B018	END SECTION DETAILS

2019 STANDARDS

SBI-5-1

HYDRAULIC SUMMARY

TOTAL DRAINAGE AREA = 1.87 SQ. MILES
CONTROLLED DRAINAGE AREA = 0.00 SQ. MILES
EFFECTIVE DRAINAGE AREA = 1.87 SQ MILES

FREQUENCY (YEARS)	DISCHARGE (CFS)	WATER SURFACE ELEVATION (FT)	VELOCITY (FPS)
2	316	1092.71	1.51
5	675	1094.12	2.76
10	1,040	1095.16	3.86
25	1,650	1096.47	5.53
50	2,070	1097.22	6.58
100	2,620	1098.18	7.87
500	4,090	1100.93	11.36
OT > 500			

SUMMARY OF BRIDGE QUANTITIES - BRIDGE "C"

ITEM DESCRIPTION	UNIT	PHASE 1	PHASE 2
UNCLASSIFIED EXCAVATION	C.Y.	1,570	1,460
STRUCTURAL EXCAVATION UNCLASSIFIED	C.Y.	160	95
TEMPORARY EARTH RETAINAGE	L.SUM	1	
CLASS AA CONCRETE	C.Y.	465.5	261.4
REINFORCING STEEL	LB.	73,410	40,000
TYPE I PLAIN RIPRAP	TON	270	
REMOVAL OF EXISTING BRIDGE STRUCTURE	L.SUM		1

PREPARED BY:

5/22/24
DATE

RYAN FRANCKA
OKLAHOMA LICENSE NO. 26497

LICENSED PROFESSIONAL ENGINEER
RYAN FRANCKA
26497
OKLAHOMA
CA 32
6-30-24

S.H.29 OVER WEST FISH CREEK — STEPHENS COUNTY
BRIDGE "C"

GENERAL PLAN AND ELEVATION
3 - 10' x 12' x 105' R.C.B.
℄ STA. 866+52.51, 0° SKEW

Design	CEG	
Detail	DRB	
Check	RMF	

CEC

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04) — SHEET NO. B013

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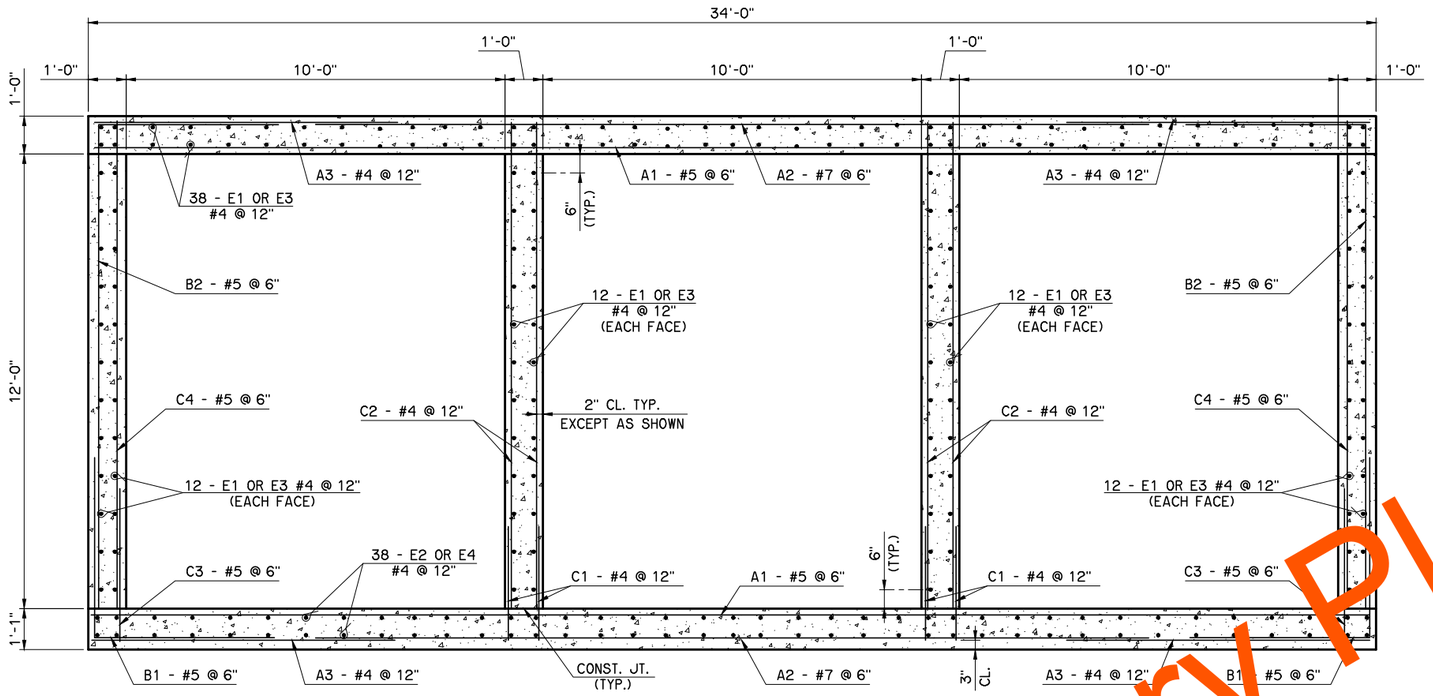
REVISIONS		
REV NO	DESCRIPTION	DATE



BARREL SECTION

PLACE WD BARS FROM APRON AND WINGS TIED TO BARREL REINFORCING BEFORE PLACING BARREL CONCRETE. SEE APRON AND WING DETAILS ON SHEETS BO15 THRU BO18.

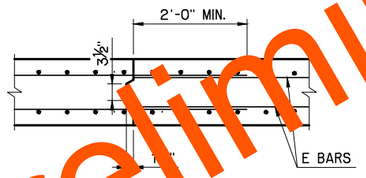
BARREL AND HEADWALL BAR LIST
PHASE 1

MARK	SIZE	NO.	FORM	LENGTH
PLAIN REINFORCING				
A1	#5	290	STR.	33'-8"
A2	#7	289	STR.	22'-0"
A3	#4	292	STR.	8'-0"
B1	#5	290	BNT.	9'-6"
B2	#5	290	BNT.	17'-7"
C1	#4	292	STR.	3'-0"
C2	#4	292	STR.	12'-10"
C3	#5	290	STR.	4'-0"
C4	#5	290	STR.	12'-10"
CH	#5	10	STR.	33'-8"
CL1	#5	38	BNT.	4'-4"
CL2	#5	38	BNT.	4'-3"
CL3	#5	38	BNT.	8'-7"
① CS1	#5	35	BNT.	5'-9"
① CS2	#5	35	BNT.	7'-0"
CT2	#4	8	BNT.	33'-8"
② E1	#4	172	STR.	76'-10"
③ E2	#4	76	STR.	79'-0"

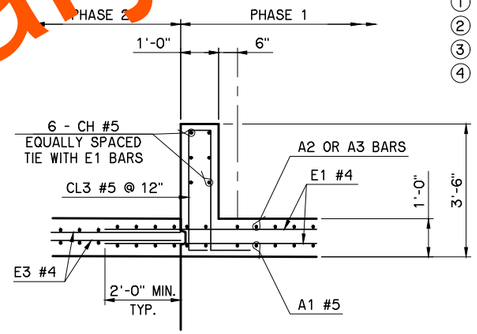
BARREL AND HEADWALL BAR LIST
PHASE 2

MARK	SIZE	NO.	FORM	LENGTH
PLAIN REINFORCING				
A1	#5	128	STR.	33'-8"
A2	#7	127	STR.	22'-0"
A3	#4	128	STR.	8'-0"
B1	#5	128	BNT.	9'-6"
B2	#5	128	BNT.	17'-7"
C1	#4	128	STR.	3'-0"
C2	#4	128	STR.	12'-10"
C3	#5	128	STR.	4'-0"
C4	#5	128	STR.	12'-10"
CH	#5	4	STR.	33'-8"
CL1	#5	38	BNT.	4'-4"
CL2	#5	38	BNT.	4'-3"
E3	#4	172	STR.	31'-10"
④ E4	#4	76	STR.	34'-0"

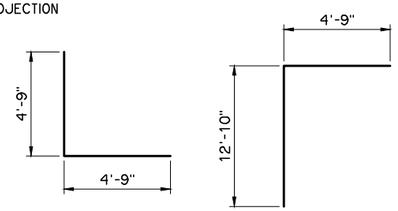
① SEE SHEET BO15 FOR BAR BEND
② INCLUDES (2) - 2'-0" LAPS
③ INCLUDES (2) - 2'-0" LAPS & (1) 2'-0" PROJECTION
④ INCLUDES (1) - 2'-0" PROJECTION



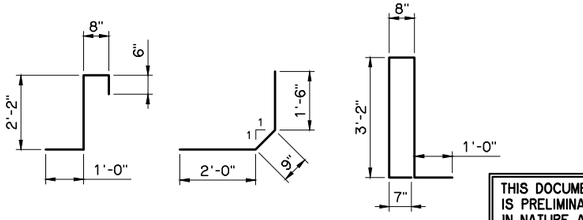
TRANSVERSE CONSTRUCTION JOINT



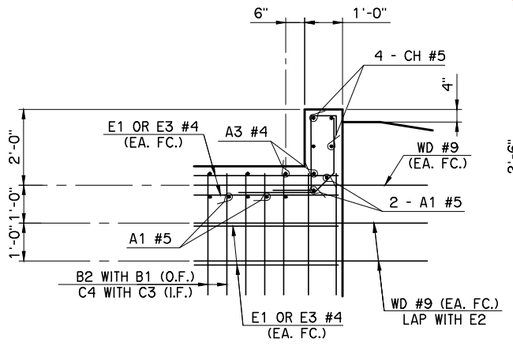
HEADWALL SECTION



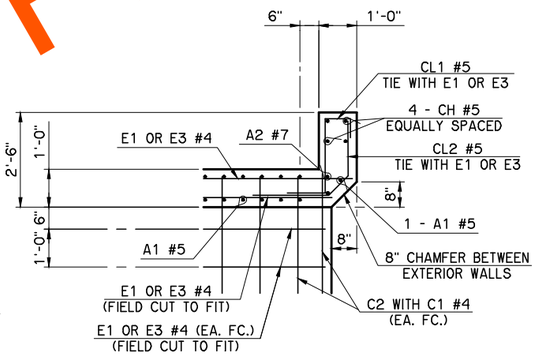
B1 #5 x 9'-6"
B2 #5 x 17'-7"



CL1 #5 x 4'-4"
CL2 #5 x 4'-3"
CL3 #5 x 8'-7"

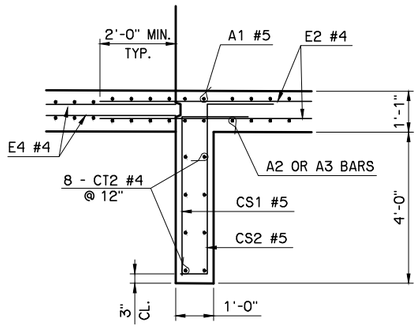


AT EXTERIOR WALL



AT INTERIOR WALL

END SECTION HEADWALL DETAILS



CURTAIN WALL SECTION

CONSTRUCTION JOINT DETAILS

THIS DOCUMENT IS PRELIMINARY IN NATURE AND IS NOT A FINAL, SIGNED AND SEALED DOCUMENT

S.H.29 OVER WEST FISH CREEK
BRIDGE "C"
STEPHENS COUNTY

R.C.B. DETAILS
BARREL DETAILS

Design	RMF	ADT
Detail	DRB	RAP
Check	RMF	JLC

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04)
SHEET NO. BO14

Preliminary Plans

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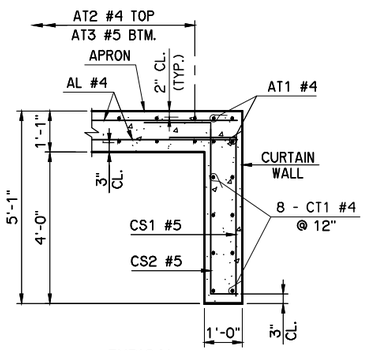
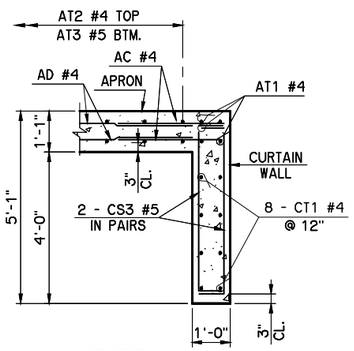
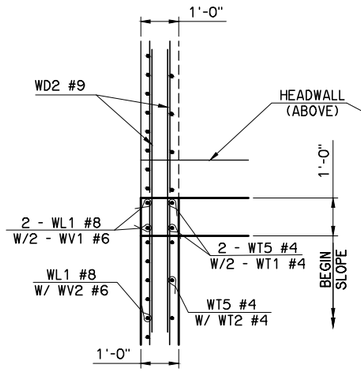


TYPICAL

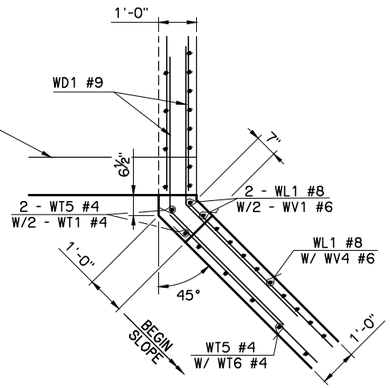


AT END

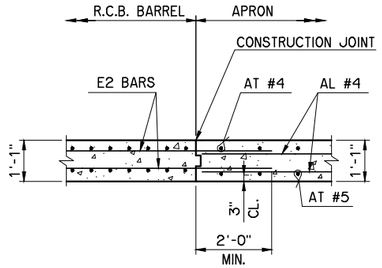
SECTION A-A



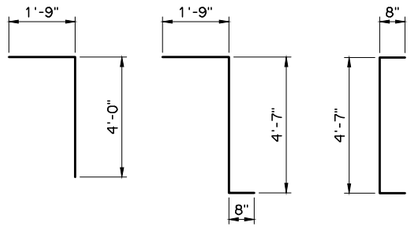
PLAN OF SHORT WING AT BARREL

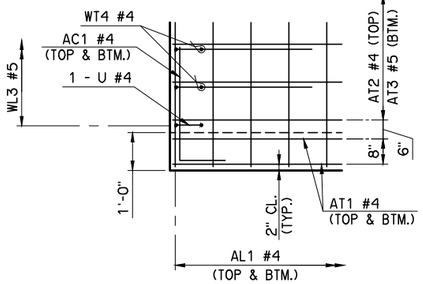


PLAN OF LONG WING AT BARREL



SECTION B-B

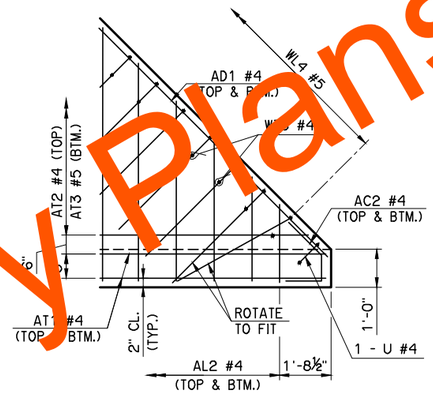




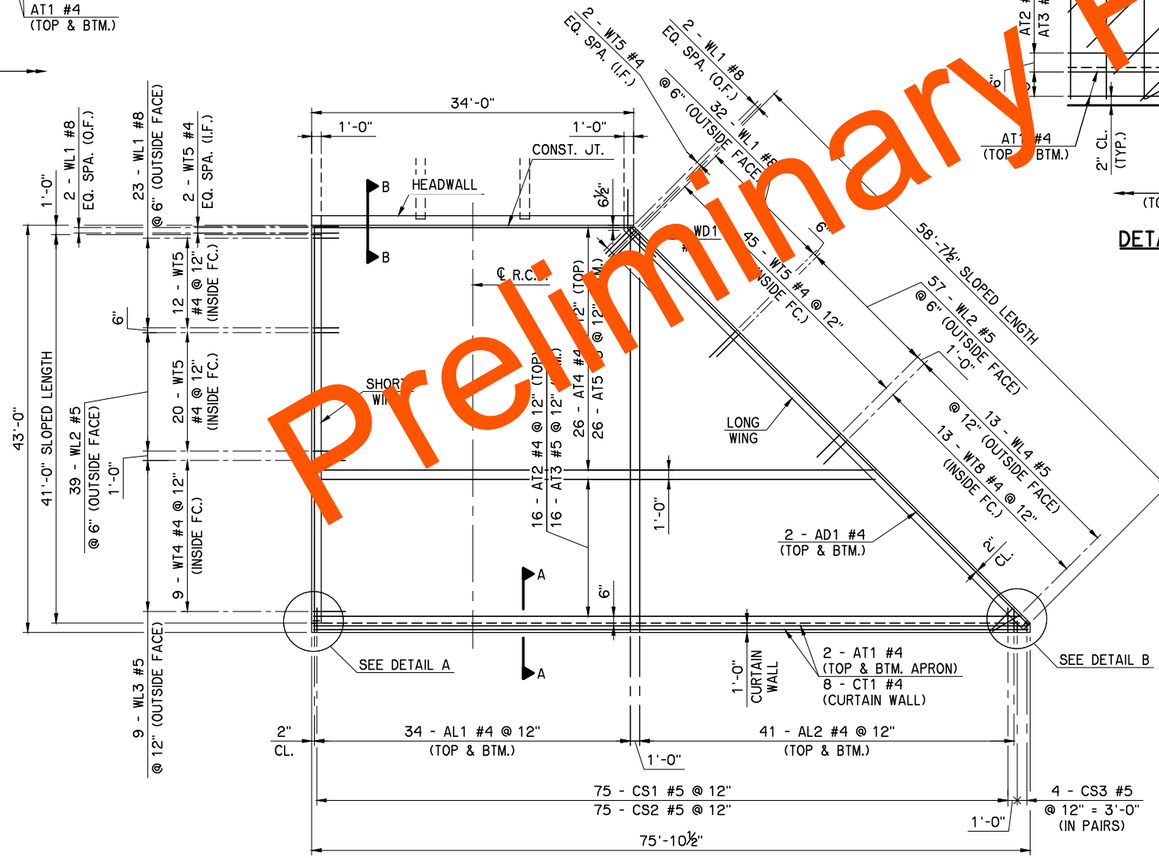
DETAIL A

NOTE:
CURTAIN WALL REINFORCING NOT SHOWN FOR CLARITY.

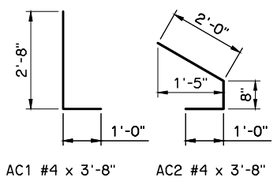
NOTE:
CURTAIN WALL REINFORCING NOT SHOWN FOR CLARITY.



DETAIL B



APRON & CURTAIN WALL PLAN



SOUTH APRON AND CURTAIN WALL BAR LIST

	MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIATION
	PLAIN REINFORCING					
	AC1	#4	2	BNT.	3'-8"	
	AC2	#4	2	BNT.	3'-8"	
	AD1	#4	2	STR.	59'-3"	
	AL1	#4	68	STR.	42'-8"	
①	AL2	#4	82	STR.	22'-3" AVG.	2'-3" TO 42'-3"
②	AT1	#4	4	STR.	77'-6"	
②	AT2	#4	16	STR.	69'-9" AVG.	62'-3" TO 77'-3"
③	AT3	#5	16	STR.	70'-3" AVG.	62'-9" TO 77'-9"
	AT4	#4	26	STR.	46'-8" AVG.	34'-2" TO 59'-2"
	AT5	#5	26	STR.	46'-8" AVG.	34'-2" TO 59'-2"
	CS1	#5	75	BNT.	5'-9"	
	CS2	#5	75	BNT.	7'-0"	
	CS3	#5	4	BNT.	5'-11"	
②	CT1	#4	8	STR.	77'-6"	
④	WD1	#9	2	BNT.	8'-4"	
④	WL1	#8	59	BNT.	17'-11"	
④	WL2	#5	96	BNT.	10'-9"	
④	WL3	#5	9	BNT.	4'-10" AVG.	3'-6" TO 6'-2"
④	WL4	#5	13	BNT.	4'-10" AVG.	3'-5" TO 6'-3"
	WT4	#4	9	STR.	2'-10" AVG.	1'-6" TO 4'-2"
	WT5	#4	81	STR.	2'-10"	
	WT8	#4	13	STR.	2'-10" AVG.	1'-5" TO 4'-3"
④	U	#4	2	BNT.	3'-0"	

① 2 SETS OF 41 BARS
② INCLUDES 1 - 2'-0" LAP
③ INCLUDES 1 - 2'-6" LAP
④ SEE SHEET BO16 FOR BAR BENDS

THIS DOCUMENT IS PRELIMINARY IN NATURE AND IS NOT A FINAL, SIGNED AND SEALED DOCUMENT

Preliminary Plans

REVISIONS

REV NO	DESCRIPTION	DATE

S.H.29 OVER WEST FISH CREEK
BRIDGE "C"
STEPHENS COUNTY

END SECTION DETAILS
SHEET 1 OF 4
SOUTH APRON AND CURTAIN WALL DETAILS

Design	RMF	ADT
Detail	DRB	RAP
Check	RMF	JLC

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04)
SHEET NO. BO15

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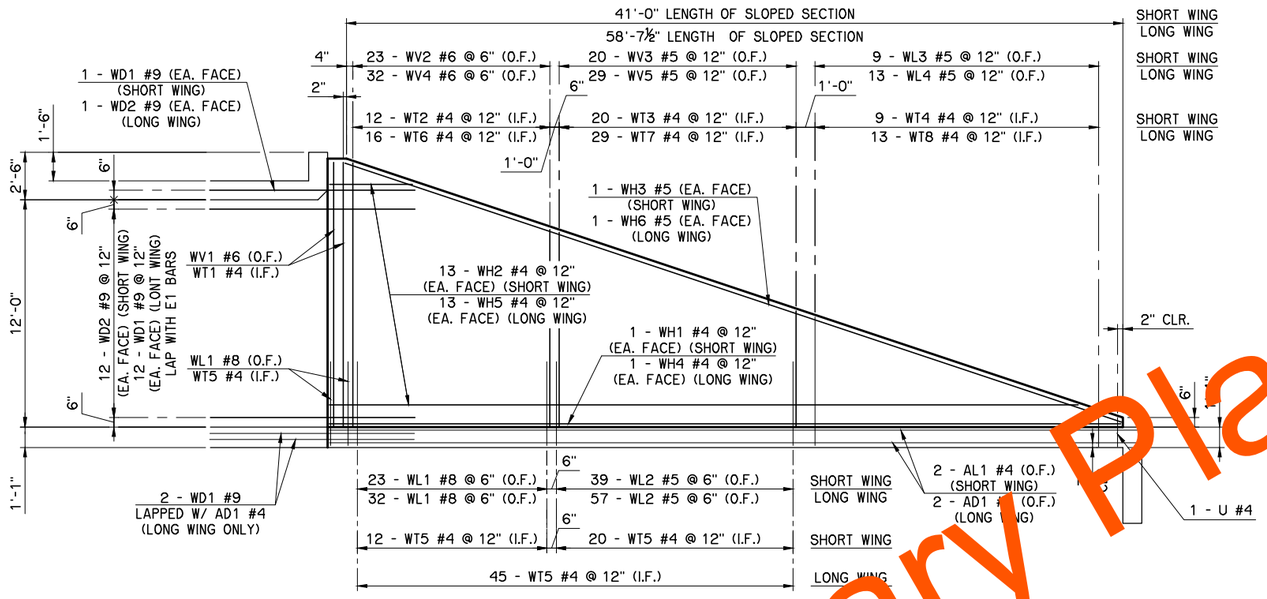
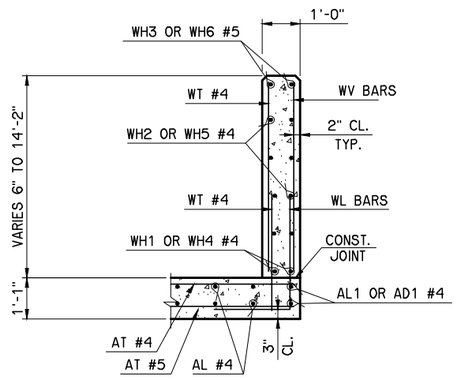
REVISIONS		
REV NO	DESCRIPTION	DATE



WING ELEVATION

NOTE:
I.F. INDICATES INSIDE FACE OF WING
O.F. INDICATES OUTSIDE FACE OF WING

Preliminary Plans

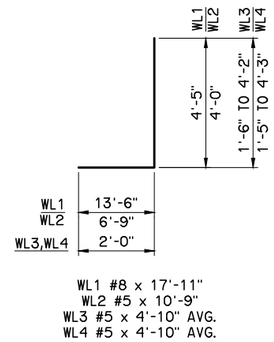


TYPICAL SECTION THRU WING

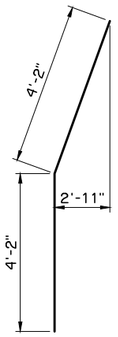
SOUTH WINGWALL BAR LIST

	MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIATION
	PLAIN REINFORCING					
	WD1	#9	26	STR.	8'-4"	
	WD2	#9	26	BNT.	8'-4"	
	WH1	#4	2	STR.	41'-8"	
(1)	WH2	#4	26	STR.	21'-2"	3'-2" TO 39'-2"
	WH3	#5	2	STR.	43'-1"	
	WH4	#4	2	STR.	59'-3"	
(1)	WH5	#4	26	STR.	29'-11" AVG.	4'-2" TO 55'-8"
	WH6	#5	2	STR.	60'-0"	
	WT1	#4	4	STR.	14'-0"	
	WT2	#4	12	STR.	12'-0" AVG.	10'-2" TO 13'-10"
	WT3	#4	20	STR.	6'-10" AVG.	3'-8" TO 10'-0"
	WT6	#4	16	STR.	12'-2" AVG.	10'-5" TO 13'-11"
	WT7	#4	29	STR.	6'-11" AVG.	3'-8" TO 10'-2"
	WV1	#6	4	STR.	14'-0"	
	WV2	#6	23	STR.	12'-0" AVG.	10'-2" TO 13'-10"
	WV3	#5	20	STR.	6'-10" AVG.	3'-8" TO 10'-0"
	WV4	#6	32	STR.	12'-1" AVG.	10'-3" TO 13'-11"
	WV5	#5	29	STR.	6'-11" AVG.	3'-8" TO 10'-2"

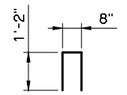
(1) 2 SETS OF 13 BARS



WL1 #8 x 17'-11"
WL2 #5 x 10'-9"
WL3 #5 x 4'-10" AVG.
WL4 #5 x 4'-10" AVG.



WD2 #9 x 8'-4"



U #4 x 3'-0"

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S.H.29 OVER WEST FISH CREEK — STEPHENS COUNTY
BRIDGE "C"

END SECTION DETAILS

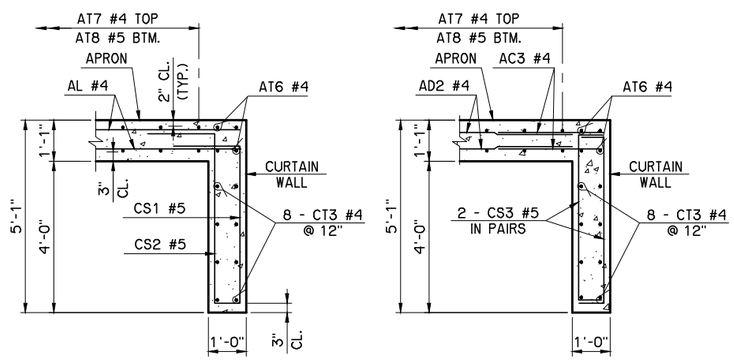
SHEET 2 OF 4
SOUTH WINGWALL DETAILS

Design	RMF	ADT
Detail	DRB	RAP
Check	RMF	JLC

CEC

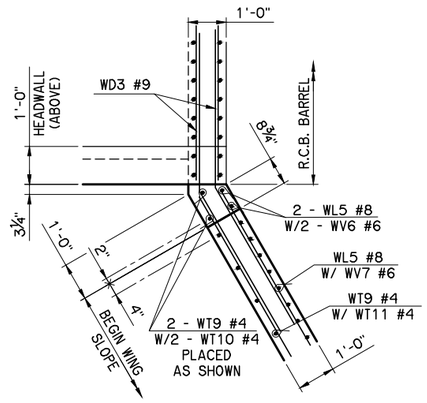
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04) — SHEET NO. B016

L:\Active\1508A\Drawings\Bridge C\3 south wing.dwg, 5/13/2024 2:55:20 PM, Deanne Brittian

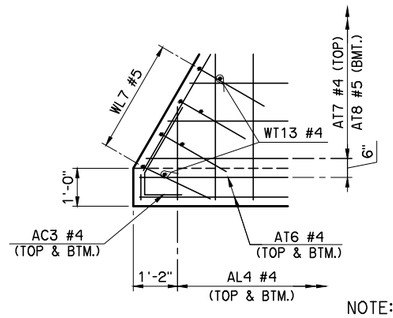


TYPICAL AT END

SECTION A-A

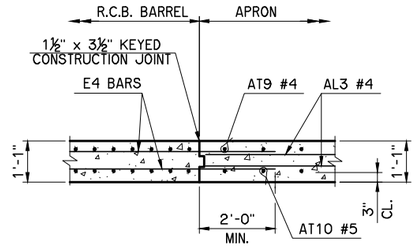


PLAN OF WING AT BARREL

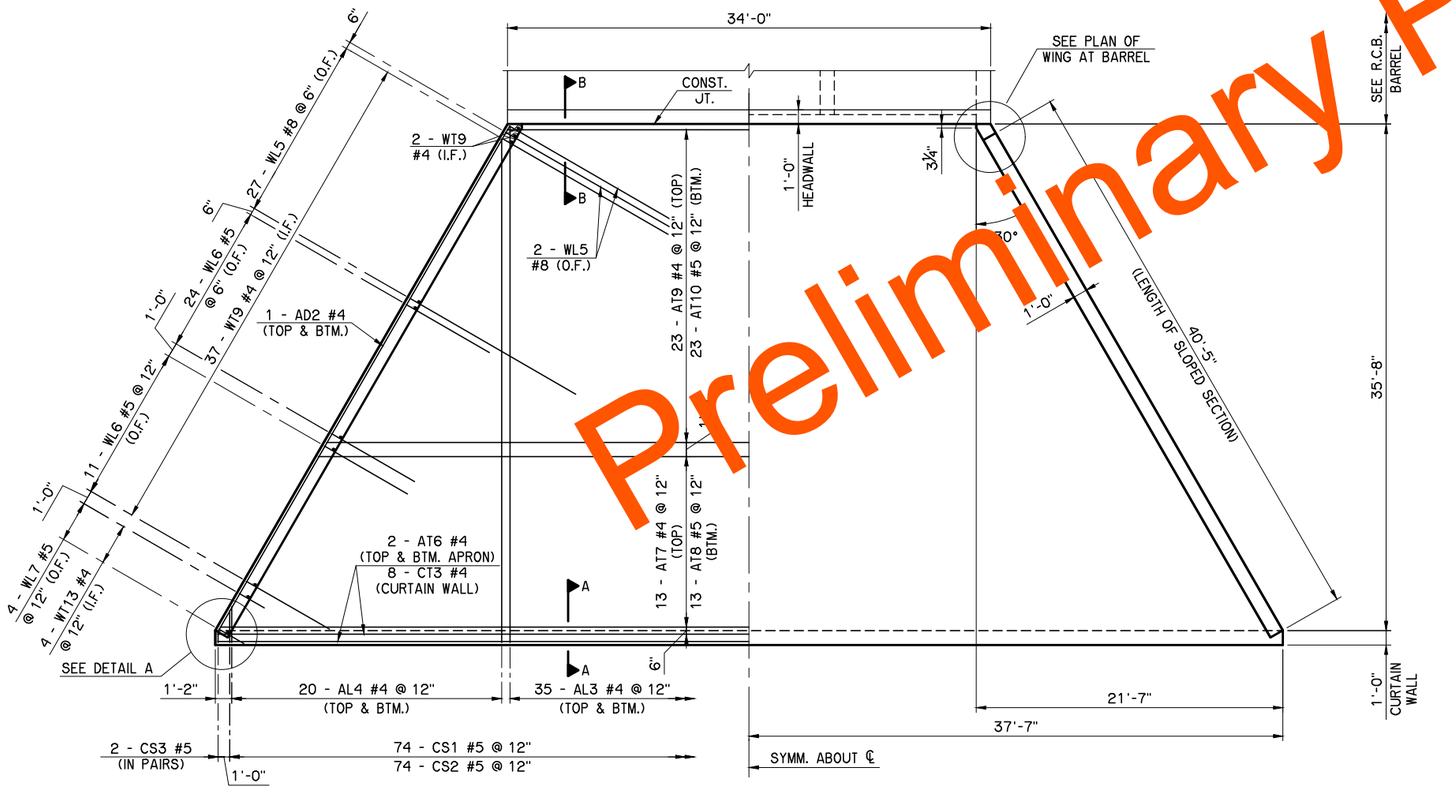


DETAIL A

NOTE:
CURTAIN WALL REINFORCING NOT SHOWN FOR CLARITY.

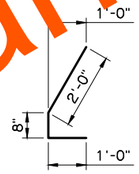


SECTION B-B



HALF APRON REINFORCING HALF APRON PLAN

APRON & CURTAIN WALL PLAN



AC3 #4 x 3'-8"

NOTE:
I.F. INDICATES INSIDE FACE OF WING
O.F. INDICATES OUTSIDE FACE OF WING

NORTH APRON AND CURTAIN WALL BAR LIST

	MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIATION
	PLAIN REINFORCING					
	AC3	#4	4	BNT.	3'-8"	
	AD2	#4	4	STR.	41'-1"	
	AL3	#4	70	STR.	36'-4"	
(1)	AL4	#4	80	STR.	18'-11" AVG.	2'-5" TO 35'-5"
(2)	AT6	#4	4	STR.	77'-4"	
(2)	AT7	#4	13	STR.	70'-0" AVG.	63'-1" TO 76'-11"
(2)	AT8	#5	13	STR.	70'-0" AVG.	63'-1" TO 76'-11"
	AT9	#4	23	STR.	46'-9" AVG.	34'-1" TO 59'-5"
	AT10	#5	23	STR.	46'-9" AVG.	34'-1" TO 59'-5"
(3)	CS1	#5	74	BNT.	5'-9"	
(3)	CS2	#5	74	BNT.	7'-0"	
(3)	CS3	#5	4	BNT.	5'-11"	
(2)	CT3	#4	8	STR.	77'-4"	
(4)	WL5	#8	58	BNT.	17'-11"	
(4)	WL6	#5	70	BNT.	10'-9"	
(4)	WL7	#5	8	BNT.	5'-7" AVG.	5'-2" TO 6'-0"
	WT9	#4	78	STR.	2'-10"	
	WT13	#4	8	STR.	3'-7" AVG.	3'-2" TO 4'-0"

(1) 4 SETS OF 20 BARS
(2) INCLUDES 1 - 2'-6" LAP
(3) SEE SHEET B015 FOR BAR BENDS
(4) SEE SHEET B018 FOR BAR BENDS

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Preliminary Plans

REVISIONS		
REV NO	DESCRIPTION	DATE

S.H.29 OVER WEST FISH CREEK BRIDGE "C" — STEPHENS COUNTY

END SECTION DETAILS
SHEET 3 OF 4
NORTH APRON AND CURTAIN WALL DETAILS

Design	RMF	
Detail	DRB	
Check	RMF	

CEC

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04) — SHEET NO. B017

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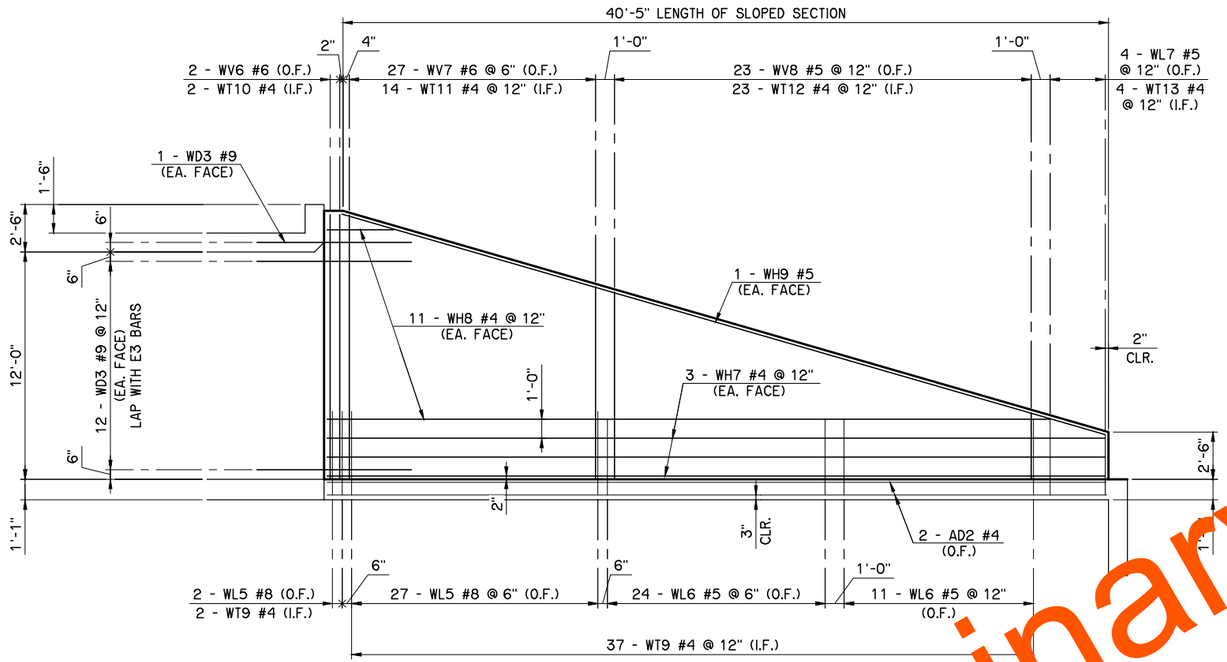
REVISIONS		
REV NO	DESCRIPTION	DATE



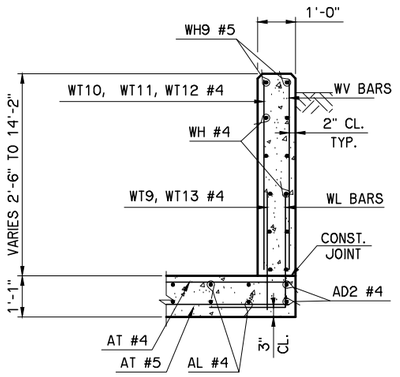
WING ELEVATION

NOTE:
I.F. INDICATES INSIDE FACE OF WING
O.F. INDICATES OUTSIDE FACE OF WING

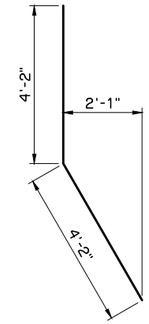
NORTH WINGWALL BAR LIST
(ONE SHOWN, TWO REQUIRED)

MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIATION
PLAIN REINFORCING					
WD3	#9	26	BNT.	8'-4"	
WH7	#4	6	STR.	41'-1"	
① WH8	#4	22	STR.	20'-10" AVG.	3'-6" TO 38'-2"
WH9	#5	2	STR.	41'-11"	
WT10	#4	2	STR.	14'-0"	
WT11	#4	14	STR.	12'-0" AVG.	10'-2" TO 13'-10"
WT12	#4	23	STR.	6'-8" AVG.	3'-6" TO 9'-10"
WV6	#6	2	STR.	14'-0"	
WV7	#6	27	STR.	12'-0" AVG.	10'-2" TO 13'-10"
WV8	#5	23	STR.	6'-8" AVG.	3'-6" TO 9'-10"

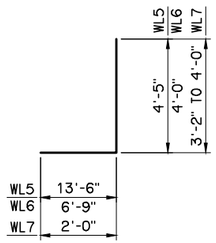
① 2 SETS OF 11 BARS



TYPICAL SECTION THRU WING



WD3 #9 x 9'-2"



WL5 #8 x 17'-11"
WL6 #5 x 10'-9"
WL7 #5 x 5'-7" AVG

Preliminary Plans

THIS DOCUMENT IS PRELIMINARY IN NATURE AND IS NOT A FINAL, SIGNED AND SEALED DOCUMENT

S.H.29 OVER WEST FISH CREEK — STEPHENS COUNTY
BRIDGE "C"

END SECTION DETAILS

SHEET 4 OF 4
NORTH WINGWALL DETAILS

Design	RMF	
Detail	DRB	
Check	RMF	

CEC

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 29657(04) — SHEET NO. B018

L:\Active\1508A\Drawings\Bridge C\5 north wings REVISED.dwg, 5/14/2024 9:38:16 AM, Deanne Brittian

REVISIONS		
REV. NO.	DESCRIPTION	DATE

U.S. ARMY CORPS OF ENGINEERS SECTION 404 PERMIT CONDITIONS

404 PERMIT INFORMATION

NATIONWIDE PERMIT NO. 14

☐ TO BE PROVIDED AT A LATER DATE

SECTION 404 OF THE CLEAN WATER ACT REQUIRES PRIOR AUTHORIZATION FROM SECRETARY OF THE ARMY (CORPS) FOR THE DISCHARGE OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES.

☑ NO PRE-CONSTRUCTION NOTIFICATION REQUIRED: PROJECT DOES NOT REQUIRE NOTIFICATION TO THE US ARMY CORPS OF ENGINEERS (USACE) IN ORDER TO COMMENCE.

☐ PRE-CONSTRUCTION NOTIFICATION REQUIRED: RESIDENT ENGINEER MUST NOTIFY THE USACE WITHIN 30 DAYS OF THE START OF CONSTRUCTION AND 30 DAYS PRIOR TO COMPLETION OF CONSTRUCTION, FORMS LOCATED IN THE CONTRACT.

☐ INDIVIDUAL PERMIT: WILL BE MONITORED CLOSELY BY THE USACE.

☐ GENERAL PERMIT: PROJECT WITHIN A DESIGNATED CRITICAL RESOURCE WATER AND WILL REQUIRE PRE-CONSTRUCTION NOTIFICATION SEE ABOVE FOR EXPLANATION OF PRE-CONSTRUCTION NOTIFICATION.

☐ NO PERMIT REQUIRED

SWT TRACKING NO. N/A

SPECIAL CONDITIONS

PERMIT GENERAL CONDITIONS

THE CONTRACTOR SHALL BE RESPONSIBLE BUT NOT LIMITED TO THE FOLLOWING HIGHLIGHTS OF THE 404 PERMIT (SEE CONTRACT FOR COMPLETE LIST):

TEMPORARY FILLS:

APPROPRIATE MEASURES MUST BE TAKEN TO MAINTAIN NORMAL DOWNSTREAM FLOWS AND MINIMIZE FLOODING TO THE MAXIMUM EXTENT PRACTICABLE, WHEN TEMPORARY STRUCTURES (WORK ROADS, WORK PADS, ETC.,) WORK, AND DISCHARGES, INCLUDING COFFERDAMS, ARE NECESSARY FOR CONSTRUCTION ACTIVITIES, ACCESS FILLS, OR DE WATERING OF CONSTRUCTION SITES. TEMPORARY FILLS MUST CONSIST OF MATERIALS, AND BE PLACED IN A MANNER, THAT WILL NOT BE ERODED BY EXPECTED HIGH FLOWS. TEMPORARY FILLS MUST BE REMOVED IN THEIR ENTIRETY AND THE AFFECTED AREAS RETURNED TO PRE-CONSTRUCTION ELEVATIONS. THE AREAS AFFECTED BY TEMPORARY FILLS MUST BE RE VEGETATED, AS APPROPRIATE.

NAVIGATION:

NO ACTIVITY MAY CAUSE MORE THAN A MINIMAL ADVERSE EFFECT ON NAVIGATION WITHIN A NAVIGABLE WATER OF THE U.S. IF THIS PROJECT IS LOCATED WITHIN A NAVIGABLE WATER OF THE U.S., IT WILL BE IDENTIFIED IN THE SPECIAL CONDITIONS.

AQUATIC LIFE MOVEMENTS & ADVERSE EFFECTS FROM IMPOUNDMENTS:

NO ACTIVITY MAY LARGELY DISRUPT THE NECESSARY LIFE CYCLE MOVEMENTS OF THOSE SPECIES INDIGENOUS TO THE BODY OF WATER, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. CULVERTS WILL BE DESIGNED TO PROVIDE SUFFICIENT PASSAGE FOR AQUATIC LIFE AND INSTALLED TO MAINTAIN LOW FLOW. RATE OF FLOW CANNOT BE MADE HIGHER THAN WHAT WAS PRIOR TO THE START OF CONSTRUCTION. EROSION CONTROL MEASURES SHOULD BE UTILIZED AROUND THE PERIMETER OF NEW STRUCTURES TO AVOID SILT BUILD UP. CAUTION SHOULD BE TAKEN TO MINIMIZE HARM IF CONSTRUCTION ACTIVITIES TAKE PLACE WITHIN A STREAM OR RIVER CHANNEL AND CREATE A CONFINED BODY OF WATER, CAUSE ADVERSE EFFECTS TO THE AQUATIC SYSTEM IN ANY WAY, AND/OR RESTRICTING ITS FLOW.

MANAGEMENT OF WATER FLOWS:

CONSTRUCTION ACTIVITIES MAY NOT IMPEDE THE PASSAGE OF NORMAL OR HIGH FLOWS. TO THE GREATEST EXTENT POSSIBLE, THE PRE- CONSTRUCTION COURSE, CONDITIONS,CAPACITY AND LOCATION OF OPEN WATERS MUST BE MAINTAINED. THIS INCLUDES STREAM CHANNALIZATION AND STORM WATER MANAGEMENT.

SUITABLE MATERIAL:

NO ACTIVITY MAY USE UNSUITABLE MATERIAL (E.G. TRASH, DEBRIS, CAR BODIES, ASPHALT, ETC.). MATERIALS USED FOR CONSTRUCTION OR DISCHARGED MUST BE FREE FROM TOXIC POLLUTANTS IN TOXIC AMOUNTS (SEE SECTION 307 OF CLEAN WATER ACT)

PROPER MAINTENANCE:

ANY AUTHORIZED STRUCTURE OR FILL SHALL BE PROPERLY MAINTAINED, INCLUDING MAINTENANCE TO ENSURE PUBLIC SAFETY AND COMPLIANCE WITH APPLICABLE NATION WIDE PERMIT GENERAL CONDITIONS, AS WELL AS ANY ACTIVITY- SPECIFIC CONDITIONS ADDED BY THE DISTRICT ENGINEER TO AN NATIONWIDE PERMIT AUTHORIZATION

HAZARDOUS MATERIALS:

HAZARDOUS MATERIALS, CHEMICALS, FUELS, LUBRICATING OILS AND OTHER SUCH SUBSTANCES SHOULD BE STORED AWAY FROM ANY STREAM OR RIVERCHANNEL (SEE SECTION 307 OF CLEAN WATER ACT)

EQUIPMENT:

HEAVY EQUIPMENT WORKING IN WETLANDS OR MUDFLATS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE; FOR EXAMPLE IF WETLANDS ARE PRESENT WITHIN THE CONSTRUCTION, THE FOOTPRINT WILL BE SHOWN ON THE PLANS. MEASURES SHOULD BE TAKEN TO PREVENT DISCHARGE INTO ANY WATERS OF THE STATE (e.g. CONCRETE WASHOUT).

SOIL EROSION AND SEDIMENT CONTROLS:

APPROPRIATE SOIL EROSION AND SEDIMENT CONTROLS MUST BE USED AND MAINTAINED IN EFFECTIVE OPERATING CONDITION DURING CONSTRUCTION, AND ALL EXPOSED SOILS AND OTHER FILLS, AS WELL AS ANY WORK WITHIN STREAM OR RIVER CHANNELS OR BANKS, MUST BE PERMANENTLY STABILIZED AS SOON AS POSSIBLE.

404 COMPLIANCE:

IN ORDER TO REMAIN COMPLIANT WITH THE 404 PERMIT, THE PROJECT MUST COMPLY WITH ALL FEDERAL ENVIRONMENTAL PROTECTION LAWS ASSOCIATED AND, THE ENVIRONMENTAL COMMITMENTS AS SHOWN ON THE PLANS. THIS INCLUDES BUT IS NOT LIMITED TO COMPLIANCE WITH ALL ENVIRONMENTAL NOTES IN THE PLANS, INCLUDING CULTURAL RESOURCES, HAZARDOUS WASTE, BIOLOGICAL FOR PROTECTED SPECIES, AND DEQ STORM WATER REGULATIONS AS THEY PERTAIN TO THE SWMP SHEET WITHIN THE PLANS. ALL OF THE 404 PERMIT GENERAL AND SPECIFIC CONDITIONS MUST BE ADHERED TO. A COPY OF THESE CONDITIONS CAN BE FOUND IN THE CONTRACT WITH THE 404 PERMIT.

PERMIT GENERAL CONDITIONS

FUELING:

ALL FUELING AND SERVICING OF VEHICLES AND EQUIPMENT SHALL BE DONE ABOVE THE ORDINARY HIGH WATER MARK (OHWM).

MATERIAL STORAGE:

STORE MATERIAL AND FUEL OUTSIDE OF THE ORDINARY HIGH WATER MARK OR ANY AREA LIKELY TO FLOOD.

DEBRIS STORAGE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY MATERIALS, DEBRIS, OR REFUSE WHICH HAS FALLEN INTO ANY STREAM OR RIVER CHANNELS RESULTING FROM THE EXECUTION OF THE PROJECT AS SOON AS POSSIBLE.

SEE NATIONWIDE PERMIT 14 IN THE CONTRACT

401 CERTIFICATION CONDITIONS

THE CONTRACTOR SHALL BE RESPONSIBLE BUT NOT LIMITED TO THE FOLLOWING HIGHLIGHTS OF THE 401 CERTIFICATION (SEE CONTRACT FOR COMPLETE LIST):

☑ ALL SPILLS OF FUEL OR POLLUTANTS IN EXCESS OF FIVE GALLONS SHALL BE REPORTED TO ODEQ WITHIN 24 HRS AND REPORTED TO POLLUTION PREVENTION HOTLINE (1-800-522-0206)

☑ ALL FUELING AND SERVICING OF VEHICLES AND EQUIPMENT SHALL BE DONE OUTSIDE THE ORDINARY HIGH WATER MARK

☑ THE PERMITTEE SHALL PROVIDE ACCESS TO THE PROPERTY TO ODEQ FOR INSPECTIONS.

☑ ANY STOCKPILE SHALL BE ABOVE ORDINARY HIGH WATER MARK AND REMOVED FROM LIKELY FLOOD ZONE

☑ BEST MANAGEMENT PRACTICES SHOULD BE USED TO CONTROL SOIL EROSION AND MAINTAIN COMPLIANCE WITH WATER QUALITY STANDARDS.

☑ FOR ANY PROJECT THAT INVOLVES BANK STABILIZATION, THE PERMITTEE SHALL CONSIDER INSTALLING BIOENGINEERING PRACTICES IN PLACE OF STRUCTURAL PRACTICES (RIPRAP) TO MINIMIZE IMPACTS TO AQUATIC RESOURCES

Preliminary Plans

SECTION 404 PERMIT COMPLIANCE

DETAIL			
REVIEW			
APPROVED			

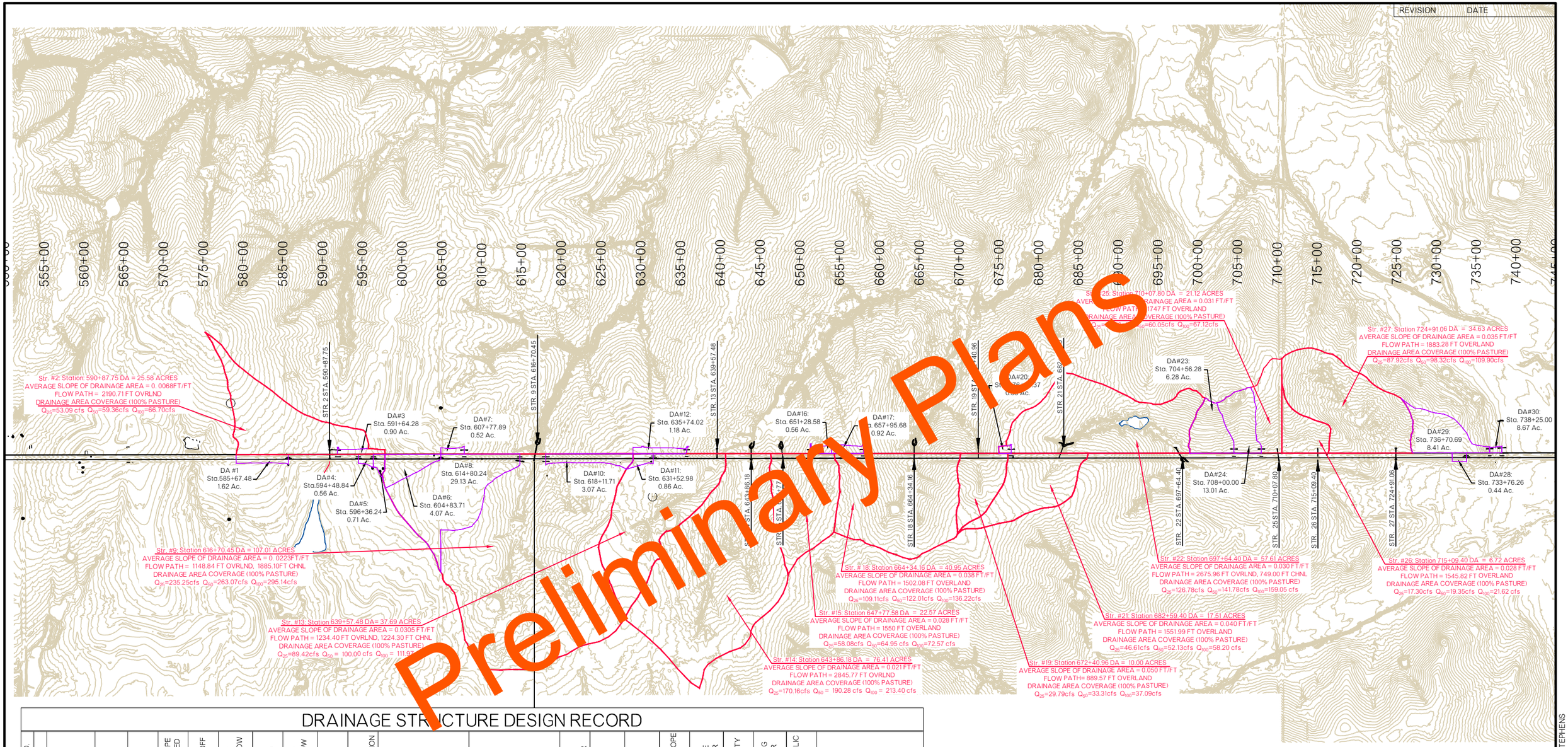
ENVIRONMENTAL DIVISION

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 29657(04) | SHEET NO. E001

Revised 2/14/2017

REVISION DATE



Preliminary Plans

DRAINAGE STRUCTURE DESIGN RECORD

STRUCTURE NO.	DESIGN YEAR	CENTERLINE STATION	DRAINAGE AREA	ANTICIPATED LAND USE	AVERAGE SLOPE OF WATERSHED	C: WEIGHTED RUNOFF COEFFICIENT	LENGTH OF OVERLAND FLOW	SLOPE OF OVERLAND	LENGTH OF CHANNEL FLOW	SLOPE OF CHANNEL	T.C.: TIME OF CONCENTRATION	INTENSITY OF DESIGN YEAR RAINFALL			DESIGN YEAR DISCHARGE			T.W.: DESIGN TAILWATER	FLOW LINE INLET	FLOW LINE OUTLET	STRUCTURE SLOPE	MAXIMUM ALLOWABLE HEADWATER	FLOW VELOCITY	CONTROLLING HEADWATER	TYPE OF HYDRAULIC CONTROL	REMARKS
												25	50	100	Q_{25}	Q_{50}	Q_{100}								
			ACRES		%		FT.	%	FT.	%	MIN.	IN/HOUR			CFS			FT.	ELEV.	ELEV.	%	ELEV.	FT/SEC	ELEV.		
2	50	590+87.75	25.58	Pasture	0.68%	0.50	2190.71	0.68%	N/A	N/A	36.21	4.15	4.64	5.21	53.09	59.36	66.70	1.15	1241.05	1240.83	0.26%	1246.29	8.60	1245.13	INLET	
9	50	616+70.45	107.01	Pasture	2.23%	0.50	1148.84	1.70%	1885.10	2.55%	32.61	4.40	4.92	5.52	235.25	263.07	295.14	2.49	1190.27	1179.00	5.79%	1214.75	25.98	1196.79	INLET	
13	50	639+57.48	37.69	Pasture	3.05%	0.50	1234.40	2.60%	1224.30	3.50%	28.22	4.75	5.31	5.94	89.42	100.00	111.97	1.52	1205.66	1203.12	2.73%	1212.96	15.91	1212.95	INLET	
14	50	643+86.18	76.41	Pasture	2.10%	0.50	2845.77	2.10%	N/A	N/A	31.84	4.45	4.98	5.59	170.16	190.28	213.40	2.10	1197.00	1188.37	6.85%	1204.55	24.31	1203.63	INLET	
15	50	647+77.58	22.57	Pasture	2.80%	0.50	1550.00	2.80%	N/A	N/A	24.00	5.15	5.76	6.43	58.08	64.95	72.57	1.21	1200.92	1193.36	5.52%	1206.32	20.27	1206.18	INLET	
18	50	664+34.16	40.95	Pasture	3.80%	0.50	1502.08	3.80%	N/A	N/A	22.32	5.33	5.96	6.65	109.11	122.01	136.22	1.69	1174.12	1170.00	2.14%	1195.85	17.17	1182.80	INLET	
19	50	672+40.96	10.00	Pasture	5.00%	0.50	889.57	5.00%	N/A	N/A	17.41	5.96	6.66	7.42	29.79	33.31	37.09	0.84	1194.67	1190.04	3.62%	1202.44	15.15	1198.13	INLET	
21	50	682+59.40	17.51	Pasture	4.00%	0.50	1551.99	4.00%	N/A	N/A	22.36	5.32	5.95	6.65	46.61	52.13	58.20	1.07	1179.18	1173.38	3.74%	1195.24	17.32	1185.28	INLET	
22	50	697+64.40	57.61	Pasture	3.00%	0.50	2675.96	3.00%	749.00	3.00%	32.54	4.40	4.92	5.52	126.78	141.78	159.05	1.82	1143.74	1142.91	0.64%	1156.03	11.29	1150.01	INLET	
25	50	710+07.80	21.12	Pasture	3.10%	0.50	1747.00	3.10%	N/A	N/A	24.60	5.09	5.69	6.36	53.70	60.05	67.12	1.16	1134.25	1130.11	2.76%	1139.20	15.78	1139.07	INLET	
26	50	715+09.40	6.72	Pasture	2.80%	0.50	1545.82	2.80%	N/A	N/A	23.98	5.15	5.76	6.43	17.30	19.35	21.62	0.62	1129.07	1124.49	2.89%	1133.56	13.03	1131.88	INLET	
27	50	724+91.06	34.63	Pasture	3.50%	0.50	1883.28	3.50%	N/A	N/A	24.67	5.08	5.68	6.35	87.92	98.32	109.90	1.51	1104.45	1103.21	1.14%	1113.29	12.23	1108.99	INLET	
42	50	808+52.70	16.11	Pasture	3.20%	0.50	1328.42	3.20%	N/A	N/A	22.08	5.36	5.99	6.69	43.15	48.25	53.86	1.03	1153.82	1149.45	2.44%	1161.42	14.79	1159.28	INLET	
45	50	815+52.42	104.69	Pasture	2.17%	0.50	822.85	2.70%	2520.10	2.00%	31.13	4.51	5.04	5.65	235.95	263.86	295.83	2.49	1134.18	1128.10	3.97%	1150.84	21.89	1140.77	INLET	
53	50	839+78.12	13.99	Pasture	3.50%	0.50	1490.40	3.50%	N/A	N/A	22.63	5.29	5.92	6.61	37.04	41.42	46.25	0.95	1156.36	1147.46	5.14%	1168.22	17.25	1159.36	INLET	
58	50	882+78.11	127.68	Pasture	1.69%	0.50	1727.18	1.90%	4014.10	1.60%	46.11	3.61	4.04	4.55	230.42	257.67	290.53	2.46	1103.89	1101.18	1.58%	1115.60	16.08	1109.28	INLET	

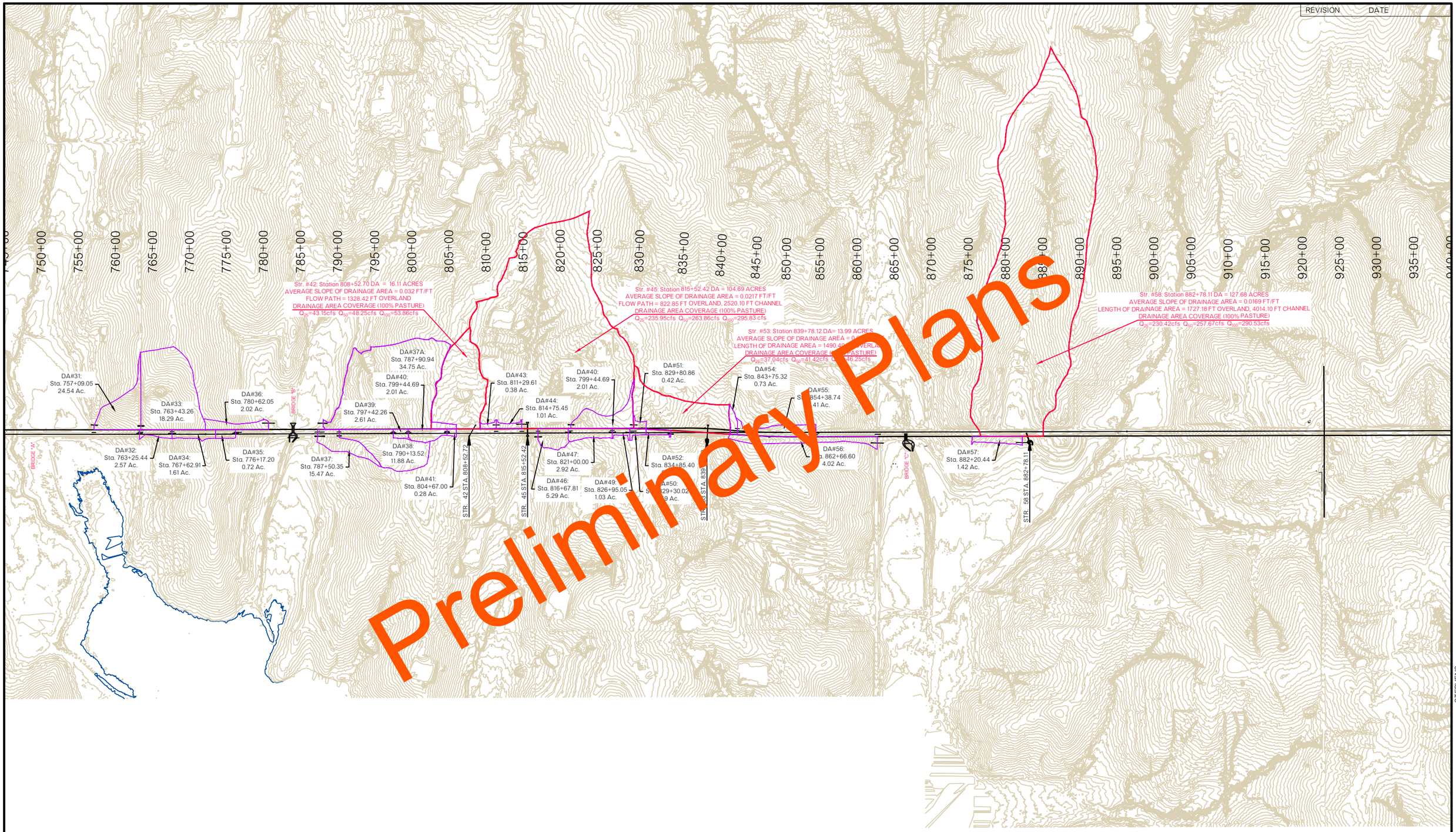
DRAINAGE AREA MAP

STATE JOB NO. 29657(04) SHEET NO. R001

STEPHENS

SH 29

REVISION	DATE



DRAINAGE AREA MAP

STATE JOB NO. 29657(04) SHEET NO. R002

STEPHENS

SH 29

STORMWATER MANAGEMENT PLAN

DESCRIPTION	REVISIONS	DATE

SITE DESCRIPTION

PROJECT LIMITS: BEGINNING APPROX. 11.38 MILES EAST OF US 81 & EXTENDING EAST APPROX. 5.68 MILES.

PROJECT DESCRIPTION: GRADE, DRAIN AND BRIDGE REPLACEMENT OF SH 29 ON AN OFFSET ALIGHNMENT ALSO HAVING DETOURS, CROSS DRAINS, TEMPORARY AND/OR PERMANENT EROSION CONTROL DEVICES.

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES: PRIOR TO INITIATING SOIL DISTURBING ACTIVITIES, THE CONTRACTOR WILL INSTALL ALL PERIMETER TEMPORARY SEDIMENT CONTROLS SPECIFIED. STRIP, STOCKPILE AND STABILIZE TOPSOIL. CLEAR AND GRUB ONLY IN NECESSARY AREAS, PRESERVING AS MUCH NATIVE VEGETATION AS POSSIBLE. INSTALL, MAINTAIN AND/OR MOVE TEMPORARY SEDIMENT ITEMS WITH CONSTRUCTION OPERATIONS AS PRACTICAL. IF DIRECTED BY THE ENGINEER, PLANT TEMPORARY SEEDING. REPLACE SALVAGED TOPSOIL AND DEVICES WHEN AN ACCEPTABLE VEGETATIVE COVER (AT LEAST 70%) HAS BEEN ATTAINED. AS SITE CONDITIONS WARRANT, THE CONTRACTOR MAY CHOOSE TO MODIFY THE TYPE OR ARRANGEMENT OF SPECIFIED PRACTICES TO IMPROVE THEIR EFFECTIVENESS AS APPROVED BY THE ENGINEER. THE CONTRACTOR WILL MAINTAIN A LOG OF THE DATES OF MAJOR SOIL DISTURBANCE ACTIVITIES, AND ALSO THE DATES OF INSTALLATION OF EROSION CONTROL MEASURES.

SOIL TYPE: STEPHENVILLE-DARNELL COMPLEX & NEWALLA

TOTAL AREA OF THE CONSTRUCTION SITE: 161.95 ACRES

ESTIMATED AREA TO BE DISTURBED: 122.86 ACRES

OFFSITE AREA TO BE DISTURBED: (FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 100.29 ACRES

TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 90.42 ACRES

POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: 0.68

LATITUDE & LONGITUDE OF CENTER OF PROJECT: 34°38'16.20" N 97°42'[illegible]50" W

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: BLACK BEAR CREEK

SENSITIVE WATERS OR WATERSHEDS: YES [ ] NO [X]

303(d) IMPAIRED WATERS: YES [ ] NO [X]

IF YES, LIST IMPAIRMENT:

LOCATED IN A TMDL: YES [ ] NO [X]

LAKE THUNDERBIRD TMDL: YES [ ] NO [X]

MS4 ENTITY YES [ ] NO [X]

IF YES, LOCATION:

NOTE:
THIS SHEET SHOULD BE USED IN CONJUNCTION WITH A DRAINAGE MAP THAT ILLUSTRATES THE DRAINAGE PATTERNS/PATHWAYS AND RECEIVING WATERS FOR THIS PROJECT. THIS SHEET SHOULD ALSO BE USED WITH THE EROSION CONTROL SUMMARIES, PAY ITEMS, & NOTES.

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

- ____ TEMPORARY SEEDING
- _X_ PERMANENT SODDING, SPRIGGING OR SEEDING
- _X_ VEGETATIVE MULCHING
- ____ SOIL RETENTION BLANKET
- ____ PRESERVATION OF EXISTING VEGETATION

NOTE: TEMPORARY EROSION CONTROL METHODS MUST BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER 14 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, OR AS DIRECTED BY THE ENGINEER.

STRUCTURAL PRACTICES:

- ____ STABILIZED CONSTRUCTION EXIT
- _X_ TEMPORARY SILT FENCE
- _X_ TEMPORARY SILT DIKES
- ____ TEMPORARY FIBER LOG
- ____ DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- ____ DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- _X_ ROCK FILTER DAMS
- ____ TEMPORARY SLOPE DRAINS
- _X_ PAVED FLUMES W/ DITCH LINER PROTECTION
- ____ TEMPORARY DIVERSION CHANNELS
- _X_ TEMPORARY SEDIMENT BASINS
- ____ TEMPORARY SEDIMENT TRAPS
- _X_ TEMPORARY SEDIMENT FILTERS
- _X_ TEMPORARY SEDIMENT REMOVAL
- _X_ RIP RAP
- ____ INLET SEDIMENT FILTER
- ____ TEMPORARY BRUSH SEDIMENT BARRIERS
- ____ SANDBAG BERMS
- ____ TEMPORARY STREAM CROSSINGS

OFFSITE VEHICLE TRACKING:

- _X_ HAUL ROADS DAMPENED FOR DUST CONTROL
- _X_ LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- _X_ EXCESS DIRT ON ROAD REMOVED DAILY

NOTES:

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER FROM THE BEGINNING OF CONSTRUCTION UNTIL AN ACCEPTABLE VEGETATIVE COVER IS ESTABLISHED. INSPECTION BY THE CONTRACTOR AND ANY NECESSARY REPAIRS SHALL BE PERFORMED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH AS RECORDED BY A NON-FREEZING RAIN GAUGE TO BE LOCATED ON SITE. POTENTIALLY ERODIBLE AREAS, DRAINAGEWAYS, MATERIAL STORAGE, STRUCTURAL DEVICES, CONSTRUCTION ENTRANCES AND EXITS ALONG WITH EROSION AND SEDIMENT CONTROL LOCATIONS ARE EXAMPLES OF SITES THAT NEED TO BE INSPECTED.

WASTE MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF CONSTRUCTION WASTE MATERIAL IS REQUIRED BY THE CONTRACTOR. MATERIALS INCLUDE STOCKPILES, SURPLUS, DEBRIS AND ALL OTHER BY-PRODUCTS FROM THE CONSTRUCTION PROCESS. PRACTICES INCLUDE DISPOSAL, PROPER MATERIALS HANDLING, SPILL PREVENTION AND CLEANUP MEASURES. CONTROLS AND PRACTICES SHALL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL AGENCIES.

HAZARDOUS MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF HAZARDOUS WASTE MATERIALS IS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING MANUFACTURER'S RECOMMENDATIONS, STATE AND FEDERAL REGULATIONS TO ENSURE CORRECT HANDLING, DISPOSAL, SPILL PREVENTION AND CLEANUP MEASURES. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO: PAINTS, ACIDS, CLEANING SOLVENTS, CHEMICAL ADDITIVES, CONCRETE CURING COMPOUNDS AND CONTAMINATED SOILS.

GENERAL NOTES:

A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO COMPLY WITH THE OKLAHOMA POLLUTION DISCHARGE ELIMINATION SYSTEM (OPDES) REGULATIONS. THIS PLAN IS INITIATED DURING THE DESIGN PHASE, CONFIRMED IN THE PRE-WORK MEETINGS AND AVAILABLE ON THE JOB SITE ALONG WITH COPIES OF THE NOTICE OF INTENT (NOI) FORM AND PERMIT CERTIFICATE THAT HAVE BEEN FILED WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ). THE PLAN MUST BE KEPT CURRENT WITH UP-TO-DATE AMENDMENTS DURING THE PROGRESSION OF THE PROJECT. ALL CONTRACTOR OFF-SITE OPERATIONS ASSOCIATED WITH THE PROJECT MUST BE DOCUMENTED IN THE SWPPP, I.E., BORROW PITS, WORK ROADS, DISPOSAL SITES, ASPHALT/CONCRETE PLANTS, ETC. THE BASIC GOAL OF STORM WATER MANAGEMENT IS TO IMPROVE WATER QUALITY BY REDUCING POLLUTANTS IN STORM WATER DISCHARGES. RUNOFF FROM CONSTRUCTION SITES HAS A POTENTIAL FOR POLLUTION DUE TO EXPOSED SOILS AND THE PRESENCE OF HAZARDOUS MATERIALS USED IN THE CONSTRUCTION PROCESS. THE PREVENTION OF SOIL EROSION, CONTAINMENT OF HAZARDOUS MATERIALS AND/OR THE INTERCEPTION OF THESE POLLUTANTS BEFORE LEAVING THE CONSTRUCTION SITE ARE THE BEST PRACTICES FOR CONTROLLING STORM WATER POLLUTION.

THE FOLLOWING SECTIONS OF THE 2009 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:

103.05	BONDING REQUIREMENTS
104.10	FINAL CLEANING UP
104.12	CONTRACTOR'S RESPONSIBILITY FOR WORK
104.13	ENVIRONMENTAL PROTECTION
106.08	STORAGE AND HANDLING OF MATERIAL
107.01	LAWS, RULES AND REGULATIONS TO BE OBSERVED
107.20	STORM WATER MANAGEMENT
220	MANAGEMENT OF EROSION, SEDIMENTATION AND STORM WATER POLLUTION PREVENTION AND CONTROL
221	TEMPORARY SEDIMENT CONTROL

IN ADDITION:

"ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA." ODEQ, WATER QUALITY DIVISION, SEPTEMBER 13, 2017.

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		STORMWATER MANAGEMENT PLAN
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R003

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REVISED 08 / 18 / 2017

DESCRIPTION	REVISIONS	DATE

SEC. 18, T2N, R5W

575+00

580+00

SCALE: 1"=50'

LEGEND: (EROSION CONTROL)

- TEMP. SILT DIKE
- TEMP. SILT FENCE
- TEMP. SEDIMENT FILTER
- TEMP. ROCK FILTER DAM
- RIP-RAP
- DRAINAGE DIRECTION

STA. 585+00

℄ Survey

N89° 53' 43.61"E

TOC/TOS

BM #1

SEC. 19, T2N, R5W

SEC. 18, T2N, R5W

590+00

595+00

SCALE: 1"=50'

OUTFALL #

DISTURBED AREA #

BEGIN PROJECT
STA. 585+00.00
CRL SH 29
N=474,895.5469
E=2,059,848.5163

TOC/TOS

SILT DIKE

R/W

1C

1D

1B

1E

2

3

T1

T2

T3

T4

1

2

3

4

5

E-W 164.8'

℄ Survey

BM #77

BM #76

BM #75

RFD 4

ROCK FILTER DAM TYPE 4

SILT FENCE
401 LF

N89° 53' 43.61"E

STA. 585+00

STA. 600+00

SEC. 19, T2N, R5W

PHASE 1

Preliminary

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO R004

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SEC. 18, T2N, R5W

SEC. 17, T2N, R5W

LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

605+00

610+00

615+00

STA. 600+00

STA. 615+00

N00° 11' 31.79"W

N00° 06' 13.09"W

BRAY CITY LIMITS

N.S. 294.8'

SILT FENCE
452 LF

SILT FENCE
95 LF

R/W

TOC/TOS

SILT DIKE

2

3C

3B

7

6

T5

T6

8

N89° 54' 41.55"E

E-W 164.8'

℄ Survey

N89° 53' 43.61"E

BM #14

BM #1

CONST. DIKE

SEC. 19, T2N, R5W

SEC. 20, T2N, R5W

SEC. 17, T2N, R5W

OUTFALL #

DISTURBED AREA #

320+00

625+00

SCALE: 1"=50'

3

ROCK FILTER
DAM TYPE 4

SILT FENCE
1428 LF

3E

4B

9

10

T7

T8

BM #2

BM #3

SEC. 20, T2N, R5W

PHASE 1

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R005

Preliminary Plans

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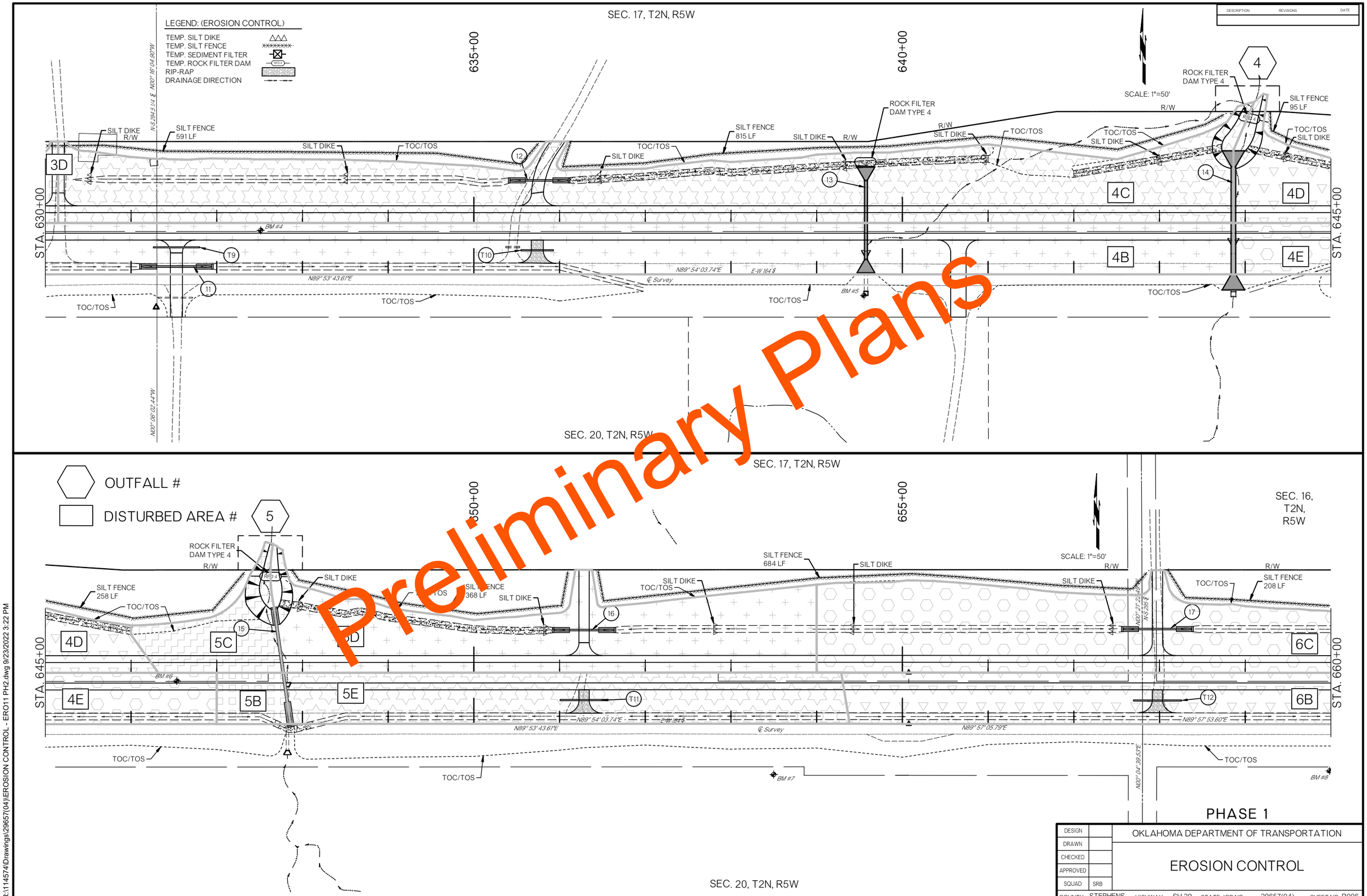

Preliminary Plans

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R006

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LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

SEC. 16, T2N, R5W

SCALE: 1"=50'

STA. 660+00 — STA. 675+00

6 — ROCK FILTER DAM TYPE 4 — 665+00 — 670+00

7 — ROCK FILTER DAM TYPE 4 — 675+00

SILT FENCE 433 LF
SILT FENCE 779 LF
SILT FENCE 267 LF
SILT DIKE
TOC/TOS
R/W

6B, 6C, 6D, 6E, 7A, 7B, 7C

18, 19

℄ Survey N89° 57' 05.79"E
E-W 164'± N89° 57' 53.60"E

BM #9
BM #10

SEC. 21, T2N, R5W

OUTFALL #
DISTURBED AREA #

SEC. 16, T2N, R5W

SCALE: 1"=50'

STA. 675+00 — STA. 690+00

680+00 — 685+00

8 — ROCK FILTER DAM TYPE 4

SILT FENCE 125 LF
SILT FENCE 582 LF
SILT FENCE 586 LF
SILT DIKE
TOC/TOS
R/W

7C, 8B, 8C, 8D, 9B

20, 21, T13

℄ Survey N89° 57' 05.79"E
E-W 164'± N89° 57' 53.60"E
N89° 58' 10.88"E

S00° 17' 57.10"E
N 3226.5 ft ±
N00° 17' 28.72"W
N 1414' ±

BM #11
BM #12
BM #13

SEC. 21, T2N, R5W

PHASE 1

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R007

Preliminary Plans

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SEC. 16, T2N, R5W

LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

695+00

700+00

SCALE: 1"=50'

STA. 690+00

STA. 705+00

R/W

SILT DIKE

TOC/TOS

SILT FENCE
684 LF

9C

9D

9B

10C

10B

22

23

T14

℄ Survey

E-W 164 ±

N89° 58' 10.88"E

BM #14

RFD 4

ROCK FILTER
DAM TYPE 4

SEC. 21, T2N, R5W

Preliminary Plans

SEC. 16, T2N, R5W

SEC. 15, T2N, R5W

OUTFALL #

DISTURBED AREA #

710+00

715+00

SCALE: 1"=50'

STA. 705+00

STA. 720+00

24

25

26

10C

10B

12B

12C

12A

12D

15B

15A

T15

BM #16

BM #17

BM #18

BM #19

N89° 56' 39.33"E

N89° 57' 05.79"E

E-W 164 ±

℄ Survey

10

12

N 396' S

W 1,141' 69" 400'

SEC. 21, T2N, R5W

SEC. 22, T2N, R5W

PHASE 1

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R008

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LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

SEC. 15, T2N, R5W

725+00

730+00

SCALE: 1"=50'

R/W

SILT DIKE

TOC/TOS

SILT FENCE
473 LF

15B

15C

15A

19B

19A

27

ROCK FILTER
DAM TYPE 4

STA. 720+00

STA. 735+00

N89° 56' 39.33"E

E-W 164 ±

℄ Survey

N89° 57' 05.79"E

BM #20

BM #21

T16

28

15

SEC. 22, T2N, R5W

OUTFALL #

DISTURBED AREA #

SEC. 15, T2N, R5W

740+00

745+00

SCALE: 1"=50'

SILT FENCE
175 LF

SILT FENCE
157 LF

SILT FENCE
143 LF

29

30

T17

T18

19C

19D

19

BM #22

BM #23

N89° 57' 05.79"E

N89° 56' 49.02"E

N.S. 2962.11 ±

N20° 06' 21.05"W

STA. 750+00

SEC. 22, T2N, R5W

PHASE 1

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R009

Preliminary Plans

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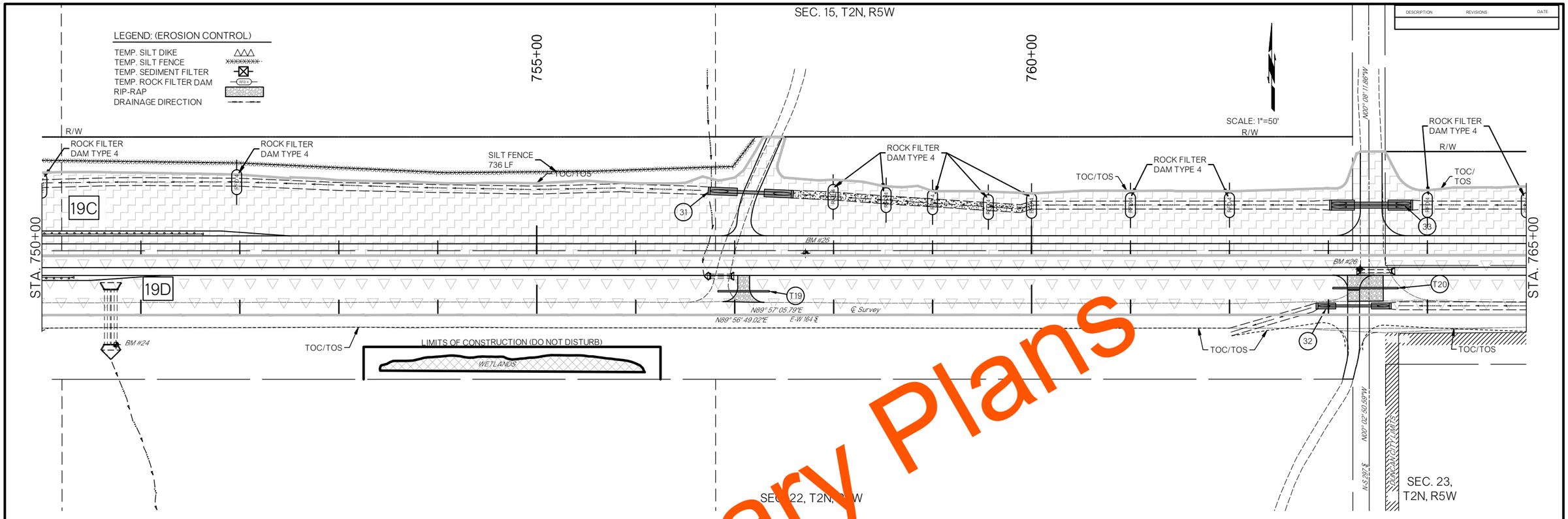

Preliminary Plans

PHASE 1

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R010

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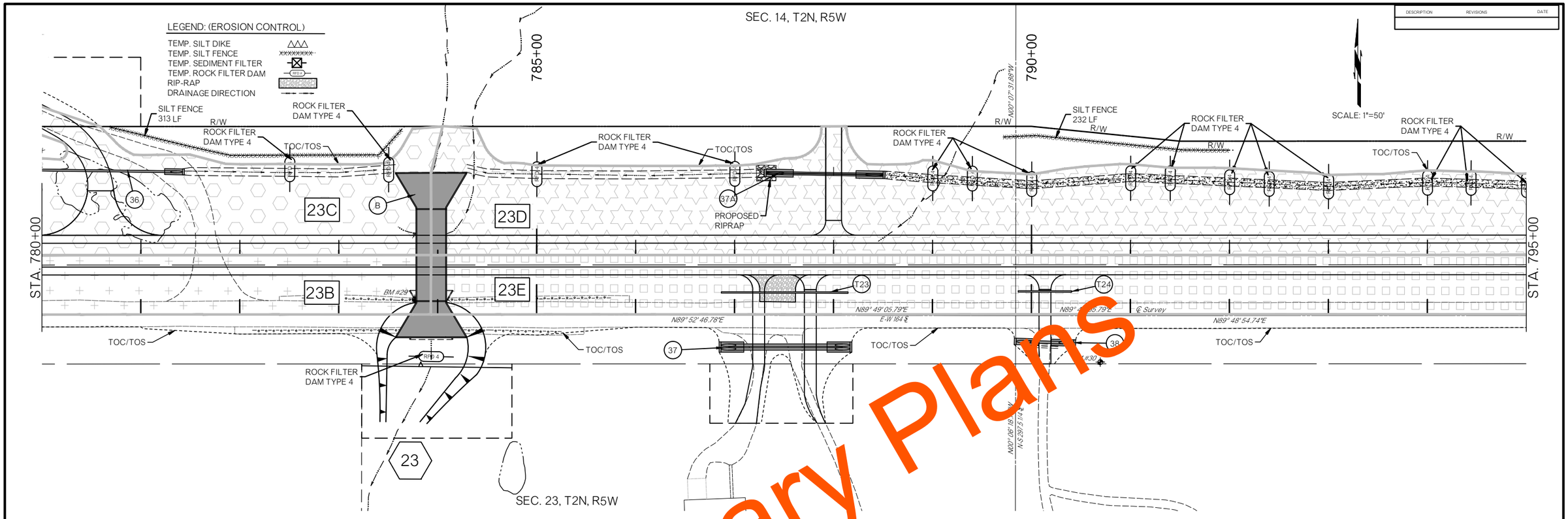

DESCRIPTION | REVISIONS | DATE

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R011

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SEC. 14, T2N, R5W

SEC. 13, T2N, R5W

LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

815+00

820+00

STA. 810+00

STA. 825+00

SILT DIKE
R/W
TOC/TOS
PROPOSED RIPRAP

28A
28B
28C
28D

43
44
45
46
48

T28
T29
T30
T31

N89° 48' 54.74"E
℄ Survey
N89° 49' 05.79"E
N89° 58' 18.01"E
E-W 164 ⅝

BM #33
BM #34

TOC/TOS DETOUR

ROCK FILTER DAM TYPE 4
RFD 4
28

N00° 12' 56.98"W
N00° 03' 57.01"W
N-S 382 ⅝

SEC. 23, T2N, R5W

SEC. 24, T2N, R5W

Preliminary Plans

OUTFALL #

DISTURBED AREA #

SEC. 1[illegible], T2N, R5W

830+00

835+00

SCALE: 1"=50'

DETOUR TOC/TOS

28C
28D
33A
33C

49
50
51
52
53

T32
T33

BM #35
BM #36
BM #37

33

ROCK FILTER DAM TYPE 4

PHASE 1

SEC. 24, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R012

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LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

SEC. 13, T2N, R5W

845+00

850+00

SCALE: 1"=50'

SILT DIKE
R/W
TOC/TOS
DETOUR TOC/TOS
SILT FENCE
99 LF
T34
54
℄ Survey
N89° 51' 05.79"E
E-W 164 ±
N89° 58' 18.01"E
℄ Detour 'A'
55
T35
33B
34B
STA. 840+00
STA. 855+00
BM #38
BM #39
N00° 11' 13.58"W
N00° 05' 45.67"W
N 5,285,714 ±

SEC. 24, T2N, R5W

860+00

865+00

SCALE: 1"=50'

T36
56
BM #40
BM #41
BM #42
PROPOSED RIPRAP
C
RFD 4
ROCK FILTER DAM TYPE 4
N00° 08' 47.74"W
W 5,288 ±
S00° 07' 34.24"E
STA. 870+00

PHASE 1

SEC. 24, T2N, R5W

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R013

DESCRIPTION REVISIONS DATE

Preliminary Plans

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DESCRIPTION	REVISIONS	DATE

SEC. 18, T2N, R5W

575+00

580+00

SCALE: 1"=50'

LEGEND: (EROSION CONTROL)

- TEMP. SILT DIKE
- TEMP. SILT FENCE
- TEMP. SEDIMENT FILTER
- TEMP. ROCK FILTER DAM
- RIP-RAP
- DRAINAGE DIRECTION

STA. 585+00

SILT FENCE
539 LF

℄ Survey

BM #76

SILT FENCE
658 LF

TOC/TOS

SEC. 19, T2N, R5W

SEC. 18, T2N, R5W

590+00

595+00

SCALE: 1"=50'

OUTFALL #

DISTURBED AREA #

BEGIN PROJECT
STA. 585+00.00
CRL SH 29
N=474,895.5469
E=2,039,848.5163

STA. 585+00

STA. 600+00

TOC/TOS

R/W

1B

1A

1E

1F

3B

3A

T1

T2

T3

T4

1

2

3

4

5

SILT DIKE

BM #77

BM #76

BM #75

RFD 4

ROCK FILTER
DAM TYPE 4

℄ Survey

N89° 53' 43.61"E

PHASE 2

SEC. 19, T2N, R5W

Preliminary

Preliminary Plans

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO R014

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SEC. 18, T2N, R5W

SEC. 17, T2N, R5W

LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

605+00

610+00

N00° 11' 31.79"W

N.S.294.8'

BRAY CITY LIMITS

N00° 06' 13.09"W

STA. 600+00

STA. 615+00

R/W

TOC/TOS

T5

T6

7

6

3B

SILT DIKE

TOC/TOS

CONST. DIKE

BM #14

N89° 54' 41.55"E

E-W 164.8'

℄ Survey

N89° 53' 43.61"E

SILT DIKE

TOC/TOS

T DIKE

BM #1

8

TOC/TOS

SEC. 19, T2N, R5W

SEC. 20, T2N, R5W

Preliminary Plans

SEC. 17, T2N, R5W

3

ROCK FILTER DAM TYPE 4

RFD 4

OUTFALL #

DISTURBED AREA #

320+00

625+00

SCALE: 1"=50'

STA. 615+00

STA. 630+00

9

BM #2

BM #3

3B

3E

3A

3F

4B

4A

T7

T8

10

SEDIMENT FILTER

SILT DIKE

TOC/TOS

SEC. 20, T2N, R5W

PHASE 2

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R015

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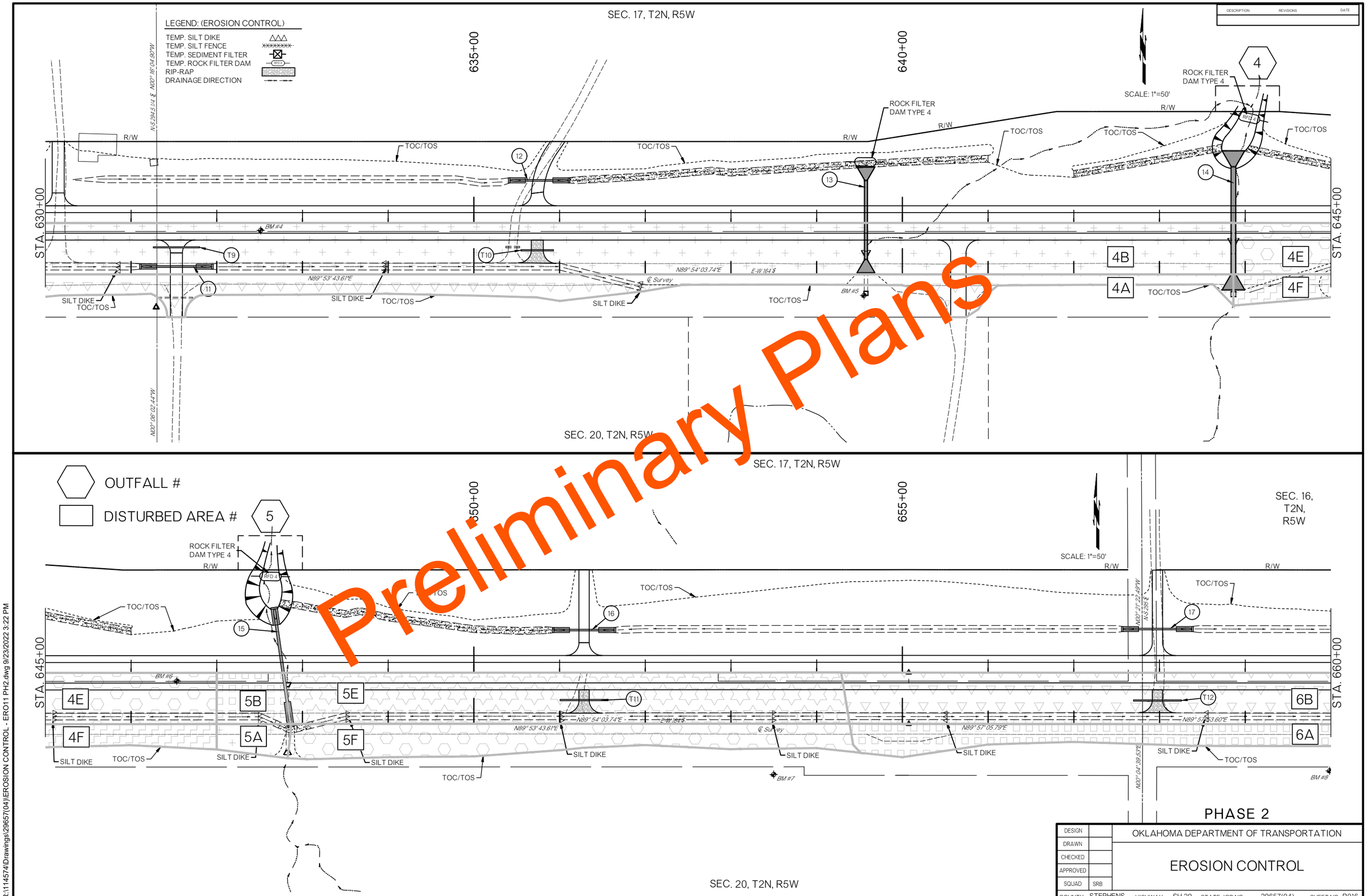

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		EROSION CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R016

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LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

SEC. 16, T2N, R5W

SCALE: 1"=50'

STA. 660+00 — 665+00 — 670+00 — STA. 675+00

6 ROCK FILTER DAM TYPE 4 — RFD 4

7 ROCK FILTER DAM TYPE 4 — RFD 5

18 — 19

TOC/TOS — R/W

6B — 6A — 6E — 6F — 7C — 7D

SILT DIKE — SEDIMENT FILTER

N89° 57' 05.79"E — ℄ Survey — N89° 57' 53.60"E

BM #9 — BM #10

SEC. 21, T2N, R5W

OUTFALL #

DISTURBED AREA #

SEC. 16, T2N, R5W

SCALE: 1"=50'

STA. 675+00 — 680+00 — 685+00 — STA. 690+00

8 ROCK FILTER DAM TYPE 4 — RFD 4

20 — 21

T13

7C — 7D — 8B — 8A — 9B — 9A

SEDIMENT FILTER

N89° 57' 05.79"E — ℄ Survey — E-W 164 ± — N89° 57' 53.60"E — N89° 58' 10.88"E

BM #11 — BM #12 — BM #13

SEC. 21, T2N, R5W

Preliminary Plans

PHASE 2

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		EROSION CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R017

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SEC. 16, T2N, R5W

DESCRIPTION	REVISIONS	DATE

LEGEND: (EROSION CONTROL)

- TEMP. SILT DIKE
- TEMP. SILT FENCE
- TEMP. SEDIMENT FILTER
- TEMP. ROCK FILTER DAM
- RIP-RAP
- DRAINAGE DIRECTION

695+00

700+00

SCALE: 1"=50'

R/W

TOC/TOS

22

23

STA. 690+00

STA. 705+00

9B

9A

10B

10A

℄ Survey

E-W 164'±

N89° 58' 10.88"E

BM #14

BM #15

T14

SILT DIKE

TOC/TOS

SILT FENCE
528 LF

SILT FENCE
435 LF

SILT FENCE
493 LF

ROCK FILTER
DAM TYPE 4

RFD 4

SEC. 21, T2N, R5W

SEC. 16, T2N, R5W

OUTFALL #

DISTURBED AREA #

SEC. 15, T2N, R5W

710+00

715+00

SCALE: 1"=50'

24

25

26

T15

BM #16

SEDIMENT
FILTER

10

11

12

12A

12D

13

14

15A

N89° 57' 05.79"E

N 396.5' M

SEC. 21, T2N, R5W

SEC. 22, T2N, R5W

PHASE 2

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R018

Preliminary Plans

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LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

SEC. 15, T2N, R5W

725+00

730+00

SCALE: 1"=50'

R/W

TOC/TOS

STA. 720+00

STA. 735+00

27

15A

19A

T16

28

14

15

16

17

N89° 56' 39.33"E

℄ Survey

E-W 164.8'

N89° 57' 05.79"E

BM #20

BM #21

SILT DIKE

SILT FENCE
174 LF

ROCK FILTER
DAM TYPE 4

SILT FENCE
848 LF

SEC. 22, T2N, R5W

OUTFALL #

DISTURBED AREA #

SEC. 15, T2N, R5W

740+00

745+00

SCALE: 1"=50'

29

30

T17

T18

19A

19D

20

BM #22

BM #23

SILT FENCE
896 LF

SILT FENCE
101 LF

N63°W

N00°

N.S. 2962.14 ft

N20° 06' 21.05"W

N89° 57' 05.79"E

N89° 56' 49.02"E

SEC. 22, T2N, R5W

PHASE 2

Preliminary Plans

DESCRIPTION	REVISIONS	DATE

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R019

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LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

SEC. 15, T2N, R5W

755+00

760+00

SCALE: 1"=50'

R/W

TOC/TOS

STA. 750+00

STA. 765+00

19D

BM #25

BM #26

BM #24

T19

T20

N89° 57' 05.79"E

N89° 56' 49.02"E

℄ Survey

E-W 164.8'

20

21

LIMITS OF CONSTRUCTION (DO NOT DISTURB)

WETLANDS

SILT FENCE
1,341 LF

SILT FENCE
185 LF

SILT DIKE

31

32

33

34

35

N00°08'11"W 1400.89'

N00°02'50"W 1400.00'

S 89°57' E

SEC. 22, T2N, R5W

SEC. 14, T2N, R5W

SEC. 23,
T2N, R5W

Preliminary

Preliminary Plans

OUTFALL #

DISTURBED AREA #

770+00

775+00

780+00

SCALE: 1"=50'

19D

21

T21

T22

23A

23B

DUNCAN CITY LIMITS

SILT DIKE

SILT FENCE
261 LF

SILT FENCE
375 LF

BM #27

BM #28

N89° 57' 05.79"E

℄ Survey

N89° 52' 46.78"E

E-W 164.8'

N89° 49' 05.79"E

22

LAKE FUQUA, CITY OF DUNCAN PROPERTY

SEC. 23, T2N, R5W

PHASE 2

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R020

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LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

SEC. 14, T2N, R5W

785+00

790+00

SCALE: 1"=50'

STA. 780+00

STA. 795+00

R/W

TOC/TOS

PROPOSED RIPRAP

23B

23E

23A

23F

BM #29

N89° 52' 46.78"E

N89° 49' 05.79"E

E-W 164'±

℄ Survey

N89° 48' 54.74"E

SILT FENCE 335 LF

ROCK FILTER DAM TYPE 4

SILT FENCE 223 LF

SILT FENCE 463 LF

SEC. 23, T2N, R5W

SEC. 14, T2N, R5W

800+00

805+00

SCALE: 1"=50'

STA. 795+00

STA. 810+00

BM #31

23E

23F

24

25A

28A

26

SILT DIKE

SILT FENCE 144 LF

SILT FENCE 93 LF

SILT FENCE 141 LF

SILT FENCE 234 LF

ROCK FILTER DAM TYPE 4

PHASE 2

SEC. 23, T2N, R5W

Preliminary Plans

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R021

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SEC. 14, T2N, R5W

SEC. 13, T2N, R5W

LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

815+00

820+00

STA. 810+00

STA. 825+00

R/W

TOC/TOS

PROPOSED RIPRAP

43 44 45 48

T28 T29 T30 T31

28A 28D

26 27 29 30

N89° 48' 54.74"E

℄ Survey N89° 49' 05.79"E

N89° 58' 18.01"E E-W 164.3'

BM #33

BM #34

SILT FENCE 537 LF

TOC/TOS DETOUR

ROCK FILTER DAM TYPE 4

RFD 4

SILT FENCE 79 LF

SILT FENCE 71 LF

SILT DIKE

N00° 12' 56.86"W

N00° 03' 57.01"W 1/4 S-26-2-8

SEC. 23, T2N, R5W

SEC. 24, T2N, R5W

Preliminary Plans

OUTFALL #

DISTURBED AREA #

SEC. 1[illegible], T2N, R5W

830+00

835+00

STA. 825+00

STA. 840+00

SCALE: 1"=50'

DETOUR TOC/TOS

28D 30 31 33

T32 T33

49 50 51 52 53

SILT DIKE

SILT FENCE 488 LF

SILT FENCE 452 LF

BM #35

BM #37

ROCK FILTER DAM TYPE 4

PHASE 2

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		EROSION CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R022

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LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

SEC. 13, T2N, R5W

845+00

850+00

N00° 11' 13.58"W

SCALE: 1"=50'

DESCRIPTION	REVISIONS	DATE

STA. 840+00

STA. 855+00

R/W

TOC/TOS

DETOUR TOC/TOS

T34

54

℄ Survey N89° 51' 05.79"E

E-W 164 ±

N89° 58' 18.01"E

℄ Dalrae 'A'

SILT DIKE

55

T35

34B

34A

32

BM #38

BM #39

ROCK FILTER DAM TYPE 4

SILT FENCE 201 LF

N-S 285.1'±

N00° 05' 45.67"W

SEC. 24, T2N, R5W

860+00

865+00

SCALE: 1"=50'

N00° 09' 08.47"W

OUTFALL #

DISTURBED AREA #

T36

BM #40

BM #41

BM #42

66

34E

34F

PROPOSED RIPRAP

SILT FENCE 343 LF

SILT FENCE 356 LF

SILT FENCE 255 LF

N89° 51' 05.79"E

℄ Survey

E-W 164 ±

N89° 58' 18.01"E

S00° 34' 24"E

V.S. 285.1'±

RFD #1

STA. 855+00

STA. 870+00

PHASE 2

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R023

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Preliminary Plans

SEC. 18, T2N, R4W

LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

875+00

880+00

SCALE: 1"=50'

TOC/TOS CROSSOVER

BM #44

TOC/TOS

N89° 43' 16.77"E

N89° 51' 05.79"E

℄ Survey

E-W 184 $

34E

35B

35E

STA. 870+00

STA. 885+00

BM #43

ROCK FILTER DAM TYPE 4

ROCK FILTER DAM TYPE 4

ROCK FILTER DAM TYPE 4

ROCK FILTER DAM TYPE 4

ROCK FILTER DAM TYPE 4

BM #45

35A

35F

57

58

RIP-RAP

TOC/TOS

R/W

SILT FENCE 110 LF

TOC/TOS

SILT DIKE

SILT FENCE 651 LF

SILT DIKE

TOC/TOS

SILT DIKE

TOC/TOS

R/W

SILT FENCE 58 LF

35

ROCK FILTER DAM TYPE 4

SILT FENCE 136 LF

SEC. 19, T2N, R4W

SEC. 18, T2N, R4W

OUTFALL #

DISTURBED AREA #

890+00

895+00

N00° 16' 52.53"W

N 5,289,514 $

SCALE: 1"=50'

TOC/TOS CROSSOVER

N89° 51' 05.79"E

℄ Survey

E-W 184 $

N89° 43' 16.77"E

N89° 51' 05.79"E

BM #47

37

STA. 885+00

STA. 900+00

BM #46

TOC/TOS CROSSOVER

SILT FENCE 379 LF

37

R/W

R/W

R/W 29657(10)

R/W

R/W

N00° 05' 37.21"W

R/W

PHASE 2

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R024

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SEC. 14, T2N, R5W

SEC. 13, T2N, R5W

LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

815+00

820+00

STA. 810+00

STA. 825+00

R/W

TOC/TOS

PROPOSED RIPRAP

43 44 45 46 48

T28 T29 T30 T31

N89° 48' 54.74"E

℄ Survey N89° 49' 05.79"E

N89° 58' 18.01"E

E-W 164.3'

BM #33

BM #34

TOC/TOS DETOUR

ROCK FILTER DAM TYPE 4

RFD 4

N00° 12' 56.86"W

N00° 03' 57.01"W

N-S 326.3'

SEC. 23, T2N, R5W

SEC. 24, T2N, R5W

Preliminary Plans

OUTFALL #

DISTURBED AREA #

SEC. 1[illegible], T2N, R5W

830+00

835+00

SCALE: 1"=50'

STA. 825+00

STA. 840+00

28D

33C

33

T32 T33

49 50 51 52 53

DETOUR TOC/TOS

℄ Survey N89° 49' 05.79"E

E-W 164.3' N89° 58' 18.01"E

BM #35

BM #36

BM #37

ROCK FILTER DAM TYPE 4

PHASE 3

SEC. 24, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R025

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LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

SEC. 13, T2N, R5W

845+00

850+00

SCALE: 1"=50'

SILT DIKE
R/W
TOC/TOS
DETOUR TOC/TOS
SILT FENCE
99 LF
T34
54
℄ Survey
N89° 51' 05.79"E
E-W 164 $
℄ Detour 'A'
N89° 58' 18.01"E
55
T35
33D
34B
34C
STA. 840+00
STA. 855+00
BM #38
BM #39
N00° 11' 13.58"W
N00° 05' 45.67"W
N 5,285,114 $

Preliminary

SEC. 24, T2N, R5W

860+00

865+00

SCALE: 1"=50'

TOC/TOS
R/W
T36
56
BM #40
BM #41
BM #42
℄ Survey
N89° 51' 05.79"E
E-W 164 $
N89° 58' 18.01"E
34C
34D
PROPOSED RIPRAP
C
RFD 4
ROCK FILTER DAM TYPE 4
N00° 09' 06.47"W
S00° 07' 34.24"E
W 5,280 $
STA. 855+00
STA. 870+00

PHASE 3

SEC. 24, T2N, R5W

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R026

R:\1145741Drawings\29657(04)\EROSION CONTROL - ERO11 PH2.dwg 9/23/2022 3:22 PM

SEC. 18, T2N, R4W

LEGEND: (EROSION CONTROL)

TEMP. SILT DIKE
TEMP. SILT FENCE
TEMP. SEDIMENT FILTER
TEMP. ROCK FILTER DAM
RIP-RAP
DRAINAGE DIRECTION

875+00

880+00

SCALE: 1"=50'

SILT FENCE
170 LF

TOC/TOS

TOC/TOS
CROSSOVER

SILT FENCE
955 LF

34D

34E

35C

35D

35B

35E

STA. 870+00

STA. 885+00

N89° 51' 05.79"E

℄ Survey

N89° 43' 16.77"E

E-W 164 ±

BM #43

BM #44

BM #45

ROCK FILTER
DAM TYPE 4

RFD 4

58

57

35

R/W

SEC. 19, T2N, R4W

Preliminary Plans

SEC. 18, T2N, R4W

OUTFALL #

DISTURBED AREA #

890+00

895+00

SCALE: 1"=50'

N00° 16' 52.53"W
N-S 2895.114 ±

N00° 05' 37.21"W

36

TOC/TOS
CROSSOVER

SILT FENCE
394 LF

SILT DIKE

BM #46

BM #47

STA. 885+00

STA. 900+00

R/W

R/W 29657(10)

SEC. 19, T2N, R4W

PHASE 3

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		EROSION CONTROL
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R027

DESCRIPTION REVISIONS DATE

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DESCRIPTION	REVISIONS	DATE

PHASE 1 ~ SEDIMENT BASIN 1

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
729+00.00	10.79	~	~	~
728+00.00	34.00	100.00	2,239.50	2,239.50
TYPE 4 RFD @ 728+00.00 : TOP ELEVATION = 1108.95				

PHASE 1 ~ SEDIMENT BASIN 2

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
729+00.00	10.79	~	~	~
730+00.00	34.00	100.00	2,239.50	2,239.50
TYPE 4 RFD @ 730+00.00 : TOP ELEVATION = 1108.95				

PHASE 1 ~ SEDIMENT BASIN 3

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
730+00.00	11.66	~	~	~
731+00.00	34.00	100.00	2,283.00	2,283.00
TYPE 4 RFD @ 731+00.00 : TOP ELEVATION = 1106.85				

PHASE 1 ~ SEDIMENT BASIN 4

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
731+00.00	11.66	~	~	~
732+00.00	34.00	100.00	2,283.00	2,283.00
TYPE 4 RFD @ 732+00.00 : TOP ELEVATION = 1104.75				

PHASE 1 ~ SEDIMENT BASIN 5

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
733+00.00	11.66	~	~	~
734+00.00	34.00	100.00	2,283.00	2,283.00
TYPE 4 RFD @ 734+00.00 : TOP ELEVATION = 1102.65				

PHASE 1 ~ SEDIMENT BASIN 6

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
735+00.00	11.66	~	~	~
736+00.00	32.35	100.00	2,200.50	2,200.50
TYPE 4 RFD @ 736+00.00 : TOP ELEVATION = 1100.55				

PHASE 1 ~ SEDIMENT BASIN 7

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
750+00.00	28.00	~	~	~
751+00.00	26.03	100.00	2,701.50	2,701.50
752+00.00	8.32	100.00	1,717.50	4,419.00
TYPE 4 RFD @ 750+00.00 : TOP ELEVATION = 1082.90				

PHASE 1 ~ SEDIMENT BASIN 8

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
752+00.00	50.99	~	~	~
753+00.00	48.43	100.00	4,971.00	4,971.00
754+00.00	45.92	100.00	4,717.50	9,688.50
755+00.00	41.08	100.00	4,350.00	14,038.50
TYPE 4 RFD @ 752+00.00 : TOP ELEVATION = 1084.10				

PHASE 1 ~ SEDIMENT BASIN 9

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
758+00.00	30.00	~	~	~
758+53.33	0.01	53.33	800.22	800.22
TYPE 4 RFD @ 758+00.00 : TOP ELEVATION = 1089.25				

PHASE 1 ~ SEDIMENT BASIN 10

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
758+53.33	30.00	~	~	~
759+00.00	2.22	46.67	751.83	751.83
TYPE 4 RFD @ 758+53.33 : TOP ELEVATION = 1091.25				

PHASE 1 ~ SEDIMENT BASIN 11

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
759+00.00	30.34	~	~	~
759+56.33	0.01	56.33	854.81	854.81
TYPE 4 RFD @ 759+00.00 : TOP ELEVATION = 1093.00				

PHASE 1 ~ SEDIMENT BASIN 12

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
759+56.33	30.34	~	~	~
760+00.00	4.31	43.67	756.58	756.58
TYPE 4 RFD @ 759+56.33 : TOP ELEVATION = 1095.00				

PHASE 1 ~ SEDIMENT BASIN 13

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
760+00.00	31.39	~	~	~
760+76.92	0.00	76.92	1,207.30	1,207.30
TYPE 4 RFD @ 760+00.00 : TOP ELEVATION = 1096.55				

PHASE 1 ~ SEDIMENT BASIN 14

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
761+00.00	34.00	~	~	~
761+76.92	0.00	76.92	1,307.68	1,307.68
TYPE 4 RFD @ 761+00.00 : TOP ELEVATION = 1099.15				

PHASE 1 ~ SEDIMENT BASIN 15

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
762+00.00	34.00	~	~	~
762+76.92	0.00	76.92	1,307.68	1,307.68
TYPE 4 RFD @ 762+00.00 : TOP ELEVATION = 1101.75				

PHASE 1 ~ SEDIMENT BASIN 16

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
764+00.00	34.00	~	~	~
764+76.92	0.00	76.92	1,307.68	1,307.68
TYPE 4 RFD @ 764+00.00 : TOP ELEVATION = 1106.95				

PHASE 1 ~ SEDIMENT BASIN 17

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
765+00.00	34.00	~	~	~
765+76.92	0.00	76.92	1,307.68	1,307.68
TYPE 4 RFD @ 765+00.00 : TOP ELEVATION = 1109.55				

PHASE 1 ~ SEDIMENT BASIN 18

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
766+00.00	34.00	~	~	~
766+76.92	0.85	76.92	1,340.33	1,340.33
TYPE 4 RFD @ 766+00.00 : TOP ELEVATION = 1109.55				

PHASE 1 ~ SEDIMENT BASIN 19

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
767+00.00	34.00	~	~	~
767+76.92	0.00	76.92	1,307.68	1,307.68
TYPE 4 RFD @ 767+00.00 : TOP ELEVATION = 1114.75				

PHASE 1 ~ SEDIMENT BASIN 20

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
768+00.00	34.00	~	~	~
768+83.33	0.00	83.33	1,416.65	1,416.65
TYPE 4 RFD @ 768+00.00 : TOP ELEVATION = 1117.35				

PHASE 1 ~ SEDIMENT BASIN 21

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
769+00.00	34.00	~	~	~
770+00.00	0.85	100.00	1,742.25	1,742.25
TYPE 4 RFD @ 769+00.00 : TOP ELEVATION = 1119.75				

PHASE 1 ~ SEDIMENT BASIN 22

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
770+00.00	34.00	~	~	~
771+00.00	6.55	100.00	2,027.73	2,027.73
TYPE 4 RFD @ 770+00.00 : TOP ELEVATION = 1121.65				

PHASE 1 ~ SEDIMENT BASIN 23

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
771+00.00	34.00	~	~	~
772+00.00	14.92	100.00	2,446.00	2,446.00
TYPE 4 RFD @ 771+00.00 : TOP ELEVATION = 1123.04				

PHASE 1 ~ SEDIMENT BASIN 24

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
772+00.00	34.00	~	~	~
772+76.92	25.22	100.00	2,961.00	2,961.00
TYPE 4 RFD @ 772+00.00 : TOP ELEVATION = 1123.92				

Preliminary Plans

BRIDGE 'A'

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SEDIMENT BASIN SUMMARIES
CHECKED		
APPROVED		
SQUAD		

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R028

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DESCRIPTION	REVISIONS	DATE

PHASE 1 ~ SEDIMENT BASIN 1

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
776+00.00	34.00	~	~	~
775+00.00	9.74	100.00	2,187.00	2,187.00

TYPE 4 RFD @ 776+00.00 : TOP ELEVATION = 1122.32

PHASE 1 ~ SEDIMENT BASIN 2

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
776+65.60	29.90	~	~	~
776+31.30	0.00	34.30	512.80	512.80

TYPE 4 RFD @ 776+65.60 : TOP ELEVATION = 1116.50

PHASE 1 ~ SEDIMENT BASIN 3

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
777+00.00	29.90	~	~	~
776+65.60	0.00	34.40	514.30	514.30

TYPE 4 RFD @ 777+00.00 : TOP ELEVATION = 1114.50

PHASE 1 ~ SEDIMENT BASIN 4

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
777+46.70	28.75	~	~	~
777+20.00	0.00	26.70	383.83	383.83

TYPE 4 RFD @ 777+46.70 : TOP ELEVATION = 1113

PHASE 1 ~ SEDIMENT BASIN 5

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
777+73.30	28.75	~	~	~
777+46.70	0.00	26.60	382.39	382.39

TYPE 4 RFD @ 777+73.30 : TOP ELEVATION = 1111

PHASE 1 ~ SEDIMENT BASIN 6

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
778+00.00	28.75	~	~	~
777+73.30	0.00	26.70	383.83	383.83

TYPE 4 RFD @ 778+00.00 : TOP ELEVATION = 1109

PHASE 1 ~ SEDIMENT BASIN 7

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
778+33.33	28.00	~	~	~
778+00.00	0.00	33.33	466.64	466.64

TYPE 4 RFD @ 778+33.33 : TOP ELEVATION = 1107

PHASE 1 ~ SEDIMENT BASIN 8

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
778+66.66	28.00	~	~	~
778+33.33	0.00	33.33	466.78	466.64

TYPE 4 RFD @ 778+66.66 : TOP ELEVATION = 1105.00

PHASE 1 ~ SEDIMENT BASIN 9

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
779+00.00	28.00	~	~	~
778+66.66	0.00	33.34	466.78	466.78

TYPE 4 RFD @ 779+00.00 : TOP ELEVATION = 1103.00

PHASE 1 ~ SEDIMENT BASIN 10

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
782+50.00	28.00	~	~	~
781+50.00	18.92	100.00	2,346.00	2,346.00

TYPE 4 RFD @ 782+50.00 : TOP ELEVATION = 1099.94

PHASE 1 ~ SEDIMENT BASIN 11

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
783+50.00	28.00	~	~	~
782+50.00	18.92	100.00	2,346.00	2,346.00

TYPE 4 RFD @ 783+50.00 : TOP ELEVATION = 1097.50

PHASE 1 ~ SEDIMENT BASIN 12

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
785+00	28.00	~	~	~
786+00	14.38	100.00	2,119.00	2,119.00
787+00	0.53	100.00	945.50	3,064.50

TYPE 4 RFD @ 787+00.00 : TOP ELEVATION = 1099.95

PHASE 1 ~ SEDIMENT BASIN 13

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
787+00.00	28.00	~	~	~
788+00.00	14.38	100.00	2,119.00	2,119.00

TYPE 4 RFD @ 787+00.00 : TOP ELEVATION = 1101.48

PHASE 1 ~ SEDIMENT BASIN 14

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
789+00.00	28.00	~	~	~
789+40.00	0.00	40.00	560.02	560.02

TYPE 4 RFD @ 789+00.00 : TOP ELEVATION = 1107.25

PHASE 1 ~ SEDIMENT BASIN 15

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
789+40.00	28.00	~	~	~
789+80.00	0.00	40.00	560.02	560.02

TYPE 4 RFD @ 789+40.00 : TOP ELEVATION = 1109.25

PHASE 1 ~ SEDIMENT BASIN 16

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
790+00.00	28.00	~	~	~
791+00.00	11.00	100.00	1,950.00	1,950.00

TYPE 4 RFD @ 790+00.00 : TOP ELEVATION = 1112.25

PHASE 1 ~ SEDIMENT BASIN 17

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
791+00.00	28.00	~	~	~
791+40.00	0.00	40.00	560.02	560.02

TYPE 4 RFD @ 791+00.00 : TOP ELEVATION = 111[illegible]

PHASE 1 ~ SEDIMENT BASIN 18

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
791+40.00	28.00	~	~	~
791+00.00	0.00	40.00	560.02	560.02

TYPE 4 RFD @ 791+40.00 : TOP ELEVATION = 1115.25

PHASE 1 ~ SEDIMENT BASIN 19

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
792+00.00	28.00	~	~	~
792+40.00	0.00	40.00	560.02	560.02

TYPE 4 RFD @ 792+00.00 : TOP ELEVATION = 1117.25

PHASE 1 ~ SEDIMENT BASIN 20

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
792+40.00	28.00	~	~	~
792+80.00	0.00	40.00	560.02	560.02

TYPE 4 RFD @ 792+40.00 : TOP ELEVATION = 1119.25

PHASE 1 ~ SEDIMENT BASIN 21

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
793+00.00	28.00	~	~	~
794+00.00	0.00	100.00	1,400.05	1,400.05

TYPE 4 RFD @ 793+00.00 : TOP ELEVATION = 1123.25

PHASE 1 ~ SEDIMENT BASIN 22

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
794+00.00	28.00	~	~	~
794+43.95	0.00	43.96	615.32	615.32

TYPE 4 RFD @ 794+00.00 : TOP ELEVATION = 1125.25

PHASE 1 ~ SEDIMENT BASIN 23

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
794+43.95	28.00	~	~	~
794+87.91	0.00	43.96	615.46	615.46

TYPE 4 RFD @ 794+43.95 : TOP ELEVATION = 1127.25

PHASE 1 ~ SEDIMENT BASIN 24

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
795+00.00	28.00	~	~	~
795+43.95	0.00	43.95	615.32	615.32

TYPE 4 RFD @ 795+00.00 : TOP ELEVATION = 1129.80

PHASE 1 ~ SEDIMENT BASIN 25

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
795+43.95	28.00	~	~	~
795+87.91	0.00	43.96	615.46	615.46

TYPE 4 RFD @ 795+43.95 : TOP ELEVATION = 1131.80

PHASE 1 ~ SEDIMENT BASIN 26

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
796+00.00	30.00	~	~	~
796+43.95	0.00	43.95	659.27	659.27

TYPE 4 RFD @ 796+00.00 : TOP ELEVATION = 1135.30

PHASE 1 ~ SEDIMENT BASIN 27

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
796+43.95	30.00	~	~	~
796+87.91	0.00	43.96	659.42	659.42

TYPE 4 RFD @ 796+43.95 : TOP ELEVATION = 1137.30

Preliminary Plans

BRIDGE 'B'

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SEDIMENT BASIN SUMMARIES
CHECKED		
APPROVED		
SQUAD		

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R029

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DESCRIPTION	REVISIONS	DATE

PHASE 1 ~ SEDIMENT BASIN 28

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
797+00.00	30.00	~	~	~
797+32.52	0.00	32.52	487.82	487.82
TYPE 4 RFD @ 797+00.00 : TOP ELEVATION = 1140.80				

PHASE 1 ~ SEDIMENT BASIN 29

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
797+32.52	30.00	~	~	~
797+65.04	0.00	32.52	487.82	487.82
TYPE 4 RFD @ 797+32.52 : TOP ELEVATION = 1142.80				

PHASE 1 ~ SEDIMENT BASIN 30

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
797+65.04	30.00	~	~	~
797+97.56	0.00	32.52	487.82	487.82
TYPE 4 RFD @ 797+65.04 : TOP ELEVATION = 1144.80				

PHASE 1 ~ SEDIMENT BASIN 31

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
798+00.00	30.00	~	~	~
798+50.00	0.00	50.00	750.03	750.03
TYPE 4 RFD @ 798+00.00 : TOP ELEVATION = 1146.95				

PHASE 1 ~ SEDIMENT BASIN 32

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
798+50.00	30.00	~	~	~
799+00.00	0.00	50.00	750.03	750.03
TYPE 4 RFD @ 798+50.00 : TOP ELEVATION = 1148.95				

PHASE 1 ~ SEDIMENT BASIN 33

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
799+00.00	34.00	~	~	~
800+00.00	0.00	100.00	2,195.00	2,195.00
TYPE 4 RFD @ 799+00.00 : TOP ELEVATION = 1150.95				

PHASE 1 ~ SEDIMENT BASIN 34

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
800+00.00	34.00	~	~	~
800+83.68	0.00	83.68	1,422.60	1,422.60
TYPE 4 RFD @ 800+00.00 : TOP ELEVATION = 1153.79				

PHASE 1 ~ SEDIMENT BASIN 35

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
801+00.00	34.00	~	~	~
802+00.00	0.00	100.00	1,700.05	1,700.05
TYPE 4 RFD @ 801+00.00 : TOP ELEVATION = 1156.18				

PHASE 1 ~ SEDIMENT BASIN 36

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
802+00.00	34.00	~	~	~
803+00.00	5.00	100.00	1,950.00	1,950.00
TYPE 4 RFD @ 802+00.00 : TOP ELEVATION = 1158.13				

PHASE 1 ~ SEDIMENT BASIN 37

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
803+00.00	34.00	~	~	~
804+00.00	11.33	100.00	2,266.50	2,266.50
TYPE 4 RFD @ 803+00.00 : TOP ELEVATION = 1159.64				

PHASE 1 ~ SEDIMENT BASIN 38

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
804+00.00	34.00	~	~	~
805+00.00	19.61	100.00	2,680.50	2,680.50
TYPE 4 RFD @ 804+00.00 : TOP ELEVATION = 1160.71				

Preliminary Plans

BRIDGE 'B'

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SEDIMENT BASIN SUMMARIES
CHECKED		
APPROVED		
SQUAD		

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R030

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DESCRIPTION	REVISIONS	DATE

PHASE 2 ~ SEDIMENT BASIN 1

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
844+00.00	34.00	~	~	~
843+00.00	13.01	100.00	2,350.50	2,350.50

TYPE 4 RFD @ 844+00.00 : TOP ELEVATION = 1163.04

PHASE 2 ~ SEDIMENT BASIN 2

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
845+00.00	34.59	~	~	~
844+00.00	11.33	100.00	2,296.00	2,296.00

TYPE 4 RFD @ 845+00.00 : TOP ELEVATION = 1161.97

PHASE 2 ~ SEDIMENT BASIN 3

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
846+00.00	34.00	~	~	~
845+00.00	7.70	100.00	2,084.91	2,084.91

TYPE 4 RFD @ 846+00.00 : TOP ELEVATION = 1160.67

PHASE 2 ~ SEDIMENT BASIN 4

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
847+00.00	34.00	~	~	~
846+50.00	4.75	100.00	1,937.71	1,937.71

TYPE 4 RFD @ 847+00.00 : TOP ELEVATION = 1159.14

PHASE 2 ~ SEDIMENT BASIN 5

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
848+00.00	28.75	~	~	~
847+00.00	1.98	100.00	1,536.39	1,536.39

TYPE 4 RFD @ 848+00.00 : TOP ELEVATION = 1157.36

PHASE 2 ~ SEDIMENT BASIN 6

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
849+00.00	34.00	~	~	~
848+00.00	0.00	100.00	1,700.05	1,700.05

TYPE 4 RFD @ 849+00.00 : TOP ELEVATION = 1155.36

PHASE 2 ~ SEDIMENT BASIN 7

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
850+00.00	34.00	~	~	~
849+00.00	0.00	100.00	1,700.05	1,700.05

TYPE 4 RFD @ 850+00.00 : TOP ELEVATION = 1153.11

PHASE 2 ~ SEDIMENT BASIN 8

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
851+00.00	34.00	~	~	~
850+19.36	0.00	80.65	1,371.01	1,371.01

TYPE 4 RFD @ 851+00.00 : TOP ELEVATION = 1156.18

PHASE 2 ~ SEDIMENT BASIN 9

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
852+00.00	34.00	~	~	~
851+26.47	0.00	73.53	1,250.03	1,250.03

TYPE 4 RFD @ 852+00.00 : TOP ELEVATION = 1147.91

PHASE 2 ~ SEDIMENT BASIN 10

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
853+00.00	34.00	~	~	~
852+32.20	0.00	67.80	1,152.60	1,152.60

TYPE 4 RFD @ 853+00.00 : TOP ELEVATION = 1144.96

PHASE 2 ~ SEDIMENT BASIN 11

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
854+00.00	34.00	~	~	~
853+37.30	0.00	62.70	1,065.90	1,065.90

TYPE 4 RFD @ 854+00.00 : TOP ELEVATION = 1141.77

PHASE 2 ~ SEDIMENT BASIN 12

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
855+00.00	34.00	~	~	~
854+41.50	0.00	58.50	994.50	994.50

TYPE 4 RFD @ 855+00.00 : TOP ELEVATION = 1138.35

PHASE 2 ~ SEDIMENT BASIN 13

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
856+00.00	34.00	~	~	~
855+45.36	0.00	54.64	928.88	928.88

TYPE 4 RFD @ 856+00.00 : TOP ELEVATION = 1134.69

PHASE 2 ~ SEDIMENT BASIN 14

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
857+00.00	34.00	~	~	~
856+47.37	0.00	52.63	894.74	894.74

TYPE 4 RFD @ 857+00.00 : TOP ELEVATION = 1130.89

PHASE 2 ~ SEDIMENT BASIN 15

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
858+00.00	33.60	~	~	~
857+36.51	0.00	63.49	1,066.51	1,066.51

TYPE 4 RFD @ 858+00.00 : TOP ELEVATION = 1127.74

PHASE 2 ~ SEDIMENT BASIN 16

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
858+50.00	30.00	~	~	~
858+19.09	0.00	30.91	463.67	463.67

TYPE 4 RFD @ 858+50.00 : TOP ELEVATION = 1124.51

PHASE 2 ~ SEDIMENT BASIN 17

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
859+00.00	34.00	~	~	~
858+69.09	0.00	30.91	463.65	463.65

TYPE 4 RFD @ 859+00.00 : TOP ELEVATION = 1121.27

PHASE 2 ~ SEDIMENT BASIN 18

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
859+50.00	0.00	~	~	~
859+19.09	0.00	30.91	463.67	463.67

TYPE 4 RFD @ 859+50.00 : TOP ELEVATION = 1118.03

PHASE 2 ~ SEDIMENT BASIN 19

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
860+00.00	30.00	~	~	~
859+69.09	0.00	30.91	463.67	463.67

TYPE 4 RFD @ 860+00.00 : TOP ELEVATION = 1114.80

PHASE 2 ~ SEDIMENT BASIN 20

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
860+50.00	34.00	~	~	~
860+19.09	0.00	30.91	453.93	453.93

TYPE 4 RFD @ 860+50.00 : TOP ELEVATION = 1111.23

PHASE 2 ~ SEDIMENT BASIN 21

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
861+00.00	28.74	~	~	~
860+69.09	0.00	30.91	444.13	444.13

TYPE 4 RFD @ 861+00.00 : TOP ELEVATION = 1107.65

PHASE 2 ~ SEDIMENT BASIN 22

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
864+00.00	28.00	~	~	~
863+66.67	0.00	33.33	466.64	466.64

TYPE 4 RFD @ 864+00.00 : TOP ELEVATION = 1092.10

PHASE 2 ~ SEDIMENT BASIN 23

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
865+00.00	28.00	~	~	~
864+00.00	8.32	100.00	1,816.00	1,816.00

TYPE 4 RFD @ 865+00.00 : TOP ELEVATION = 1090.90

PHASE 2 ~ SEDIMENT BASIN 24

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
866+00.00	27	~	~	~
865+00.00	0.00	100.00	1,383.55	1,383.55

TYPE 4 RFD @ 866+00.00 : TOP ELEVATION = 1088.83

PHASE 2 ~ SEDIMENT BASIN 25

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
868+00.00	28.00	~	~	~
869+00.00	0.00	100.00	1,400.05	1,400.05

TYPE 4 RFD @ 868+00.00 : TOP ELEVATION = 1088.02

PHASE 2 ~ SEDIMENT BASIN 26

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
869+00.00	28.00	~	~	~
870+00.00	0.00	100.00	1,400.05	1,400.05

TYPE 4 RFD @ 869+00.00 : TOP ELEVATION = 1090.00

PHASE 2 ~ SEDIMENT BASIN 27

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
870+00.00	28.00	~	~	~
871+00.00	0.00	100.00	1,400.05	1,400.05

TYPE 4 RFD @ 870+00.00 : TOP ELEVATION = 1093.83

PHASE 2 ~ SEDIMENT BASIN 28

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
871+00.00	28.00	~	~	~
872+00.00	0.00	100.00	1,400.05	1,400.05

TYPE 4 RFD @ 871+00.00 : TOP ELEVATION = 1097.65

PHASE 2 ~ SEDIMENT BASIN 29

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
872+00.00	30.00	~	~	~
873+00.00	0.00	100.00	1,500.05	1,500.05

TYPE 4 RFD @ 872+00.00 : TOP ELEVATION = 1104.07

PHASE 2 ~ SEDIMENT BASIN 30

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
873+00.00	31.39	~	~	~
874+00.00	0.00	100.00	1,569.55	1,569.55

TYPE 4 RFD @ 873+00.00 : TOP ELEVATION = 1109.86

PHASE 2 ~ SEDIMENT BASIN 31

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
874+00.00	34.00	~	~	~
875+00.00	0.00	100.00	1,700.05	1,700.05

TYPE 4 RFD @ 874+00.00 : TOP ELEVATION = 1111.85

PHASE 2 ~ SEDIMENT BASIN 32

STATION	CROSS SECTIONAL AREA (ft²)	LENGTH BETWEEN STATIONS (ft)	CUBIC VOLUME BETWEEN STATIONS (ft³)	TOTAL CUBIC VOLUME PER FILTER DAM (ft³)
875+00.00	34.00	~	~	~
875+50.00	0.00	50.00	850.03	850.03

TYPE 4 RFD @ 875+00.00 : TOP ELEVATION = 1113.74

Preliminary Plans

BRIDGE 'C'

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		SEDIMENT BASIN SUMMARIES
APPROVED		
SQUAD		

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R031

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DESCRIPTION	REVISIONS	DATE

JP 29657(04) SH-29, STEPHENS CO.								PHASE 1				PHASE 2			
OUTFALL LOCATION		DISTURBED AREA EXTENTS						DISTURBED AREA (ACRES)				DISTURBED AREA (ACRES)			
OUTFALL NUMBER	OUTFALL STATION	AREA NO.	UPSTREAM STA.	DOWN-STREAM STA.	STRUCTURE NO.	STATION	OUTFALL CONDITION	STRUCTURE	SHEET FLOW	DITCH FLOW	SEDIMENT CONTROL MEASURE	STRUCTURE	SHEET FLOW	DITCH FLOW	SEDIMENT CONTROL MEASURE
1	590+87.75	1A	585+00.00	589+00.00			DITCH				STD. EROSION CONTROL MEASURES.			0.41	STD. EROSION CONTROL MEASURES.
		1B	585+00.00	590+87.75	2	590+87.75	STRUCTURE	0.81			STD. EROSION CONTROL MEASURES.	0.81			STD. EROSION CONTROL MEASURES.
		1C	585+00.00	590+87.75	2	590+87.75	STRUCTURE	0.98			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		1D	590+87.75	597+82.75	2	590+87.75	STRUCTURE	1.07			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		1E	590+87.75	597+82.75	2	590+87.75	STRUCTURE	0.96			STD. EROSION CONTROL MEASURES.	0.96			STD. EROSION CONTROL MEASURES.
		1F	590+87.75	597+82.75			DITCH				STD. EROSION CONTROL MEASURES.			0.58	STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	3.82				1.77		0.99	
2	597+82.75 THRU 606+00.00	2					SHEET FLOW		1.13		STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
							SUB-TOTAL		1.13						
3	616+70.45	3A	597+82.75	616+54.72	9	616+70.45	STRUCTURE				STD. EROSION CONTROL MEASURES.	1.30			STD. EROSION CONTROL MEASURES.
		3B	597+82.75	616+64.21	9	616+70.45	STRUCTURE	2.59			STD. EROSION CONTROL MEASURES.	2.59			STD. EROSION CONTROL MEASURES.
		3C	597+82.75	617+00.00			DITCH			2.66	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		3D	629+00.00	617+00.00			DITCH			2.58	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		3E	629+00.00	616+64.21	9	616+70.45	STRUCTURE	1.70			STD. EROSION CONTROL MEASURES.	1.70			STD. EROSION CONTROL MEASURES.
		3F	629+00.00	616+54.72	9	616+70.45	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.77			STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	4.29		5.24		6.36			
4	643+86.18	4A	629+00.00	643+86.18	14	643+86.18	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.71			STD. EROSION CONTROL MEASURES.
		4B	629+00.00	643+86.18	14	643+86.18	STRUCTURE	2.05			STD. EROSION CONTROL MEASURES.	2.05			STD. EROSION CONTROL MEASURES.
		4C	629+00.00	643+86.18			DITCH			2.46	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		4D	646+31.83	643+86.18			DITCH			0.42	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		4E	647+00.00	643+86.18	14	643+86.18	STRUCTURE	0.43			STD. EROSION CONTROL MEASURES.	0.43			STD. EROSION CONTROL MEASURES.
		4F	647+00.00	643+86.18	14	643+86.18	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.20			STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	2.48		2.88		3.39			
5	647+77.58	5A	647+00.00	647+86.47	15	647+77.58	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.07			STD. EROSION CONTROL MEASURES.
		5B	647+00.00	647+81.75	15	647+77.58	STRUCTURE	0.11			STD. EROSION CONTROL MEASURES.	0.11			STD. EROSION CONTROL MEASURES.
		5C	646+00.00	647+66.98			DITCH			0.29	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		5D	654+00.00	647+66.98			DITCH			1.23	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		5E	654+38.48	647+81.75	15	647+77.58	STRUCTURE	0.89			STD. EROSION CONTROL MEASURES.	0.89			STD. EROSION CONTROL MEASURES.
		5F	654+51.40	647+86.47	15	647+77.58	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.49			STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	1.00				1.56			
6	664+34.16	6A	654+51.40	664+34.16	18	664+34.16	STRUCTURE	1.38			STD. EROSION CONTROL MEASURES.	0.63			STD. EROSION CONTROL MEASURES.
		6B	654+38.48	664+34.16	18	664+34.16	STRUCTURE				STD. EROSION CONTROL MEASURES.	1.38			STD. EROSION CONTROL MEASURES.
		6C	654+00.00	664+34.16			DITCH			2.36	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		6D	670+00.00	664+34.16			DITCH			28	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		6E	672+40.96	664+34.16	18	664+34.16	STRUCTURE	1			STD. EROSION CONTROL MEASURES.	1.11			STD. EROSION CONTROL MEASURES.
		6F	672+40.96	664+34.16	18	664+34.16	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.58			STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	2.45		3.64		3.70			
7	672+40.10	7A	670+09.62	672+41.13			DITCH			0.42	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		7B	670+16.26	672+41.13			DITCH			0.40	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		7C	670+00.00	672+41.13	19	672+40.96	STRUCTURE	0.47			STD. EROSION CONTROL MEASURES.	0.47			STD. EROSION CONTROL MEASURES.
		7D	674+98.35	672+41.13	19	672+40.96	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.28			STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	0.47		0.82		0.75			
8	682+59.40	8A	674+98.35	682+59.43	21	682+59.40	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.53			STD. EROSION CONTROL MEASURES.
		8B	670+00.00	682+76.73	21	682+59.40	STRUCTURE	0.94			STD. EROSION CONTROL MEASURES.	0.94			STD. EROSION CONTROL MEASURES.
		8C	670+16.26	683+14.35			DITCH			1.85	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		8D	685+00.00	683+14.35			DITCH			0.49	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	0.94		2.34		1.47			
9	697+64.40	9A	682+59.43	698+83.95	22	697+64.40	STRUCTURE				STD. EROSION CONTROL MEASURES.	1.20			STD. EROSION CONTROL MEASURES.
		9B	682+76.73	698+35.82	22	697+64.40	STRUCTURE	2.10			STD. EROSION CONTROL MEASURES.	2.10			STD. EROSION CONTROL MEASURES.
		9C	685+00.00	697+17.22	22	697+64.40	STRUCTURE	2.05			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		9D	699+15.76	697+17.22	22	697+64.40	STRUCTURE	0.38			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	4.53				3.30			
10	710+07.80	10A	698+83.95	710+22.37			SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.45		STD. EROSION CONTROL MEASURES.
		10B	698+35.82	710+29.27	25	710+07.80	STRUCTURE	1.74			STD. EROSION CONTROL MEASURES.	1.74			STD. EROSION CONTROL MEASURES.
		10C	699+15.76	710+00.00	25	710+07.80	STRUCTURE	2.06			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	3.80				1.74	0.45		
11	710+57.65 THRU 715+09.48	11					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.20		STD. EROSION CONTROL MEASURES.
							SUB-TOTAL						0.20		

Preliminary Plans

R:\114574\Drawings\29657(04)\Drainage Area Tables 3.dwg 10/26/2022 5:39 AM

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		DISTURBED AREA TABLES
APPROVED		
SQUAD		

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R032

DESCRIPTION	REVISIONS	DATE

JP 29657(04) SH-29, STEPHENS CO.								PHASE 1				PHASE 2			
OUTFALL LOCATION		DISTURBED AREA EXTENTS						DISTURBED AREA (ACRES)				DISTURBED AREA (ACRES)			
OUTFALL NUMBER	OUTFALL STATION	AREA NO.	UPSTREAM STA.	DOWN-STREAM STA.	STRUCTURE NO.	STATION	OUTFALL CONDITION	STRUCTURE	SHEET FLOW	DITCH FLOW	SEDIMENT CONTROL MEASURE	STRUCTURE	SHEET FLOW	DITCH FLOW	SEDIMENT CONTROL MEASURE
12	715+09.40	12A	710+57.65	715+09.40	26	715+09.40	STRUCTURE	0.50			STD. EROSION CONTROL MEASURES.	0.50			STD. EROSION CONTROL MEASURES.
		12B	710+57.65	715+09.40	26	715+09.40	STRUCTURE	0.68			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		12C	718+00.00	715+09.40	26	715+09.40	STRUCTURE	0.22			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		12D	716+41.56	715+09.40	26	715+09.40	STRUCTURE	0.40			STD. EROSION CONTROL MEASURES.	0.40			STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	1.80				0.90			
13	715+09.40 THRU 718+00.00	13					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.12		STD. EROSION CONTROL MEASURES.
							SUB-TOTAL						0.12		
14	722+31.08	14	718+00.00	724+91.14			DITCH FLOW				STD. EROSION CONTROL MEASURES.			0.45	STD. EROSION CONTROL MEASURES.
							SUB-TOTAL							0.45	
15	724+91.06	15A	716+41.56	724+91.06	27	724+91.06	STRUCTURE	0.95			STD. EROSION CONTROL MEASURES.	0.95			STD. EROSION CONTROL MEASURES.
		15B	718+00.00	724+91.06	27	724+91.06	STRUCTURE	1.53			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		15C	727+00.00	724+91.06	27	724+91.06	STRUCTURE	0.38			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	2.86				0.95			
16	724+91.06 THRU 732+00.00	16					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.33		STD. EROSION CONTROL MEASURES.
							SUB-TOTAL								
17	736+69.72	17	732+00.00	736+70.69			DITCH FLOW				STD. EROSION CONTROL MEASURES.			0.43	STD. EROSION CONTROL MEASURES.
							SUB-TOTAL							0.43	
18	736+70.69 THRU 746+19.47	18					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.51		STD. EROSION CONTROL MEASURES.
							SUB-TOTAL						0.51		
19	746+14.90	19A	716+41.56	746+14.90	BRIDGE A	746+14.90	STRUCTURE	2.94			STD. EROSION CONTROL MEASURES.	2.94			STD. EROSION CONTROL MEASURES.
		19B	727+00.00	746+14.90	BRIDGE A	746+14.90	STRUCTURE	3.50			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		19C	773+24.85	746+14.90	BRIDGE A	746+14.90	STRUCTURE	5.13			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		19D	773+24.85	746+14.90	BRIDGE A	746+14.90	STRUCTURE	3.65			STD. EROSION CONTROL MEASURES.	3.65			STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	15.22				6.59			
20	746+79.13 THRU 762+00.00	20					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.62		STD. EROSION CONTROL MEASURES.
							SUB-TOTAL						0.62		
21	760+00.0 THRU 773+25.00	21					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.63		STD. EROSION CONTROL MEASURES.
							SUB-TOTAL						0.63		
22	773+25.00 THRU 778+00.00	22					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.27		STD. EROSION CONTROL MEASURES.
							SUB-TOTAL						0.27		
23	783+92.42	23A	778+01.15	783+92.42	BRIDGE B	783+92.42	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.32			STD. EROSION CONTROL MEASURES.
		23B	773+25.50	783+92.42	BRIDGE B	783+92.42	STRUCTURE	1.47			STD. EROSION CONTROL MEASURES.	1.47			STD. EROSION CONTROL MEASURES.
		23C	773+25.50	783+92.42	BRIDGE B	783+92.42	STRUCTURE	2.40			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		23D	805+92.81	783+92.42	BRIDGE B	783+92.42	STRUCTURE	4.27			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		23E	805+92.81	783+92.42	BRIDGE B	783+92.42	STRUCTURE	3.03			STD. EROSION CONTROL MEASURES.	3.03			STD. EROSION CONTROL MEASURES.
		23F	796+00.00	783+92.42	BRIDGE B	783+92.42	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.76			STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	11.17				5.58			
24	796+00.00 THRU 805+92.75	24					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.70		STD. EROSION CONTROL MEASURES.
							SUB-TOTAL						0.70		
25	808+52.70	25A	805+92.75	807+64.15	42	808+52.70	STRUCTURE	0.24			STD. EROSION CONTROL MEASURES.	0.24			STD. EROSION CONTROL MEASURES.
		25B	805+92.75	808+52.70	42	808+52.70	STRUCTURE	0.49			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	0.73				0.24			
26	810+96.48	26					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.27		STD. EROSION CONTROL MEASURES.
							SUB-TOTAL						0.27		

Preliminary Plans

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DISTURBED AREA TABLES

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R033

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DESCRIPTION	REVISIONS	DATE

JP 29657(04) SH-29, STEPHENS CO.								PHASE 1				PHASE 2				PHASE 3			
OUTFALL LOCATION		DISTURBED AREA EXTENTS						DISTURBED AREA (ACRES)				DISTURBED AREA (ACRES)				DISTURBED AREA (ACRES)			
OUTFALL NUMBER	OUTFALL STATION	AREA NO.	UPSTREAM STA.	DOWN-STREAM STA.	STRUCTURE NO.	STATION	OUTFALL CONDITION	STRUCTURE	SHEET FLOW	DITCH FLOW	SEDIMENT CONTROL MEASURE	STRUCTURE	SHEET FLOW	DITCH FLOW	SEDIMENT CONTROL MEASURE	STRUCTURE	SHEET FLOW	DITCH FLOW	SEDIMENT CONTROL MEASURE
27	811+00.00 THRU 815+52.43	27					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.33		STD. EROSION CONTROL MEASURES.				
							SUB-TOTAL						0.33						
28	815+52.42	28A	807+64.15	815+52.42	45	815+52.42	STRUCTURE	1.09			STD. EROSION CONTROL MEASURES.	1.09			STD. EROSION CONTROL MEASURES.				
		28B	809+09.57	815+52.42	45	815+52.42	STRUCTURE	1.16			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.				
		28C	831+50.87	815+52.42	45	815+52.42	STRUCTURE	3.63			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.				
		28D	831+50.87	815+52.42	45	815+52.42	STRUCTURE	2.16			STD. EROSION CONTROL MEASURES.	2.16			STD. EROSION CONTROL MEASURES.				
							SUB-TOTAL	8.04				3.25							
29	815+52.42 THRU 820+00.00	29					SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.43		STD. EROSION CONTROL MEASURES.				
							SUB-TOTAL						0.43						
30	820+00.00 THUR 831+50.87	30	831+46.98	820+00.00			SHEET FLOW				STD. EROSION CONTROL MEASURES.		0.97		STD. EROSION CONTROL MEASURES.				
							SUB-TOTAL						0.97						
31	839+78.12	31	831+50.87	839+78.12			DITCH FLOW				STD. EROSION CONTROL MEASURES.			1.29	STD. EROSION CONTROL MEASURES.				
							SUB-TOTAL							1.					
32	839+78.12	32	843+00.00	839+78.12			DITCH FLOW				STD. EROSION CONTROL MEASURES.			0.63	STD. EROSION CONTROL MEASURES.				
							SUB-TOTAL							0.63					
33	839+78.12	33A	831+50.87	839+78.12	53	839+78.12	STRUCTURE	2.09			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		33B	842+83.33	839+78.12	53	839+78.12	STRUCTURE	0.56			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		33C	831+50.87	839+78.12	53	839+78.12	STRUCTURE				STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.	1.59			STD. EROSION CONTROL MEASURES.
		33D	843+00.00	839+78.12	53	839+78.12	STRUCTURE				STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.	0.65			STD. EROSION CONTROL MEASURES.
							SUB-TOTAL	2.65								2.24			
34	866+49.10	34A	843+00.00	866+49.10	BRIDGE C	866+49.10	STRUCTURE				STD. EROSION CONTROL MEASURES.	4.96			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		34B	842+83.33	866+49.10	BRIDGE C	866+49.10	STRUCTURE				STD. EROSION CONTROL MEASURES.	2.98			STD. EROSION CONTROL MEASURES.	2.98			STD. EROSION CONTROL MEASURES.
		34C	842+83.33	866+49.10	BRIDGE C	866+49.10	STRUCTURE				STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.	1.86			STD. EROSION CONTROL MEASURES.
		34D	876+50.06	866+49.10	BRIDGE C	866+49.10	STRUCTURE				STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.	0.55			STD. EROSION CONTROL MEASURES.
		34E	875+45.31	866+49.10	BRIDGE C	866+49.10	STRUCTURE				STD. EROSION CONTROL MEASURES.	1.23			STD. EROSION CONTROL MEASURES.	1.23			STD. EROSION CONTROL MEASURES.
		34F	875+45.31	866+49.10	BRIDGE C	866+49.10	STRUCTURE				STD. EROSION CONTROL MEASURES.	1.92			STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
							SUB-TOTAL					11.09				6.62			
35	882+78.11	35A	875+45.31	883+28.16			DITCH				STD. EROSION CONTROL MEASURES.			1.83	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
		35B	875+45.31	882+91.37	58	882+78.11	STRUCTURE				STD. EROSION CONTROL MEASURES.	1.02			STD. EROSION CONTROL MEASURES.	1.02			STD. EROSION CONTROL MEASURES.
		35C	876+50.06	882+77.95	58	882+78.11	STRUCTURE				STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.	0.57			STD. EROSION CONTROL MEASURES.
		35D	885+07.24	882+77.95	58	882+78.1	STRUCTURE				STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.	0.21			STD. EROSION CONTROL MEASURES.
		35E	885+07.24	882+91.37	58	882+78.	STRUCTURE				STD. EROSION CONTROL MEASURES.	0.31			STD. EROSION CONTROL MEASURES.	0.31			STD. EROSION CONTROL MEASURES.
		35F	885+07.24	883+28.16			DITCH				STD. EROSION CONTROL MEASURES.			0.45	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
							SUB-TOTAL					1.33		2.28		2.11			
36	835+98.07	36	885+07.24	888+48.23			DITCH FLOW				STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.			0.73	STD. EROSION CONTROL MEASURES.
							SUB-TOTAL											0.73	
37	008+36.00	37	885+07.24	888+48.23			DITCH FLOW				STD. EROSION CONTROL MEASURES.			0.68	STD. EROSION CONTROL MEASURES.				STD. EROSION CONTROL MEASURES.
							SUB-TOTAL							0.68					

Preliminary Plans

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DESIGN	
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OKLAHOMA DEPARTMENT OF TRANSPORTATION

DISTURBED AREA TABLES

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R034

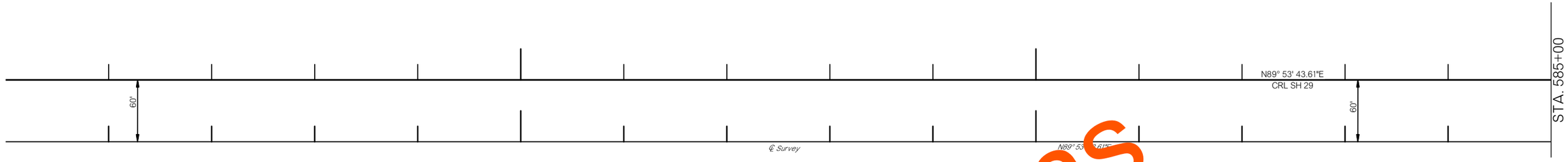
DESCRIPTION	REVISIONS	DATE

SEC. 18, T2N, R5W

575+00

580+00

SCALE: 1"=50'



SEC. 19, T2N, R5W

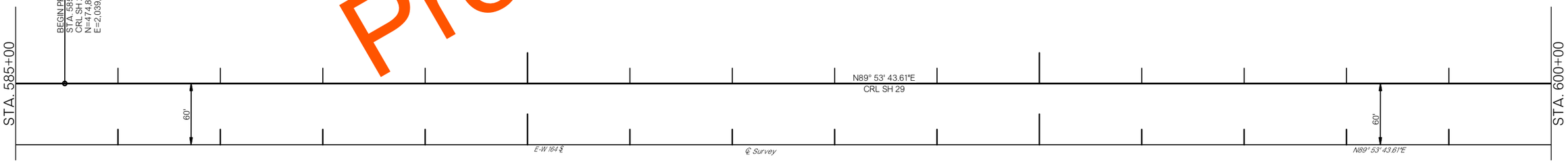
SEC. 18, T2N, R5W

Preliminary Plans

590+00

595+00

SCALE: 1"=50'



SEC. 19, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		GEOMETRIC DESIGN
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO R035

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DESCRIPTION	REVISIONS	DATE

SEC. 18, T2N, R5W

SEC. 17, T2N, R5W

SCALE: 1"=50'

STA. 600+00

605+00

610+00

STA. 615+00

60'

50'

50'

50'

N00° 11' 31.79"W

N-S 294 ℄

N 00°10'00" E

POT STA 604+80.41 CRL 60' LT
= POT STA 604+80.41 ℄ SURVEY
N=474,839.0732
E=2,041,780.9398

FOUND 1/2" IRON PIN

FOUND 1/2" IRON PIN

N 00°08'16" W

FOUND 1/2" IRON PIN

N89° 53' 43.61"E
CRL SH 29

SET 5/8" IRON PIN WITH ALUMINUM CAP STAMPED "T400"

89°54'44.60"

42.04'

89°59'56.70"

75'

60'

N89° 54' 41.55"E

E-W 164 ℄

℄ Survey

N89° 53' 43.61"E

SET MAG NAIL

POT STA 603+89.26
℄ SURVEY SH 29 42.04' LT
N=474,839.0930
E=2,041,869.2240

POT STA 604+80.50 (MAG NAIL)
℄ SURVEY SH 29 CRL 60' LT
TIE TO CORNER
N=474,839.0735
E=2,041,781.1392

POT STA 606+00 (MAG NAIL)
℄ SURVEY SH 29
N=474,840.0463
E=2,042,300.9332

89°54'45"

1.21'

N44°01'11.00"W

EW 164 ℄

N89°54'41.55"E

℄ SURVEY N89°53'43.61"E

89°59'57"

N44°03'49.00"W ℄ 294 N/S

N20° 06' 13.09"W

SEC. 19, T2N, R5W

SEC. 20, T2N, R5W

SEC. 17, T2N, R5W

SCALE: 1"=50'

STA. 615+00

620+00

625+00

STA. 630+00

60'

50'

50'

50'

N 00°08'16" W

N89° 53' 43.61"E
CRL SH 29

75'

SET MAG NAIL

℄ Survey

E-W 164 ℄

N89° 53' 43.61"E

N89° 54' 41.55"E

POT STA 620+00 (MAG NAIL)
℄ SURVEY SH 29
N=474,841.0462
E=2,043,300.9535

SEC. 20, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		GEOMETRIC DESIGN
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R036

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SEC. 17, T2N, R5W

635+00

640+00

SCALE: 1"=50'

STA. 630+00

STA. 645+00

60'

POT STA 631+30.15 CRL 60' LT
= POT STA 631+30.15 ℄ SURVEY
N=474,903.9085
E=2,044,430.6725

N:S 294.5 1/4 $ N00° 16' 04.90"W

N00°08'03"W

50'

60'

89°50'11.50"

0.46'

SET MAG NAIL

89°59'46.05"

N89° 53' 43.61"E

N89° 53' 43.61"E
CRL SH 29

N89° 54' 03.74"E

E-W 164 $

℄ Survey

SET MAG NAIL

POT STA 631+30.32 (MAG NAIL)
0.46' NORTH TO SECTION CORNER
N=474,943.730
E=2,044,430.9360

N00°08'02.44"W

89°50'11.50"

0.46'

SET MAG NAIL

89°59'46.05"

N00°08'03"W

EW 164 $ N89°54'03.74"E

℄ SURVEY N89°53'43.61"E

N00°08'02.44"W

NS 264.5 1/4 $

POT STA 640+25.00 MAG NAIL
℄ SURVEY SH 29
N=474,845.430
E=2,045,229.6300

55'

50'

S 00°08'16"E

50'

SEC. 20, T2N, R5W

650+00

655+00

SEC. 16,
T2N,
R5W

SCALE: 1"=50'

STA. 645+00

STA. 660+00

60'

89°41'31.72"

0.47'

SET MAG NAIL

N00°21'22.49"W

EW 164 $ N89°57'53.60"E

℄ SURVEY N89°57'05.79"E

90°7'33.74"

N00°04'39.59"W

NS 295 $

N:S 295 $

N00°21'22.49"W

POT STA 657+80.04 CRL 60' LT
= POT STA 657+79.99 ℄ SURVEY
N=474,908.4769
E=2,047,080.5629

50'

N 00°02'54"W

50'

PI STA 655+07.43 CRL
Δ=00° 03' 22.18" RT
N=474,908.2466
E=2,046,807.9531

N89° 53' 43.61"E
CRL SH 29

75'

89°41'31.72"

0.47'

N89° 54' 03.74"E

E-W 164 $

℄ Survey

SET MAG NAIL

N89° 57' 05.79"E

SET MAG NAIL

N89° 57' 53.60"E

90°7'33.74"

75'

50'

POT STA 650+00
℄ SURVEY SH 29
N=474,847.3207
E=2,046,930.6285

PI STA 655+07.40 (MAG NAIL)
℄ SURVEY SH 29
Δ=00°03'22.18"RT
N=474,908.2466
E=2,046,807.9277

POT STA 657+80.30 (MAG NAIL)
℄ SURVEY SH 29 ON $
0.46' NORTH TO SECTION CORNER
N=474,948.177
E=2,047,080.3324

S 00°04'40" W

N00° 04' 39.53"E

SEC. 20, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		GEOMETRIC DESIGN
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R037

DESCRIPTION	REVISIONS	DATE

Preliminary Plans

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DESCRIPTION	REVISIONS	DATE

SEC. 16, T2N, R5W

665+00

670+00

SCALE: 1"=50'

STA. 660+00

STA. 675+00

60'

60'

N89° 57' 05.79"E
CRL SH 29

℄ Survey

N89° 57' 05.79"E

E-W 164.5'

N89° 57' 53.60"E

SET MAG NAIL

POT STA 677+50.00 MAG NAIL
℄ SURVEY SH 29
N=474,850.1400
E=2,049,930.6270

50'

50'

50'

S 00°02'52" E

POT STA 677+50.00 MAG NAIL
℄ SURVEY SH 29
N=474,850.1400
E=2,049,930.6270

SEC. 21, T2N, R5W

Preliminary

SEC. 16, T2N, R5W

680+00

685+00

SCALE: 1"=50'

STA. 675+00

STA. 690+00

60'

60'

N89° 57' 05.79"E
CRL SH 29

℄ Survey

N89° 57' 05.79"E

E-W 164.5'

N89° 57' 53.60"E

SET MAG NAIL

N89° 58' 10.88"E

89°44'57.03"

0.14'

90°14'34.53"

75'

50'

N 00°02'52" W

75'

SET MAG NAIL

POT STA 684+18.79 CRL 60' LT
= POT STA 684+18.73 ℄ SURVEY
N=474,910.7055
E=2,049,719.3059

S 00° 17' 57.19" E
NS 265.5 1/4 ℄

POT STA 681+68.00 MAG NAIL
℄ SURVEY SH 29 CW 1/4 ℄
0.14' SOUTH TO SECTION CORNER
N=474,650.6670
E=2,049,719.6189

S 00° 17' 57.19" E

N 00° 07' 28.74" W

50'

89°44'57.03"

0.14'

℄ SURVEY N89°57'05.79"E

EW 164.5 ℄ N89°57'53.60"E

N89°58'10.88"E

S00°17'57.19"E

NS 265.5 1/4 ℄

N00°07'28.74"W

90°14'34.53"

SEC. 21,
T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		GEOMETRIC DESIGN
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R038

R:\1145741Drawings\29657(04)\GEOMETRIC DESIGN 11.dwg 10/26/2022 5:40 AM

DESCRIPTION	REVISIONS	DATE

SEC. 16, T2N, R5W

695+00

700+00

SCALE: 1"=50'

STA. 690+00

STA. 705+00

50'

N00°02'54"E 50'

75'

60'

N89° 57' 05.79"E
CRL SH 29

℄ Survey

E-W 164 ±

N89° 58' 10.88"E

SET MAG NAIL

SET MAG NAIL

POT STA 690+00.00 (MAG NAIL)
(0.39" E OF ℄)
N=474,951.9965
E=2,050,300.6265

N00°02'54"W 50'

50'

75'

POT STA 700+00.00 (MAG NAIL)
(0.39" E OF ℄ SURVEY)
N=474,952.3638
E=2,051,300.6261

SEC. 21, T2N, R5W

Preliminary Plans

SEC. 16, T2N, R5W

SEC. 15, T2N, R5W

710+00

715+00

SCALE: 1"=50'

N00°08'10.56"W

0.39"

℄ SURVEY N89°57'05.79"E

EW 164 ± N89°56'39.33"E

N89°58'10.88"E

90°6'47.19"

POT STA 710+57.65 CRL 60' RT
= POT STA. 710+57.59 ℄ SURVEY
N=474,912.9343
E=2,052,358.1620

SET MAG NAIL

SET MAG NAIL

N00°08'10.56"W 50'

50'

N00°08'10.56"W

SET MAG NAIL

N00°07'07.07"E

50'

50'

75'

0.39"

SET 5/8" IRON PIN WITH
ALUMINUM CAP STAMPED "7401"

STA. 705+00

STA. 720+00

60'

N89° 57' 05.79"E
CRL SH 29

℄ Survey

N89° 56' 39.33"E

E-W 164 ±

90°6'47.19"

N-S 265' ±

N00°09'41.41"W

POT STA 710+57.64 (MAG NAIL)
℄ SURVEY SH 29 ON ℄
0.39" SOUTH OF SECTION CORNER
N=474,952.3638
E=2,052,358.2098

POT STA 705+00.36 (MAG NAIL)
(0.41" E OF ℄ SURVEY SH 29
N=474,951.9000
E=2,052,822.8620

POT STA 720+00.00 (MAG NAIL)
℄ SURVEY SH 29
N=474,951.7231
E=2,053,300.6254

SEC. 21, T2N, R5W

SEC. 22, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		GEOMETRIC DESIGN
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R039

R:\114574\Drawings\29657(04)\GEOMETRIC DESIGN 11.dwg 10/26/2022 5:40 AM

SEC. 15, T2N, R5W

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

STA. 720+00

725+00

730+00

STA. 735+00

N00°00'25"W 105'

50'

75'

60'

N89° 57' 05.79"E
CRL SH 29

60'

SET MAG NAIL

N89° 56' 39.33"E

E-W 164 ±

℄ Survey

N89° 57' 05.79"E

SET MAG NAIL

S 00°02'54"E

50'

50'

POT STA 731+00.00 MAG NAIL
℄ SURVEY SH 29
N=474,854.6566
E=2,054,400.6250

SEC. 22, T2N, R5W

SEC. 15, T2N, R5W

740+00

745+00

750+00

SCALE: 1"=50'

N00°11'09.83"W

N00°11'10"W

40'

40'

POT STA 736+99.22 CRL 60' LT
= POT STA 736+99.16 ℄ SURVEY
N=474,915.1654
E=2,054,999.7321

89°51'44.31"

89°51'44.31"

N89°56'49.02"E

90°3'26.84"

90°3'26.84"

N00°08'21.05"W

N 5,295.1 ±

POT STA 736+99.22 MAG NAIL
CRL SH 29 & EW 164 ±
0.83' SOUTH TO SECTION CORNER
N=474,855.1655
E=2,054,999.9270

N89° 57' 05.79"E
CRL SH 29

℄ Survey

N89° 57' 05.79"E

E-W 164 ±

N89° 56' 49.02"E

SET MAG NAIL

N00°02'54"W

50'

50'

75'

POT STA 745+00.00 MAG NAIL
℄ SURVEY SH 29
N=474,850.0952
E=2,055,300.0244

SEC. 22, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		GEOMETRIC DESIGN
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R040

R:\1145741\Drawings\29657(04)\GEOMETRIC DESIGN 11.dwg 10/26/2022 5:40 AM

SEC. 15, T2N, R5W

DESCRIPTION	REVISIONS	DATE

755+00

760+00

SCALE: 1"=50'

STA. 750+00

60'

SET 60d NAIL

50'

PI STA 762+74.72
Δ=000° 08'00"
N=474,917.3867
E=2,057,641.5829

SET 60d NAIL

SET 60d NAIL

N89° 57' 05.79"E
CRL SH 29

POT STA 763+41.07 CRL 60' LT
= POT STA 763+41.01 ℄ SURVEY
N=474,917.3867
E=2,057,641.5829

N00° 08' 11.86"W

N.0°08'12" W.

50'

SET 60d NAIL

SET 60d NAIL

75'

60'

STA. 765+00

75'

N89° 57' 05.79"E

℄ Survey

0.42'

SET RR DATE NAIL

SET MAG NAIL

N89° 56' 49.02"E

E-W 164 ℄

90°0'3.62"

POT STA 762+60.00 MAG NAIL)
℄ SURVEY SH 29
N=474,858.139
E=2,058,060.280

POT STA 763+41.10 MAG NAIL)
℄ SURVEY SH 29 ON 1/4 ℄
0.42' NORTH TO SECTION CORNER
N=474,858.1388
E=2,057,641.7260

N00° 02' 50.59"W

N.S 267 ℄

SEC. 22, T2N, R5W

SEC. 14, T2N, R5W

N02°08'11.86"W

0.42'

℄ SURVEY N89°57'05.79"E

N89°56'49.02"E

EW 164 ℄

N89°52'46.78"E

90°0'3.62"

SEC. 23,
T2N, R5W

Preliminary Plans

770+00

775+00

SCALE: 1"=50'

STA. 765+00

60'

CRL SH 29
PI STA. 772+13.01
Δ=000° 08'00"
N=474,918.1332
E=2,058,513.5227

PI STA 772+13.01 CRL 60' LT
= POT STA 772+15.09 ℄ SURVEY
Δ=0° 08'00.00" LT
N=474,918.1332
E=2,058,513.5227

N89° 57' 05.79"E
CRL SH 29

N89° 49' 05.79"E
CRL SH 29

0°8'0.0"

60'

STA. 780+00

N89° 57' 05.79"E

℄ Survey

N89° 52' 46.78"E

E-W 164 ℄

SET MAG NAIL

N89° 49' 05.79"E

75'

S 00°02'54" E

50'

50'

PI STA 772+13.02 MAG NAIL)
℄ SURVEY SH 29
Δ=0° 08' 00.00" LT
N=474,858.1332
E=2,058,513.5432

SEC. 23, T2N, R5W

R:\1145741Drawings\29657(04)\GEOMETRIC DESIGN 11.dwg 10/26/2022 5:40 AM

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DRAWN		
CHECKED		GEOMETRIC DESIGN
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R041

SEC. 14, T2N, R5W

DESCRIPTION	REVISIONS	DATE

785+00

790+00

N02°07'31.88"W

SET MAG NAIL

40'

SET MAG NAIL

N02°07'32"W

40'

SET MAG NAIL

POT STA 789+84.02 CRL 60' LT
= POT STA 789+84.10 ℄ SURVEY
N=474,923.7503
E=2,060,284.5249

SCALE: 1"=50'

STA. 780+00

60'

50'

N00°10'54"W

75'

N89° 49' 05.79"E
CRL SH 29

60'

STA. 795+00

POT STA 782+00.00 (MAG NAIL)
℄ SURVEY SH 29
N=474,866.7686
E=2,059,501.6186

SET MAG NAIL

N89° 52' 46.78"E

N89° 49' 05.79"E
E-W 164 ±

SET MAG NAIL

1.22"

89°55'23.95"

N89° 49' 05.79"E

℄ Survey

N89° 48' 54.74"E

N02°07'31.886"W

1.22"

℄ SURVEY

N89°57'05.79"E

N89°56'49.02"E

E-W 164 ±

N89°52'46.78"E

89°55'23.95"

N02°06'18.16"W

N02° 06' 18.16" W
N-S 297.5 ±

POT STA 789+84.02
℄ SURVEY SH 29
(2 SURVEY TIE SECTION CORNER
Δ=00°13'32.04" LT
N=474,863.7504
E=2,060,284.6663

SEC. 23, T2N, R5W

SEC. 14, T2N, R5W

800+00

805+00

SCALE: 1"=50'

STA. 795+00

60'

N89° 49' 05.79"E
CRL SH 29

60'

STA. 810+00

SET MAG

90°00'00.61"

N89° 49' 05.79"E
N89° 48' 54.74"E

℄ Survey

E-W 164 ±

SET MAG NAIL

75'

50'

S 00°10'54"E

50'

POT STA 800+00.00 (MAG NAIL)
℄ SURVEY SH 29
N=474,866.9727
E=2,061,300.8685

75'

50'

SEC. 23, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		GEOMETRIC DESIGN
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R042

R:\1145741Drawings\29657 (04) \GEOMETRIC DESIGN 11.dwg 10/26/2022 5:40 AM

SEC. 14, T2N, R5W

SEC. 13, T2N, R5W

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

815+00

820+00

POT STA 816+35.80 CRL 60' LT.
= POT STA. 816+35.68 ℄ SURVEY
N=474,932.1609
E=2,062,936.2900

N00° 12' 56.86"W

STA. 810+00

STA. 825+00

60'

N89° 49' 05.79"E
CRL SH 29

50'

N 00°10'54" W

50'

75'

60'

N89° 48' 54.74"E

1.28'

℄ Survey

N89° 49' 05.79"E

N89° 58' 18.01"E

E-W 164.8'

SET MAG NAIL

89°53'2.80"

POT STA 810+00.00 MAG NAIL
℄ SURVEY SH 29
N=474,935.1644
E=2,062,300.8944

POT STA 816+35.91 MAG NAIL
℄ SURVEY SH 29 ON 1/4 ℄
128' SOUTH TO SECTION CORNER
N=472,297.1823
E=2,062,936.5159

POT STA 820+00.00 MAG NAIL
℄ SURVEY SH 29
N=474,870.3161
E=2,063,300.3894

1.28'

℄ SURVEY N89°49'05.79"E

N89°56'49.02"E

EW 164.8' N89°58'18.01"E

N00°12'56.86"W

N00°03'57.01"W

N5.28'

N5.28'

89°53'2.80"

SEC. 23, T2N, R5W

SEC. 24, T2N, R5W

Preliminary Plans

SEC. 24, T2N, R5W

830+00

835+00

CURVE DATA
CURVE 1
CRL SH 29
PI STA 830+94.63
Δ=4°02'38" RT.
R=1200.00'
D=4°46'38.95"
T=42.12'
L=910.63'
C=910.2...
E=8.04
S=NO SUPER
emax=6%
V=65 MPH

SCALE: 1"=50'

CURVE DATA
CURVE 3
℄ Detour 'A'
PI STA 839+42.89
Δ=5°00'00.00" RT
R=6000.00'
D=0°57'17.75"
T=261.97'
L=523.60'
C=523.43'
E=5.72
S=NO SUPER
emax=TCS2-1-00
V=55 MPH

℄ Detour 'A'
PI STA. 839+42.89
Δ=005° 00' 00" RT.
N=474939.4783
E=2065243.3739

BEGIN DETOUR 'A'
STA. 826+00.00
N=474,935.2191
E=2,063,900.4869

CRL SH 29
PC STA. 826+39.21

CRL SH 29
PI STA. 830+94.63
Δ=004° 02' 38" RT.
N=474936.7879
E=2064395.1127

℄ Detour 'A'
PC 836+80.93

STA. 825+00

STA. 840+00

60'

75'

50'

℄ Survey

N89° 49' 05.79"E

SET MAG NAIL

N89° 51' 05.79"E

N89° 49' 05.79"E
℄ DETOUR 'A'

S86° 08' 16.39"E
CRL SH 29

CRL SH 29
PT STA. 835+49.67

E-W 164.8'

N89° 58' 18.01"E

POT STA 826+27.78 MAG NAIL
℄ SURVEY SH 29
ON 1/4 ℄ 100.01' RT
N=474,870.3380
E=2,064,253.3749

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		GEOMETRIC DESIGN
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APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R043

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SEC. 13, T2N, R5W

SEC. 24, T2N, R5W

SEC. 18, T2N, R4W

SEC. 24, T2N, R5W

Preliminary Plans

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

SCALE: 1"=50'

STA. 840+00

STA. 855+00

STA. 855+00

STA. 870+00

845+00

850+00

860+00

865+00

℄ Detour 'A'
PT 842+04.53

S85° 10' 54.21"E
℄ DETOUR 'A'

SET MAG NAIL

S86° 08' 16.39"E
CRL SH 29

POT STA 842+78.08 ℄ DETOUR 'A' 315
= POT STA 842+77.20 ℄ SURVEY
N=474,911.2960
E=2,065,577.7089

N00° 11' 13.56"W
N00° 01' 14"W
50'
75'
7.38'
90°2'19.35"

POT STA 842+77.22 MAG NAIL
℄ SURVEY SH 29 ON 1/4 ℄
7.38' SOUTH TO SECTION CORNER
N=474,904.1982
E=2,065,577.8119

POT STA 842+77.33 ℄ SURVEY
ON 1/4 ℄
N=474,827.3980
E=2,065,577.8360

N-S 2385.1 1/4 ℄
N00° 05' 45.67"W

POT STA 842+79.69 CRL 22.83' RT
= POT STA 842+77.21 ℄ SURVEY
N=474,856.9418
E=2,065,577.8619

S 00° 08' 54.1" E
85'
50'

℄ Detour 'A'
PC 843+82.03

CRL SH 29
PC STA. 843+59.54

℄ Detour 'A'
PI STA. 846+42.25
Δ=004° 58' 00" LT.
N=474880.7078
E=2065940.5865

C4

℄ Survey N89° 51' 05.79"E

E-W 164 ℄ N89° 58' 18.01"E

℄ Detour 'A'
PT 849+02.14

SET MAG NAIL

50'
105'
N 00° 08' 54" W

POT STA 850+00.00 MAG NAIL
℄ SURVEY SH 29
N=474,981.6402
E=2,066,300.3578

60'

N89° 51' 05.79"E
CRL SH 29

CRL SH 29
PT STA. 852+62.50

CRL SH 29
PI STA. 848+11.20
Δ=004° 00' 38" LT.
N=474821.1416
E=2066108.1658

C2

CURVE DATA
CURVE 2
CRL SH 29
PI STA 848+11.20
Δ=4°00'37.82" LT.
R=12900.00'
D=0°26'38.95"
T=451.66'
L=902.95'
C=902.77'
E=7.90
S=NO SUPER
emax=6%
V=65 MPH

CURVE DATA
CURVE 4
℄ Detour 'A'
PI STA 846+42.25
Δ=4°58'00.00" LT
R=6000.00'
D=0°57'17.75"
T=260.22'
L=520.11'
C=519.95'
E=5.64
S=NO SUPER
emax=TCS2-1-00
V=55 MPH

N00° 11' 13.56"W
℄ SURVEY N89°51'05.79"E
7.38'
90°2'19.35"
EW 164 ℄ N89°58'18.01"E
N00° 12' 45.67"W
NS -298.5 1/4 ℄

N00° 09' 06.47"W

POT STA 869+18.54 MAG NAIL
℄ SURVEY SH 29 ON 1/4 ℄
12.91' SOUTH TO SECTION CORNER
N=474,986.6591
E=2,069,219.1166

12.91'

POT STA 869+21.93 CRL 60' RT
= POT STA 869+18.52 ℄ SURVEY
N=474,826.6092
E=2,068,219.2567
N-S 298 ℄

POT STA 869+19.54 ℄ SURVEY
ON 1/4 ℄
N=474,871.0950
E=2,069,219.1630

S00° 07' 34.24"E

60'

N89° 51' 05.79"E
CRL SH 29

89°58'40.03"

100'

S 00° 08' 25.41" E

N00° 11' 13.56"W
NS -298 ℄
℄ SURVEY N89°51'05.79"E
12.91'
N89°58'18.01"E
EW 164 ℄ N89°43'16.77"E
89°58'40.03"
S00°07'34.24"E

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		GEOMETRIC DESIGN
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R044

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SEC. 18, T2N, R4W

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

STA. 870+00

STA. 875+00

STA. 880+00

STA. 885+00

50'

60' N 01°20'00" E 50'

POT STA 870+00.00 MAG NAIL
℄ SURVEY SH 29
N=474,889.3149
E=2,068,300.5810

SET MAG NAIL WITH TAG "SRB CA3949"

℄ CROSSOVER
PC 870+89.70

60'

N89° 43' 16.77"E

N89° 51' 05.79"E

℄ Survey

E-W 164 ±

C5

℄ CROSSOVER
PI STA. 875+29.85
Δ=003° 54' 30"
N=474828.1837
E=2068827.1693

℄ CROSSOVER
PRC 879+69.65

℄ CROSSOVER

N89° 51' 05.79"E
CRL SH 29

POT STA 880+00.00 MAG NAIL
℄ SURVEY SH 29
N=474,889.4100
E=2,069,300.5780

N00°20'00"E

SET MAG NAIL WITH TAG "SRB CA3949"

℄ CROSSOVER
PI STA. 884+09.79
Δ=003° 54' 30"
N=474890.4580
E=2069705.2484

C6

60'

CURVE DATA
CURVE 5
℄ CROSSOVER
PI STA 875+29.85
Δ=3°54'29.87" LT
R=12900.00'
D=0°26'38.95"
T=440.14'
L=879.94'
C=879.77'
E=7.51
S=NO SUPER
emax=8%
V=65 MPH

CURVE DATA
CURVE 6
℄ CROSSOVER
PI STA 884+09.79
Δ=3°54'29.87" RT
R=12900.00'
D=0°26'38.95"
T=440.14'
L=879.94'
C=879.77'
E=7.51
S=NO SUPER
emax=8%
V=65 MPH

SEC. 19, T2N, R4W

SEC. 18, T2N, R4W

STA. 885+00

STA. 890+00

STA. 895+00

℄ CROSSOVER
AT 888+49.59

50'

N00°16'52.53"W
N=5,289,514.±

POT STA 886+27.37 MAG NAIL
℄ SURVEY SH 29 ON 1/4 ±
6.75' SOUTH TO SECTION CORNER
N=474,886.8702
E=2,070,327.9780
E=2,070,327.9448

SCALE: 1"=50'

SET MAG NAIL WITH TAG "SRB CA3949"

6.75'

N89° 51' 05.79"E

℄ Survey

E-W 164 ±

N89° 43' 16.77"E

89°56'43.00"

53.25'

60'

POT STA 886+27.39 (℄ SURVEY)
ON 1/4 ±
N=474,886.8702
E=2,070,327.9780

N89° 51' 05.79"E
CRL SH 29

POT STA 896+30.75 CRL 60' RT.
= POT STA 896+27.34 ℄ SURVEY
N=474,833.6249
E=2,070,928.0650

N00°20'00"E

50'

N00°05'37.21"W

N00°16'52.53"W
NS=5289.514 ±

℄ SURVEY N89°51'05.79"E

6.75'

EW 164 ±

N89°43'16.77"E

N89°58'18.01"E

89°56'43.00"

N00°05'37.21"W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		GEOMETRIC DESIGN
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R045

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Preliminary Plans

DESCRIPTION	REVISIONS	DATE

SEC. 18, T2N, R5W

575+00

580+00

SCALE: 1"=50'

FO

N89° 53' 43.61"E
CRL SH 29

STA. 585+00

℄ Survey

SEC. 19, T2N, R5W

Preliminary Plans

SEC. 18, T2N, R5W

590+00

595+00

PHASE 1A

- CONTINUE CONSTRUCTION OF BRIDGE A.
- CONSTRUCT TEMPORARY WIDENINGS IN THE FOLLOWING LOCATIONS:
  - STA. 660+45.20 TO STA. 668+28.38
  - STA. 678+99.16 TO STA. 686+16.30
  - STA. 811+88.24 TO STA. 819+18.00
  - STA. 836+16.14 TO STA. 843+51.54

PHASE 1B

- BUILD ALL OF BRIDGE C, COMPLETE BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE ASPHALT FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT FOR DETOUR A.
- A. PLACE TEMPORARY STRIPE FROM 573+00.00 THRU DETOUR A

SCALE: 1"=50'

BEGIN PROJECT
STA. 585+50.00
CRL SH 29
N=474,895.5469
E=2,039,848.5163

STA. 585+00

STA. 600+00

N89° 53' 43.61"E
CRL SH 29

T1 T2 T3 T4

1 2 3 4 5

E-W 164.8'

℄ Survey

N89° 53' 43.61"E

LEGEND

- PHASE 1
- PHASE 2
- PHASE 3

PHASE 2

- FROM BOP THRU DETOUR A SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSTRTUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23.

PHASE 3

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 878+76+18 AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.

SEC. 19, T2N, R5W

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SUGGESTED SEQUENCE OF CONSTRUCTION

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO R046

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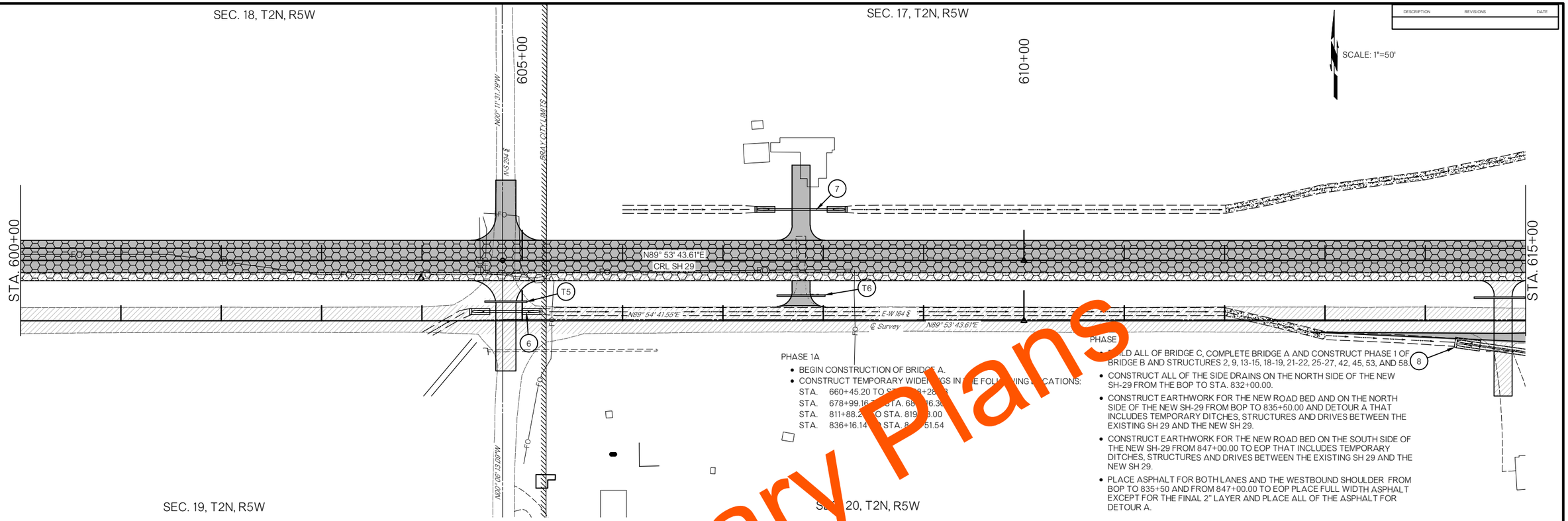
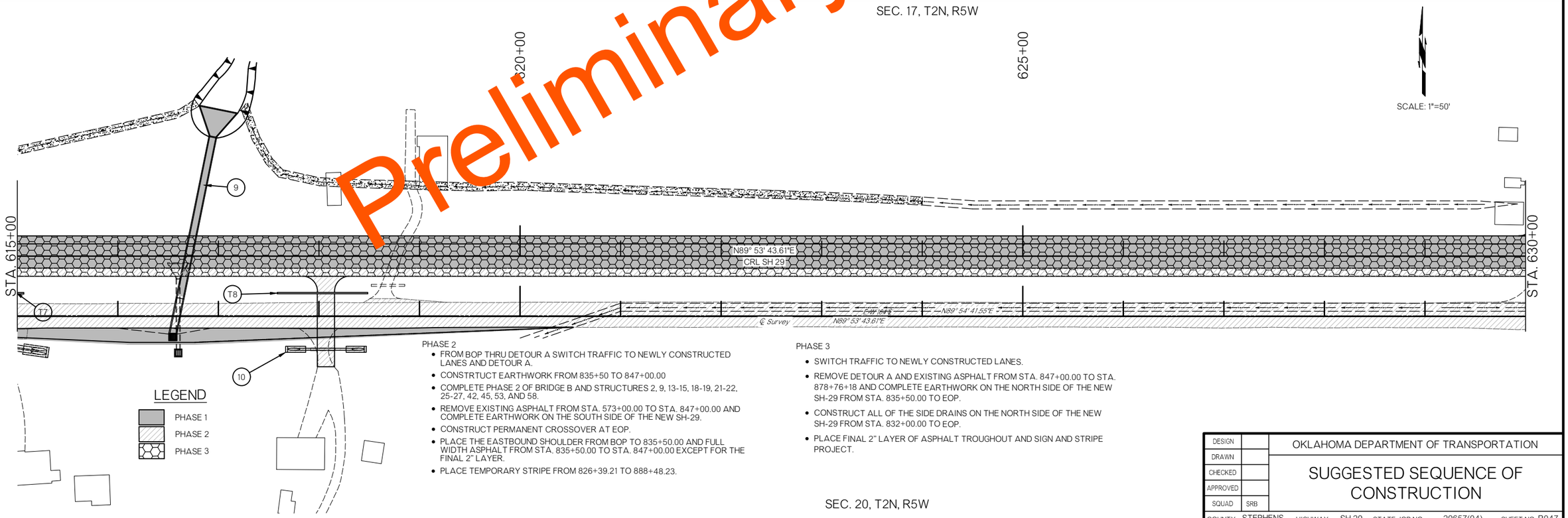


PHASE 1A

- BEGIN CONSTRUCTION OF BRIDGE A.
- CONSTRUCT TEMPORARY WIDENINGS IN THE FOLLOWING LOCATIONS:
  - STA. 660+45.20 TO STA. 668+26.30
  - STA. 678+99.16 TO STA. 686+16.30
  - STA. 811+88.20 TO STA. 819+39.00
  - STA. 836+16.14 TO STA. 844+51.54

PHASE 1B

- BUILD ALL OF BRIDGE C, COMPLETE BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE ASPHALT FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT FOR DETOUR A.



PHASE 2

- FROM BOP THRU DETOUR A SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSTRTUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23.

PHASE 3

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 878+76+18 AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SUGGESTED SEQUENCE OF CONSTRUCTION
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R047

Preliminary Plans

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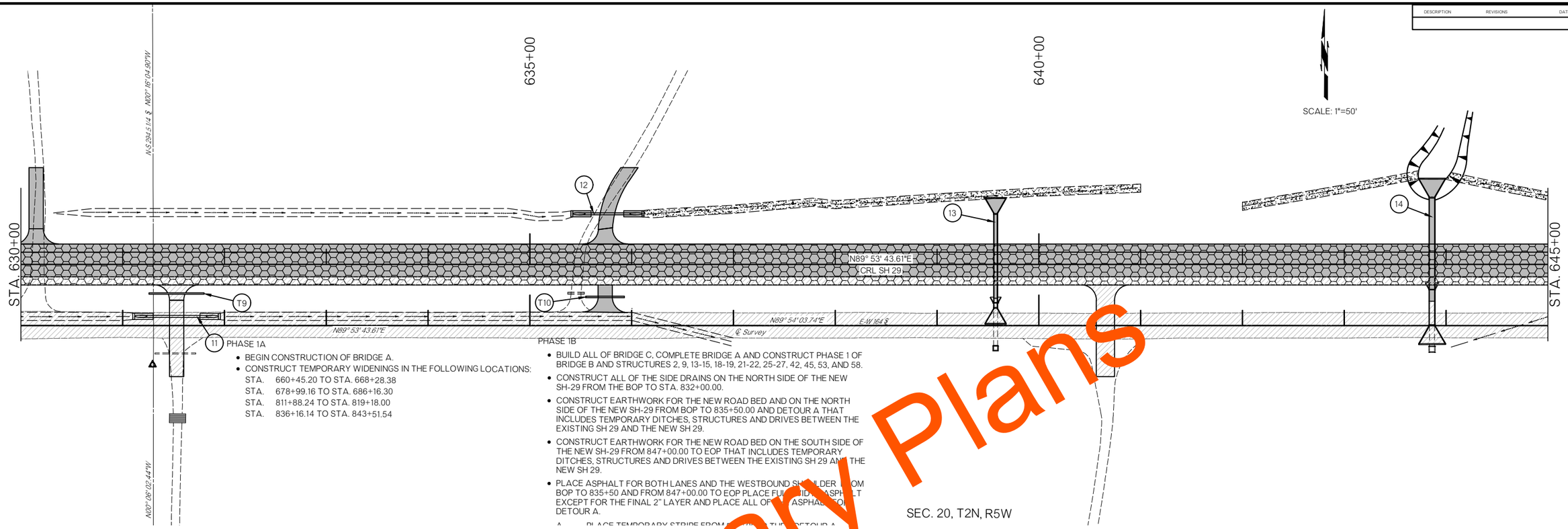


PHASE 1A

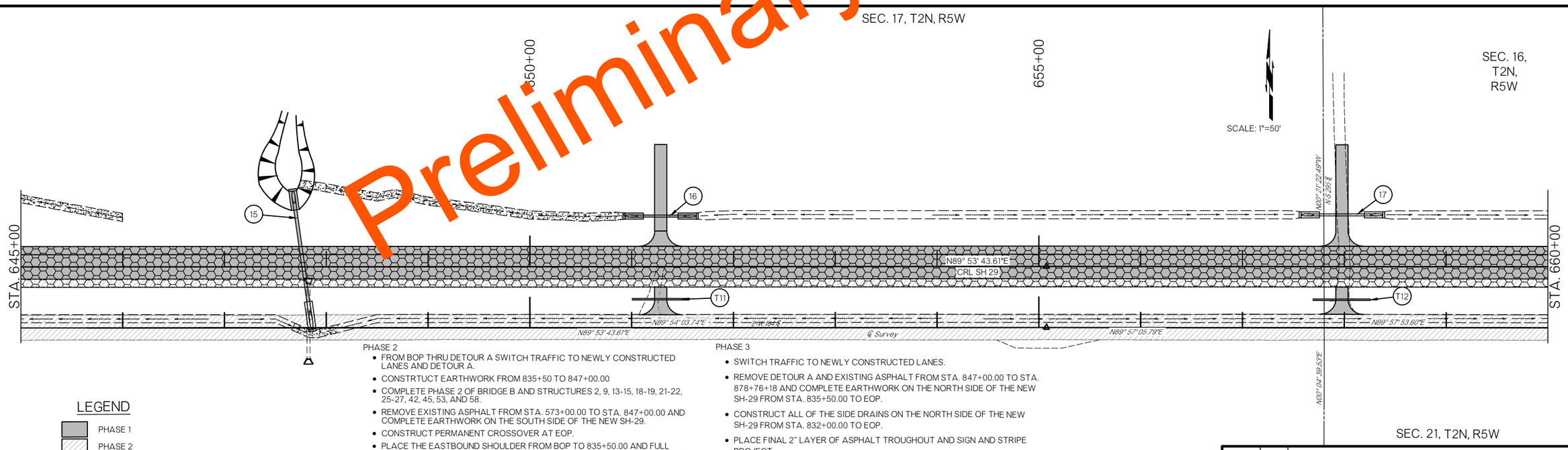
- BEGIN CONSTRUCTION OF BRIDGE A.
- CONSTRUCT TEMPORARY WIDENINGS IN THE FOLLOWING LOCATIONS:
  STA. 660+45.20 TO STA. 668+28.38
  STA. 678+99.16 TO STA. 686+16.30
  STA. 811+88.24 TO STA. 819+18.00
  STA. 836+16.14 TO STA. 843+51.54

PHASE 1B

- BUILD ALL OF BRIDGE C, COMPLETE BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE ASPHALT FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT ON DETOUR A.
- PLACE TEMPORARY STRIPE FROM [illegible] THE DETOUR A.

SEC. 20, T2N, R5W

SEC. 17, T2N, R5W



SEC. 16, T2N, R5W

SEC. 21, T2N, R5W

LEGEND

- PHASE 1
- PHASE 2
- PHASE 3

PHASE 2

- FROM BOP THRU DETOUR A SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSTRTUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23.

PHASE 3

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 878+76+18 AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.

SEC. 20, T2N, R5W

Preliminary Plans

DESCRIPTION	REVISIONS	DATE

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SUGGESTED SEQUENCE OF CONSTRUCTION

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R048

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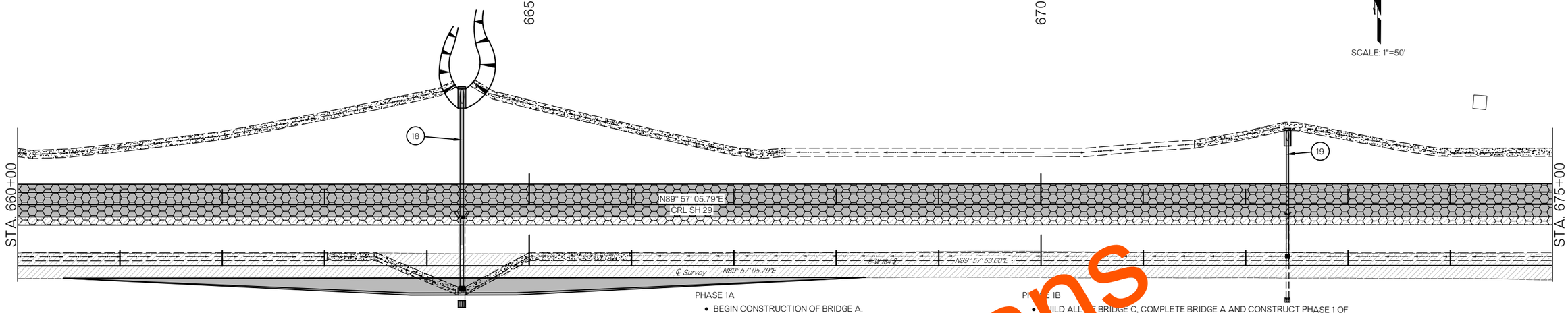
DESCRIPTION	REVISIONS	DATE

SEC. 16, T2N, R5W



SCALE: 1"=50'

PHASE 1A

- BEGIN CONSTRUCTION OF BRIDGE A.
- CONSTRUCT TEMPORARY WIDENINGS IN THE FOLLOWING LOCATIONS:
  STA. 660+45.20 TO STA. 668+28.38
  STA. 678+99.16 TO STA. 686+16.30
  STA. 811+88.24 TO STA. 819+18.00
  STA. 836+16.14 TO STA. 843+51.54

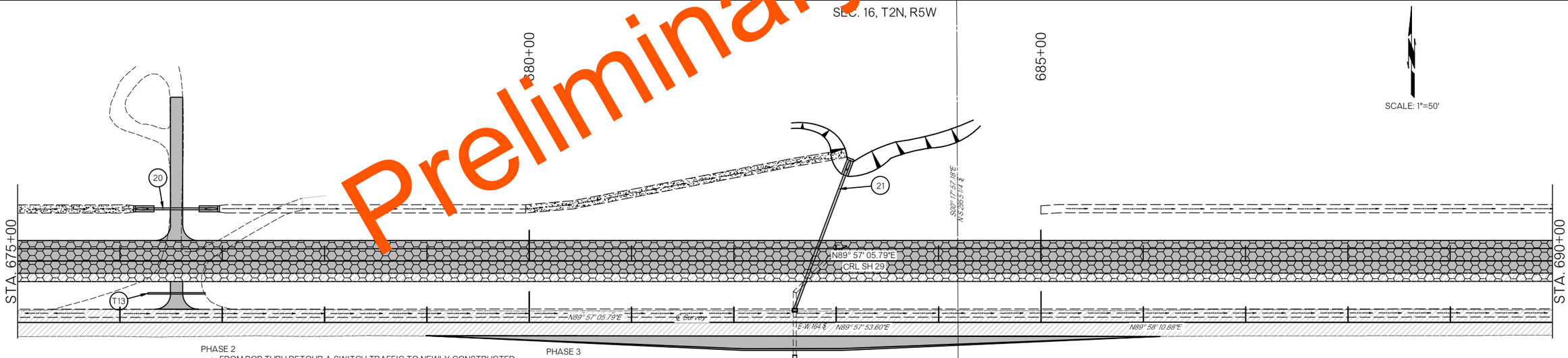
PHASE 1B

- BUILD ALL OF BRIDGE C, COMPLETE BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE ASPHALT FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT FOR DETOUR A.
- PLACE TEMPORARY STRIPE FROM STA. 826+39.21 TO STA. 888+48.23.

SEC. 21, T2N, R5W

Preliminary Plans

SEC. 16, T2N, R5W



SCALE: 1"=50'

PHASE 2

- FROM BOP THRU DETOUR A SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSRTUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23.

PHASE 3

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 878+76+18 AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.

LEGEND

- PHASE 1
- PHASE 2
- PHASE 3

SEC. 21, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SUGGESTED SEQUENCE OF CONSTRUCTION
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO R049

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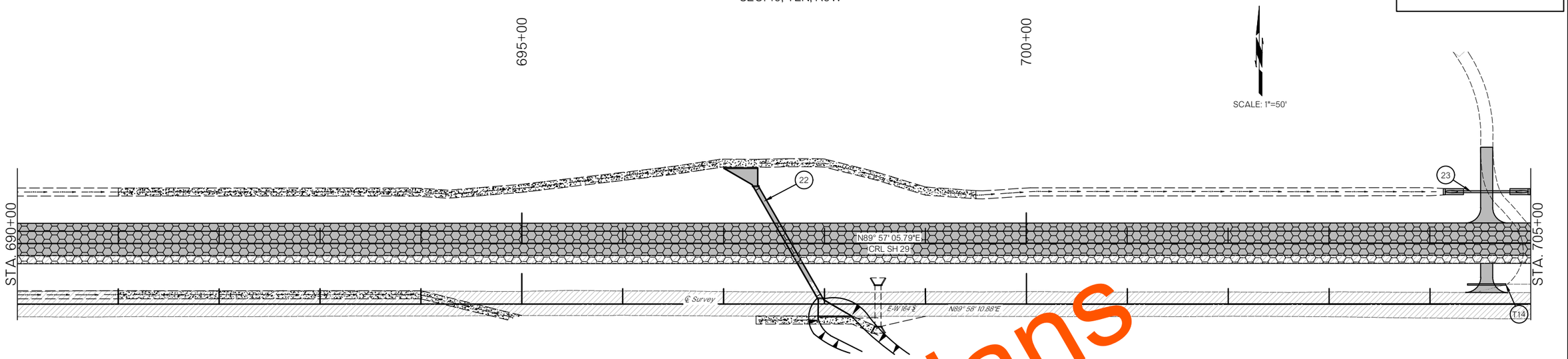
DESCRIPTION	REVISIONS	DATE

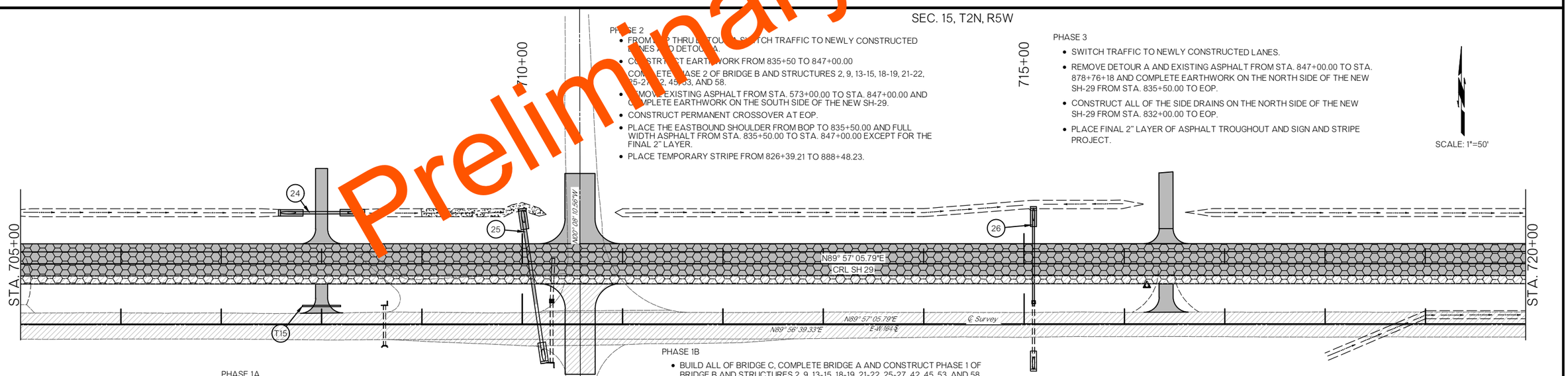
SEC. 16, T2N, R5W



Preliminary Plans

SEC. 21, T2N, R5W

SEC. 15, T2N, R5W



PHASE 2

- FROM STA. 710+00 THRU DETOUR A, SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSTRUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23.

PHASE 3

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 878+76+18 AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.

PHASE 1A

- BEGIN CONSTRUCTION OF BRIDGE A.
- CONSTRUCT TEMPORARY WIDENINGS IN THE FOLLOWING LOCATIONS:
  STA. 660+45.20 TO STA. 668+28.38
  STA. 678+99.16 TO STA. 686+16.30
  STA. 811+88.24 TO STA. 819+18.00
  STA. 836+16.14 TO STA. 843+51.54

PHASE 1B

- BUILD ALL OF BRIDGE C, COMPLETE BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE ASPHALT FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT FOR DETOUR A.
- PLACE TEMPORARY STRIPE FROM 573+00.00 THRU DETOUR A

LEGEND

- PHASE 1
- PHASE 2
- PHASE 3

SEC. 22, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SUGGESTED SEQUENCE OF CONSTRUCTION
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO 29657(04) SHEET NO R050

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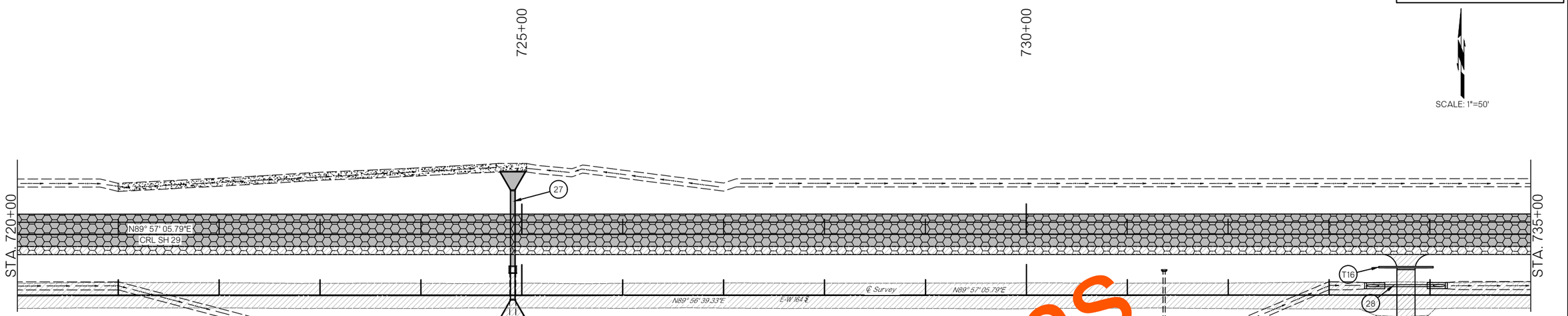
SEC. 15, T2N, R5W

DESCRIPTION	REVISIONS	DATE



PHASE 1A

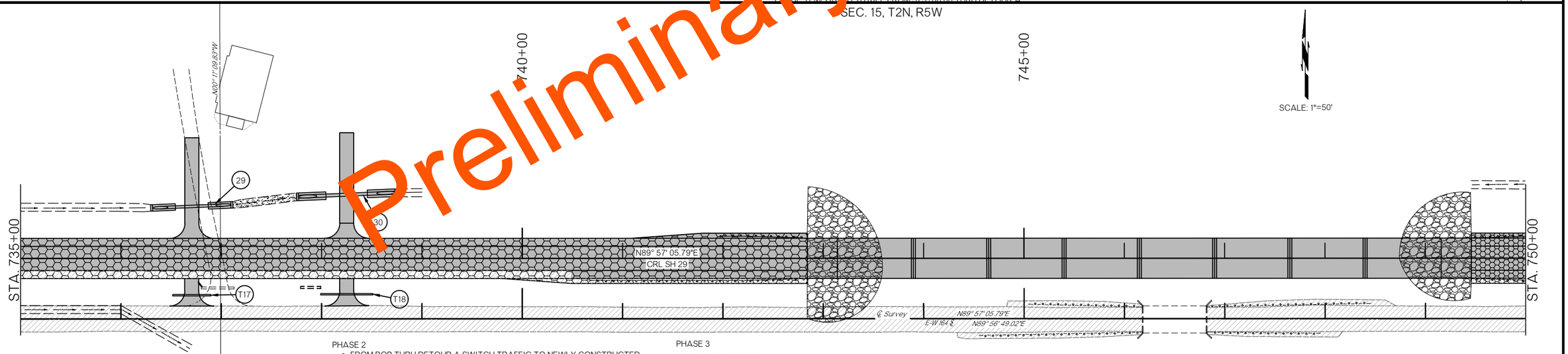
- BEGIN CONSTRUCTION OF BRIDGE A.
- CONSTRUCT TEMPORARY WIDENINGS IN THE FOLLOWING LOCATIONS:
  STA. 660+45.20 TO STA. 668+28.38
  STA. 678+99.16 TO STA. 686+16.30
  STA. 811+88.24 TO STA. 819+18.00
  STA. 836+16.14 TO STA. 843+51.54

PHASE 1B

- BUILD ALL OF BRIDGE C, COMPLETE BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE PHASE 1 FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50.00 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT FOR DETOUR A.
- PLACE TEMPORARY STRIPE FROM 573+00.00 THRU DETOUR A.

SEC. 22, T2N, R5W

SEC. 15, T2N, R5W



PHASE 2

- FROM BOP THRU DETOUR A SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSTRTUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23.

PHASE 3

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 878+76+18 AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.

LEGEND

- PHASE 1
- PHASE 2
- PHASE 3

SEC. 22, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SUGGESTED SEQUENCE OF CONSTRUCTION
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R051

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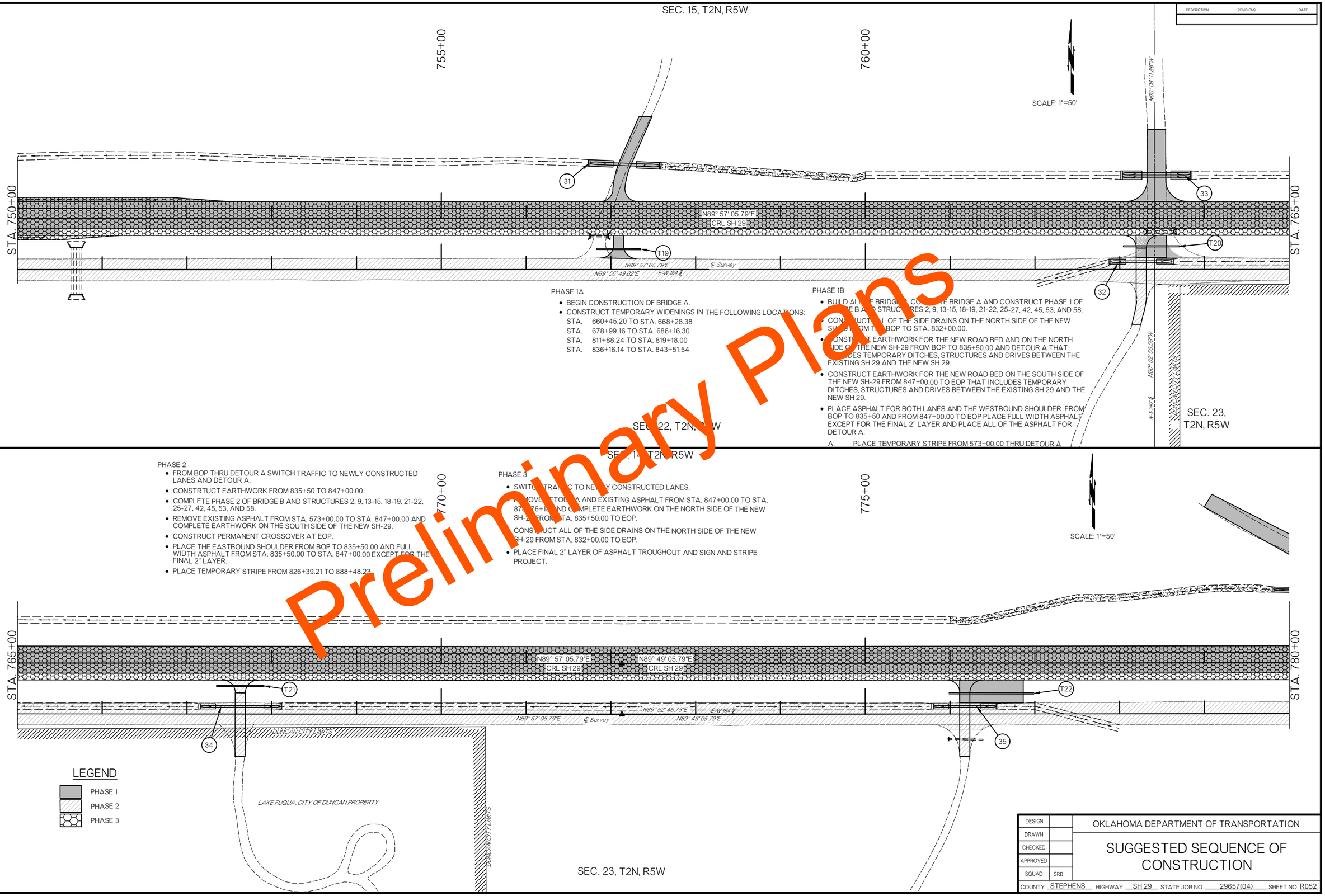

DESCRIPTION | REVISIONS | DATE

PHASE 1A

- BEGIN CONSTRUCTION OF BRIDGE A.
- CONSTRUCT TEMPORARY WIDENINGS IN THE FOLLOWING LOCATIONS:
  STA. 660+45.20 TO STA. 668+28.38
  STA. 678+99.16 TO STA. 686+16.30
  STA. 811+88.24 TO STA. 819+18.00
  STA. 836+16.14 TO STA. 843+51.54

PHASE 1B

- BUILD ALL OF BRIDGE B, CONSTRUCT BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE ASPHALT FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT FOR DETOUR A.
  A. PLACE TEMPORARY STRIPE FROM 573+00.00 THRU DETOUR A

PHASE 2

- FROM BOP THRU DETOUR A SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSTRTUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23

PHASE 3

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 876+76+18 AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
  CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SUGGESTED SEQUENCE OF CONSTRUCTION
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R052

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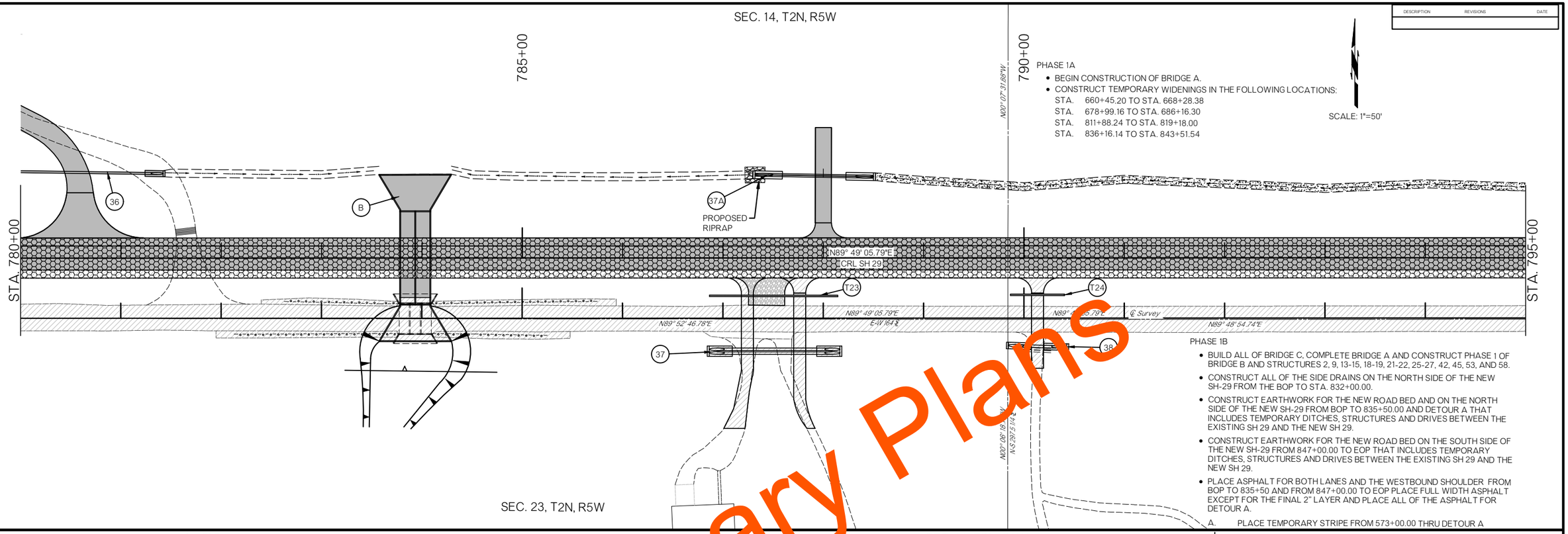
DESCRIPTION	REVISIONS	DATE



PHASE 1A

- BEGIN CONSTRUCTION OF BRIDGE A.
- CONSTRUCT TEMPORARY WIDENINGS IN THE FOLLOWING LOCATIONS:
  STA. 660+45.20 TO STA. 668+28.38
  STA. 678+99.16 TO STA. 686+16.30
  STA. 811+88.24 TO STA. 819+18.00
  STA. 836+16.14 TO STA. 843+51.54

SCALE: 1"=50'

PHASE 1B

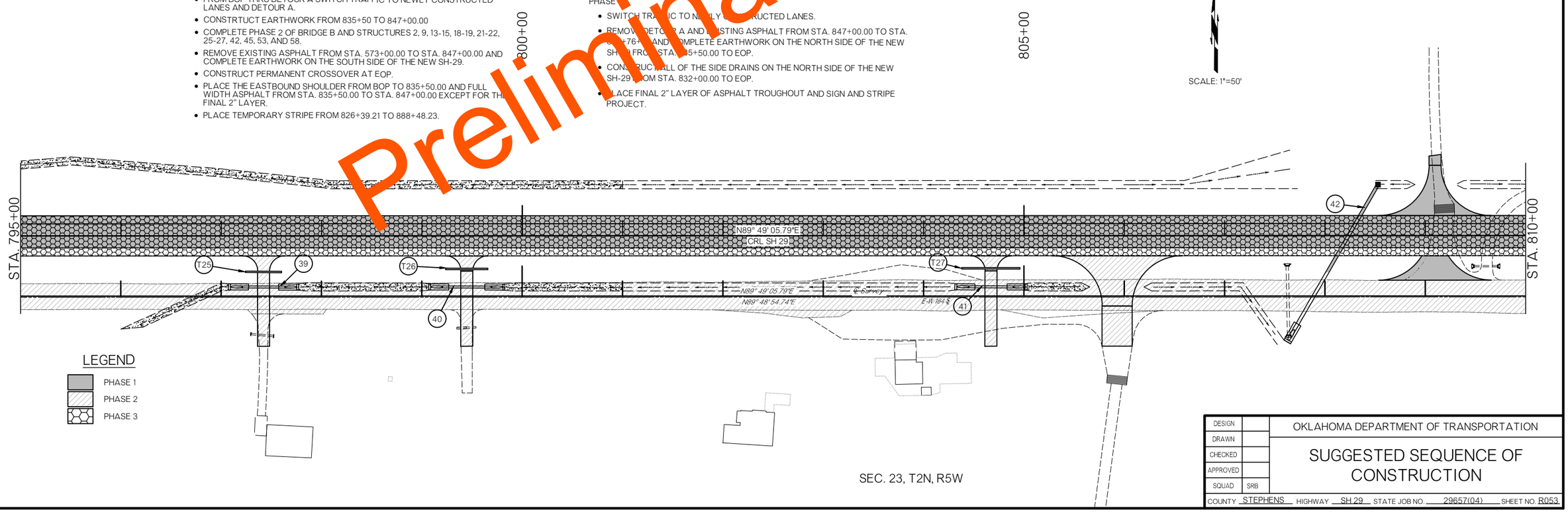
- BUILD ALL OF BRIDGE C, COMPLETE BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE ASPHALT FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT FOR DETOUR A.
- A. PLACE TEMPORARY STRIPE FROM 573+00.00 THRU DETOUR A

PHASE 2

- FROM BOP THRU DETOUR A SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSTRTUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23.

PHASE

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 876+ AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.



Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SUGGESTED SEQUENCE OF CONSTRUCTION
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO 29657(04) SHEET NO R053

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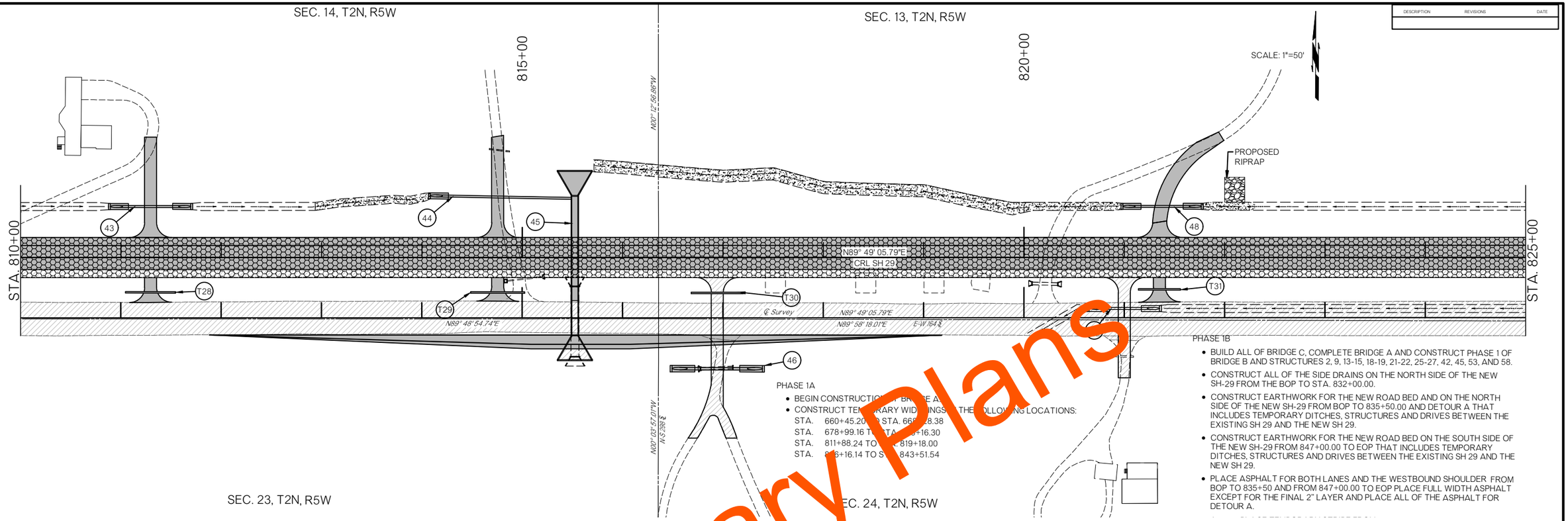
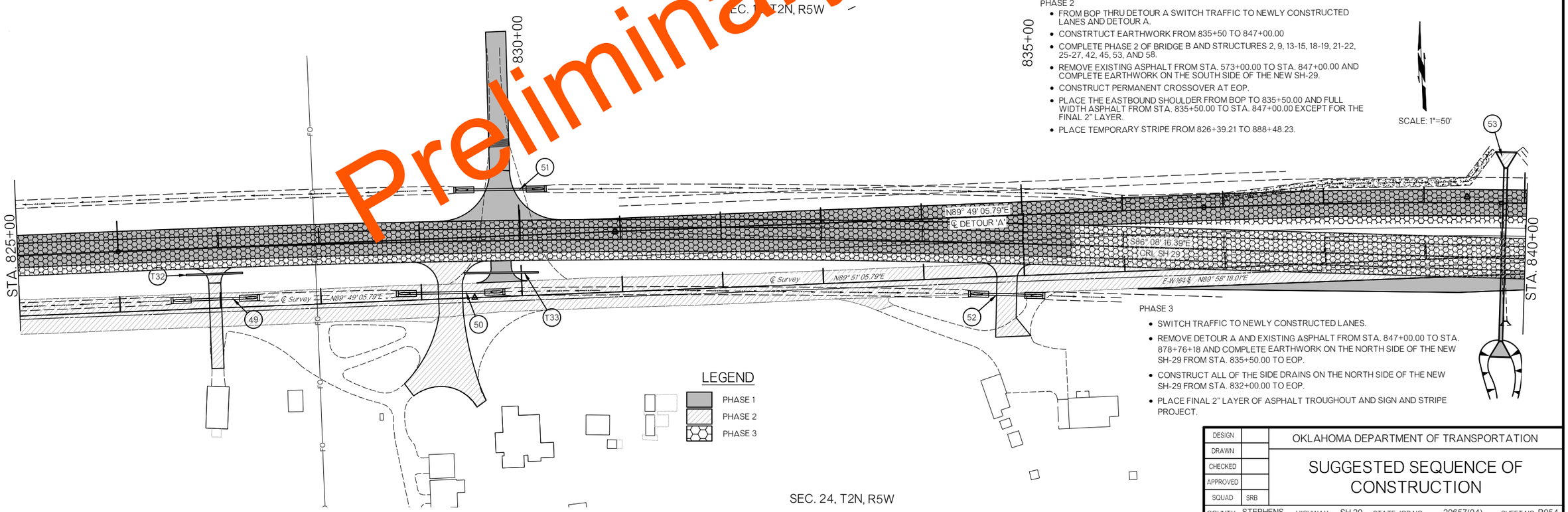


PHASE 1A

- BEGIN CONSTRUCTION OF BRIDGE A
- CONSTRUCT TEMPORARY WIDENINGS AT THE FOLLOWING LOCATIONS:
  - STA. 660+45.20 TO STA. 668+38.38
  - STA. 678+99.16 TO STA. 679+16.30
  - STA. 811+88.24 TO STA. 819+18.00
  - STA. 876+16.14 TO STA. 843+51.54

PHASE 1B

- BUILD ALL OF BRIDGE C, COMPLETE BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE ASPHALT FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT FOR DETOUR A.



PHASE 2

- FROM BOP THRU DETOUR A SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSTRTUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23.

PHASE 3

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 878+76+18 AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.

LEGEND

- PHASE 1
- PHASE 2
- PHASE 3

DESCRIPTION	REVISIONS	DATE

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SUGGESTED SEQUENCE OF CONSTRUCTION

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R054

Preliminary Plans

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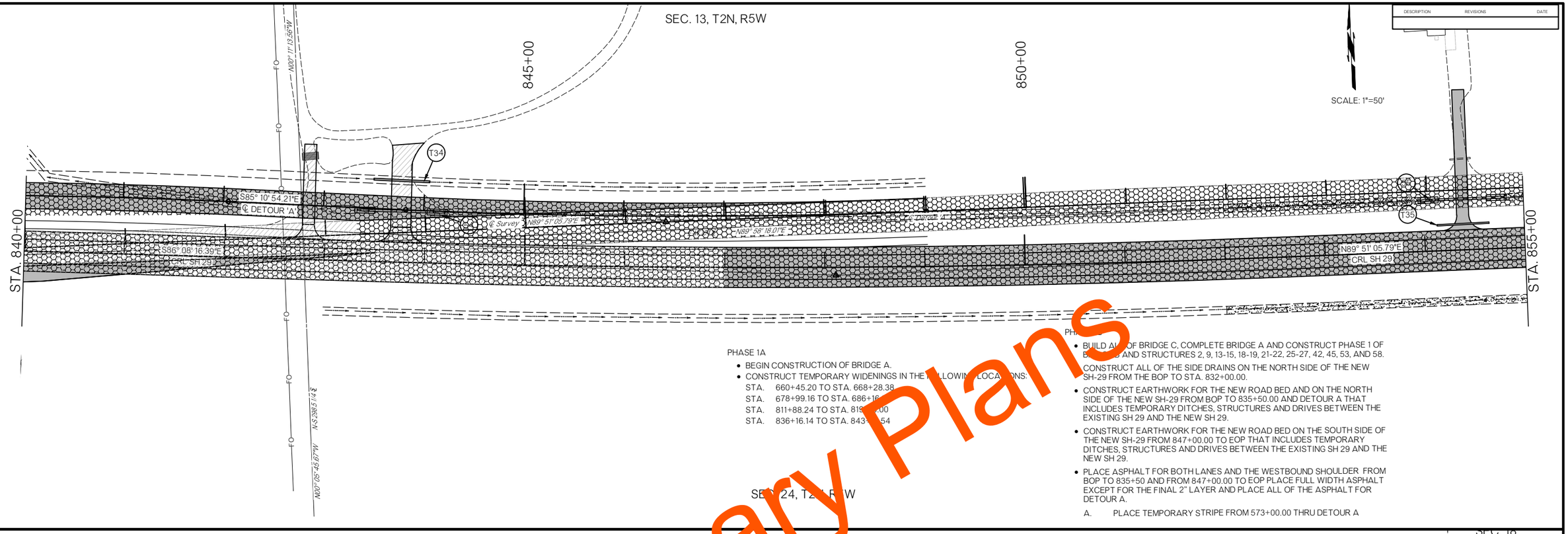

Preliminary Plans

DESCRIPTION	REVISIONS	DATE

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SUGGESTED SEQUENCE OF CONSTRUCTION

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R055

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PHASE 1B

- BUILD ALL OF BRIDGE C, COMPLETE BRIDGE A AND CONSTRUCT PHASE 1 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM THE BOP TO STA. 832+00.00.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED AND ON THE NORTH SIDE OF THE NEW SH-29 FROM BOP TO 835+50.00 AND DETOUR A THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- CONSTRUCT EARTHWORK FOR THE NEW ROAD BED ON THE SOUTH SIDE OF THE NEW SH-29 FROM 847+00.00 TO EOP THAT INCLUDES TEMPORARY DITCHES, STRUCTURES AND DRIVES BETWEEN THE EXISTING SH 29 AND THE NEW SH 29.
- PLACE ASPHALT FOR BOTH LANES AND THE WESTBOUND SHOULDER FROM BOP TO 835+50 AND FROM 847+00.00 TO EOP PLACE FULL WIDTH ASPHALT EXCEPT FOR THE FINAL 2" LAYER AND PLACE ALL OF THE ASPHALT FOR DETOUR A.
- PLACE TEMPORARY STRIPE FOR PROPOSED DETOUR A.

SEC. 18, T2N, R4W

875+00

880+00

SCALE: 1"=50'

STA. 870+00

STA. 885+00

N89° 51' 05.79"E

℄ Survey

E-W 164 ±

N89° 43' 16.77"E

℄ CROSSOVER

CRL SH 29

58

57

PHASE 1A

- BEGIN CONSTRUCTION OF BRIDGE A.
- CONSTRUCT TEMPORARY WIDENINGS IN THE FOLLOWING LOCATIONS:
  STA. 660+45.20 TO STA. 668+28.38
  STA. 678+99.16 TO STA. 686+16.30
  STA. 811+88.24 TO STA. 819+18.00
  STA. 836+16.14 TO STA. 843+51.54

Preliminary Plans

SEC. 19, T2N, R4W

SEC. 18, T2N, R4W

890+00

895+00

N00° 16' 52.53"W

N-S 2892.14 ±

N00° 05' 37.21"W

SCALE: 1"=50'

STA. 885+00

N89° 51' 05.79"E

℄ Survey

E-W 164 ±

N89° 43' 16.77"E

N89° 51' 05.79"E

CRL SH 29

N89° 51' 05.79"E

CRL SH 29

LEGEND

PHASE 1

PHASE 2

PHASE 3

PHASE 2

- FROM BOP THRU DETOUR A SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES AND DETOUR A.
- CONSTRTUCT EARTHWORK FROM 835+50 TO 847+00.00
- COMPLETE PHASE 2 OF BRIDGE B AND STRUCTURES 2, 9, 13-15, 18-19, 21-22, 25-27, 42, 45, 53, AND 58.
- REMOVE EXISTING ASPHALT FROM STA. 573+00.00 TO STA. 847+00.00 AND COMPLETE EARTHWORK ON THE SOUTH SIDE OF THE NEW SH-29.
- CONSTRUCT PERMANENT CROSSOVER AT EOP.
- PLACE THE EASTBOUND SHOULDER FROM BOP TO 835+50.00 AND FULL WIDTH ASPHALT FROM STA. 835+50.00 TO STA. 847+00.00 EXCEPT FOR THE FINAL 2" LAYER.
- PLACE TEMPORARY STRIPE FROM 826+39.21 TO 888+48.23.

PHASE 3

- SWITCH TRAFFIC TO NEWLY CONSTRUCTED LANES.
- REMOVE DETOUR A AND EXISTING ASPHALT FROM STA. 847+00.00 TO STA. 878+76+18 AND COMPLETE EARTHWORK ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 835+50.00 TO EOP.
- CONSTRUCT ALL OF THE SIDE DRAINS ON THE NORTH SIDE OF THE NEW SH-29 FROM STA. 832+00.00 TO EOP.
- PLACE FINAL 2" LAYER OF ASPHALT TROUGHOUT AND SIGN AND STRIPE PROJECT.

SEC. 19, T2N, R4W

DESCRIPTION	REVISIONS	DATE

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SUGGESTED SEQUENCE OF CONSTRUCTION
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R056

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DESCRIPTION	REVISIONS	DATE

SEC. 18, T2N, R5W

575+00

580+00

SCALE: 1"=50'

SAWING PAVEMENT
1,200 LF

COLD MILLING
5,333.32 SY

N89° 53' 43.61"E
CRL SH 29

STA. 585+00

℄ Survey

N89° 53' 43.61"E

REMOVAL OF ASPHALT
PAVEMENT 2,516.35 SY

LEGEND

- REMOVAL OF ASPHALT PAVEMENT
- REMOVAL OF FENCE
- SAWING PAVEMENT
- REMOVAL OF GUARDRAIL

REMOVAL QUANTITIES		
COLD MILLING PAVEMENT	SY	5,333.32
REMOVAL OF ASPHALT PAVEMENT	SY	2,516.35
SAWING PAVEMENT	LF	1,200

SEC. 19, T2N, R5W

♦ ITEMS INCLUDED UNDER "REMOVAL OF STRUCTURES & OBSTRUCTIONS"

Preliminary Plans

SEC. 18, T2N, R5W

590+00

595+00

SCALE: 1"=50'

BEGIN PROJECT
STA. 585+50.00
CRL SH 29
N=474,895.5469
E=2,039,848.5163

R/W

♦ REMOVAL OF FENCE
39[illegible] LF

♦ REMOVAL OF FENCE
829 LF

R/W

COLD MILLING
213.28 SY

N89° 53' 43.61"E
CRL SH 29

STA. 585+00

SAWING PAVEMENT
48 LF

♦ REMOVAL OF
EX. STRUCTURE

STA. 600+00

℄ Survey

N89° 53' 43.61"E

♦ REMOVAL OF
EX. STRUCTURE

♦ REMOVAL OF
EX. STRUCTURE

REMOVAL OF ASPHALT
PAVEMENT 5,365.94 SY

REMOVAL QUANTITIES		
COLD MILLING PAVEMENT	SY	213.28
REMOVAL OF FENCE ♦	LF	1,228
REMOVAL OF ASPHALT PAVEMENT	SY	5,365.94
SAWING PAVEMENT	LF	48

SEC. 19, T2N, R5W

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

REMOVALS

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R057

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SEC. 18, T2N, R5W

SEC. 17, T2N, R5W

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

605+00

610+00

STA. 600+00

STA. 615+00

N00° 11' 31.79"W

N 5.294 ℄

BRAY CITY LIMITS

R/W

SAWING PAVEMENT
19 LF

REMOVAL OF ASPHALT
PAVEMENT 387.03 SY

♦ REMOVAL OF FENCE
564 LF

N89° 53' 43.61"E
CRL SH 29

SAWING PAVEMENT
82 LF

♦ REMOVAL OF FENCE
374 LF

REMOVAL OF
EX. STRUCTURE ♦

♦ REMOVAL OF FENCE
771 LF

SAWING PAVEMENT
115 LF

N89° 54' 41.55"E

E-W 164 ℄

℄ Survey

N89° 53' 43.61"E

SAWING PAVEMENT
26 LF

REMOVAL OF ASPHALT
PAVEMENT 4,572.10 SY

♦ REMOVAL OF
EX. STRUCTURE

LEGEND

- REMOVAL OF ASPHALT PAVEMENT
- REMOVAL OF FENCE
- SAWING PAVEMENT
- REMOVAL OF GUARDRAIL

REMOVAL QUANTITIES		
REMOVAL OF FENCE ♦	LF	1,709
REMOVAL OF ASPHALT PAVEMENT	SY	4,959.13
SAWING PAVEMENT	LF	242

SEC. 19, T2N, R5W

♦ ITEMS INCLUDED UNDER "REMOVAL OF STRUCTURES & OBSTRUCTIONS"

SEC. 20, T2N, R5W

SEC. 17, T2N, R5W

SCALE: 1"=50'

620+00

625+00

630+00

STA. 615+00

STA. 630+00

R/W

♦ REMOVAL OF FENCE
161 LF

♦ REMOVAL OF FENCE
LF

N89° 53' 43.61"E
CRL SH 29

♦ REMOVAL OF FENCE
1,483 LF

SAWING PAVEMENT
437 LF

℄ Survey

N89° 54' 41.55"E

E-W 164 ℄

N89° 53' 43.61"E

REMOVAL OF ASPHALT
PAVEMENT 4,773.43 SY

♦ REMOVAL OF
EX. STRUCTURE

♦ REMOVAL OF
EX. STRUCTURES

REMOVAL QUANTITIES		
REMOVAL OF FENCE ♦	LF	1,809
REMOVAL OF ASPHALT PAVEMENT	SY	4,773.43
SAWING PAVEMENT	LF	437

SEC. 20, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		REMOVALS
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R058

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DESCRIPTION	REVISIONS	DATE

SEC. 17, T2N, R5W

635+00

640+00

SCALE: 1"=50'

R/W

R/W

R/W

N 53°34'51.14" E N00°16'04.90"W

STA. 630+00

STA. 645+00

N89° 53' 43.61"E
CRL SH 29

◆ REMOVAL OF FENCE 1,469 LF

REMOVAL OF EX. STRUCTURE

REMOVAL OF EX. STRUCTURE

N89° 53' 43.61"E

N89° 54' 03.74"E

℄ Survey

REMOVAL OF ASPHALT PAVEMENT 4,158.35 SY

REMOVAL OF EX. STRUCTURE

REMOVAL OF EX. STRUCTURE

N00°08'02.44"W

REMOVAL QUANTITIES		
REMOVAL OF FENCE ◆	LF	1,469
REMOVAL OF ASPHALT PAVEMENT	SY	4,158.35

LEGEND

- REMOVAL OF ASPHALT PAVEMENT
- REMOVAL OF FENCE
- SAWING PAVEMENT
- REMOVAL OF GUARDRAIL

SEC. 20, T2N, R5W

◆ ITEMS INCLUDED UNDER "REMOVAL OF STRUCTURES & OBSTRUCTIONS"

Preliminary Plans

SEC. 17, T2N, R5W

650+00

655+00

SCALE: 1"=50'

SEC. 16, T2N, R5W

R/W

R/W

R/W

N00°21'22.49"W

N 53°39'51.14" E

◆ REMOVAL OF FENCE 315 LF

STA. 645+00

STA. 660+00

N89° 53' 43.61"E
CRL SH 29

◆ REMOVAL OF FENCE 1,410 LF

◆ REMOVAL OF EX. STRUCTURE

N89° 53' 43.61"E

N89° 54' 03.74"E

℄ Survey

N89° 57' 05.79"E

N89° 57' 53.60"E

◆ REMOVAL OF EX. STRUCTURE

REMOVAL OF ASPHALT PAVEMENT 4,110.12 SY

N00°04'39.53"E

REMOVAL QUANTITIES		
REMOVAL OF FENCE ◆	LF	1,725
REMOVAL OF ASPHALT PAVEMENT	SY	4,110.12

SEC. 20, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		REMOVALS
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R059

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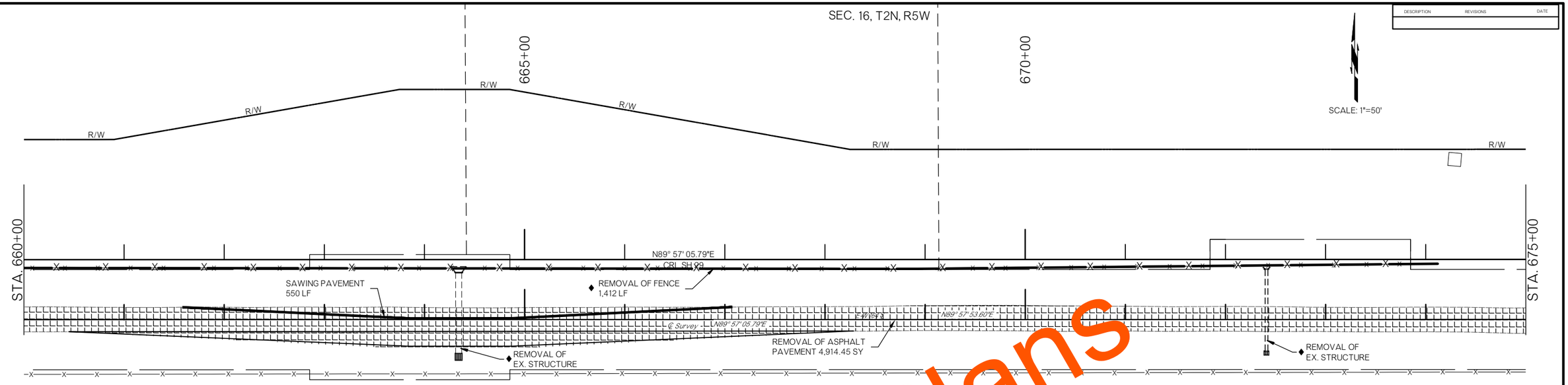
DESCRIPTION	REVISIONS	DATE



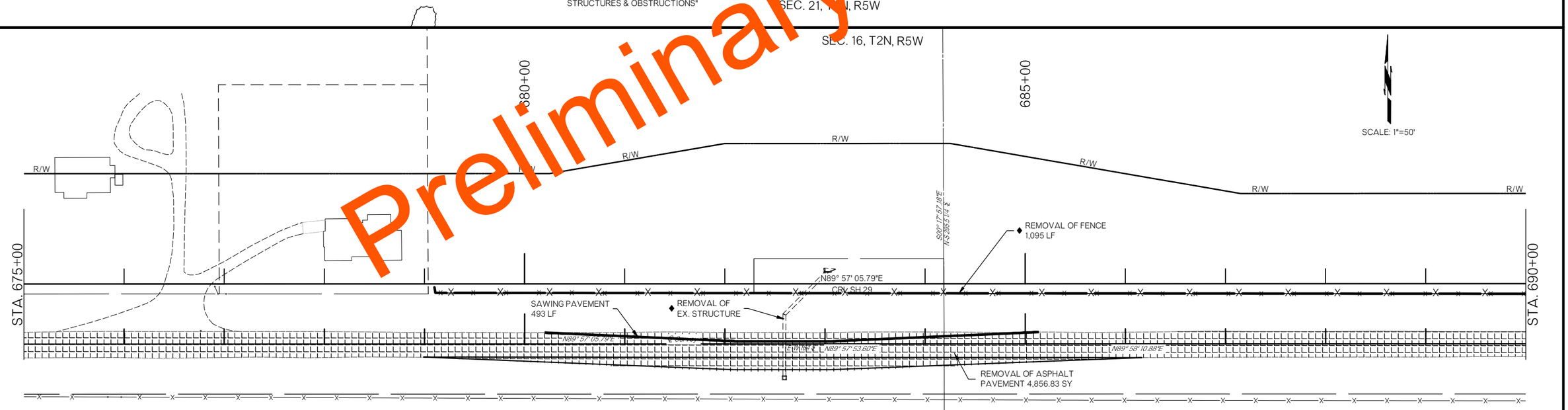
LEGEND

- REMOVAL OF ASPHALT PAVEMENT
- REMOVAL OF FENCE
- SAWING PAVEMENT
- REMOVAL OF GUARDRAIL

REMOVAL QUANTITIES		
REMOVAL OF FENCE ♦	LF	1,412
REMOVAL OF ASPHALT PAVEMENT	SY	4,914.45
SAWING PAVEMENT	LF	550

♦ ITEMS INCLUDED UNDER "REMOVAL OF STRUCTURES & OBSTRUCTIONS"

SEC. 21, T2N, R5W



REMOVAL QUANTITIES		
REMOVAL OF FENCE ♦	LF	1,095
REMOVAL OF ASPHALT PAVEMENT	SY	4,856.83
SAWING PAVEMENT	LF	493

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		REMOVALS
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R060

Preliminary Plans

R:\1145741Drawings\29657(04)\REMOVALS 11.dwg 10/26/2022 5:45 AM

DESCRIPTION	REVISIONS	DATE

SEC. 16, T2N, R5W

695+00

700+00

SCALE: 1"=50'

R/W

STA. 690+00

STA. 705+00

◆ REMOVAL OF FENCE 1,574 LF

N89° 57' 05.79"E
CRL SH 29

℄ Survey

N89° 58' 10.88"E

REMOVAL OF ASPHALT PAVEMENT 4,154.76 SY

◆ REMOVAL OF EX. STRUCTURE

LEGEND

- REMOVAL OF ASPHALT PAVEMENT
- REMOVAL OF FENCE
- SAWING PAVEMENT
- REMOVAL OF GUARDRAIL

REMOVAL QUANTITIES		
REMOVAL OF FENCE ◆	LF	1,574
REMOVAL OF ASPHALT PAVEMENT	SY	4,154.76

◆ ITEMS INCLUDED UNDER REMOVAL OF STRUCTURES / OBSTRUCTIONS

SEC. 21, T2N, R5W

SEC. 16, T2N, R5W

SEC. 15, T2N, R5W

710+00

715+00

SCALE: 1"=50'

R/W

STA. 705+00

STA. 720+00

SAWING PAVEMENT 31 LF

REMOVAL OF ASPHALT PAVEMENT 1,427.60 SY

◆ REMOVAL OF FENCE 551 LF

◆ REMOVAL OF FENCE 962 LF

N89° 57' 05.79"E
CRL SH 29

◆ REMOVAL OF EX. STRUCTURE

SAWING PAVEMENT 299 LF

N89° 57' 05.79"E
CRL SH 29

℄ Survey

N89° 56' 39.33"E

REMOVAL OF ASPHALT PAVEMENT 4,646.47 SY

◆ REMOVAL OF EX. STRUCTURE

SAWING PAVEMENT 32 LF

REMOVAL QUANTITIES		
REMOVAL OF FENCE ◆	LF	1,513
REMOVAL OF ASPHALT PAVEMENT	SY	6,074.07
SAWING PAVEMENT	LF	362

SEC. 21, T2N, R5W

SEC. 22, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		REMOVALS
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R061

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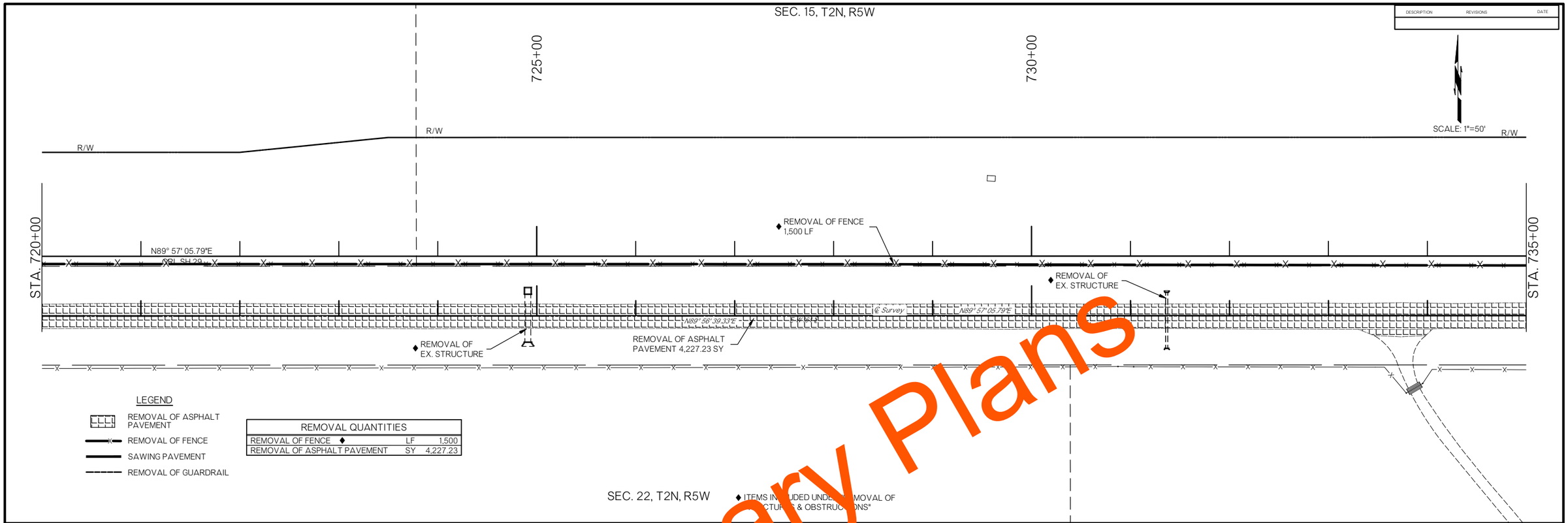
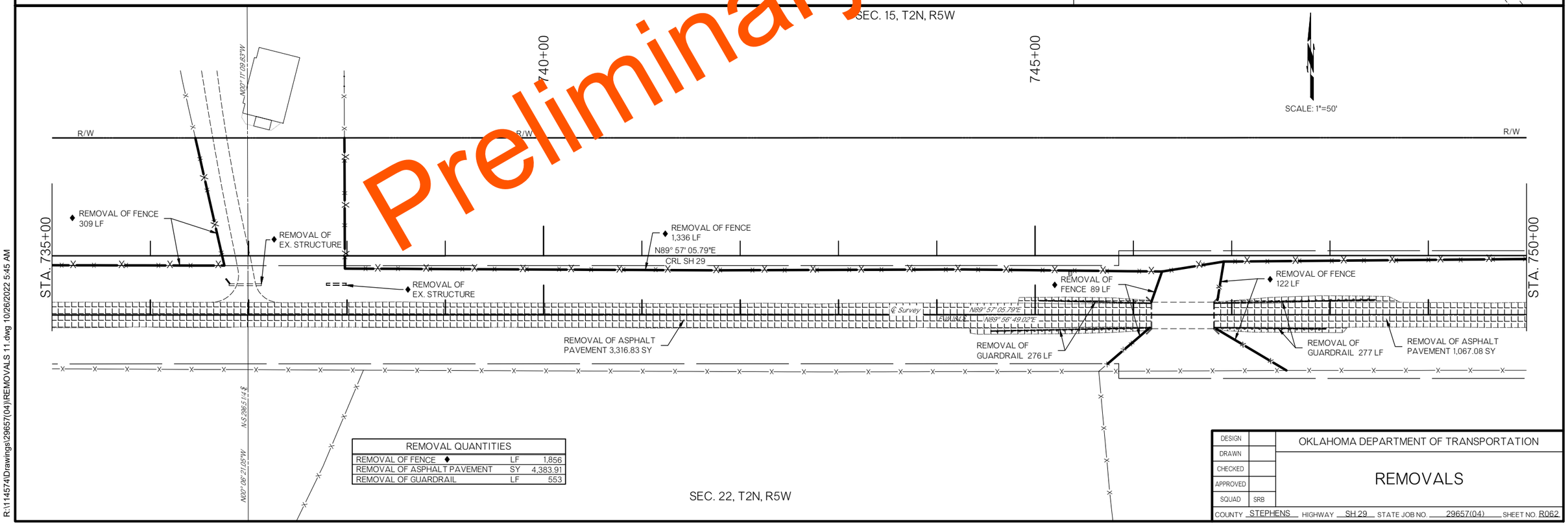


Preliminary Plans



DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

REMOVALS

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R062

R:\114574\Drawings\29657(04)\REMOVALS 11.dwg 10/26/2022 5:45 AM

SEC. 15, T2N, R5W

755+00

760+00

765+00

STA. 750+00

STA. 765+00

R/W

SCALE: 1"=50'

REMOVAL OF FENCE
786 LF

REMOVAL OF
EX. STRUCTURE

REMOVAL OF FENCE
807 LF

REMOVAL OF
EX. STRUCTURE

REMOVAL OF FENCE
230 LF

N80°57' 05.79"E
CRL SH 29

N89° 57' 05.79"E

℄ Survey

N89° 56' 49.02"E

LAWLINE

REMOVAL OF ASPHALT
PAVEMENT 160.02 SY

SAWING PAVEMENT
113 LF

REMOVAL OF
EX. STRUCTURE

LIMITS OF CONSTRUCTION (DO NOT DISTURB)

WETLANDS

REMOVAL OF ASPHALT
PAVEMENT 4,330.29 SY

N4°58'11.60"W

N4°50'50.20"W

N3°26'5"W

SEC. 23,
T2N, R5W

LEGEND

REMOVAL OF ASPHALT PAVEMENT

REMOVAL OF FENCE

SAWING PAVEMENT

REMOVAL OF GUARDRAIL

REMOVAL QUANTITIES		
REMOVAL OF FENCE ♦	LF	1,823
REMOVAL OF ASPHALT PAVEMENT	SY	4,490.31
SAWING PAVEMENT	LF	113

♦ ITEMS INCLUDED UNDER "REMOVAL OF STRUCTURES & OBSTRUCTIONS"

SEC. 22, T2N, R5W

SEC. 14, T2N, R5W

770+00

775+00

780+00

STA. 765+00

STA. 780+00

R/W

SCALE: 1"=50'

REMOVAL OF FENCE
139 LF

REMOVAL OF FENCE
1,500 LF

N89° 57' 05.79"E
CRL SH 29

N89° 49' 05.79"E
CRL SH 29

N89° 52' 46.78"E

LAWLINE

N89° 57' 05.79"E

℄ Survey

N89° 49' 05.79"E

DUNCAN CITY LIMITS

REMOVAL OF ASPHALT
PAVEMENT 4,334.26 SY

REMOVAL OF
EX. STRUCTURE

LAKE FUQUA, CITY OF DUNCAN PROPERTY

DUNCAN CITY LIMITS

REMOVAL QUANTITIES		
REMOVAL OF FENCE ♦	LF	1,639
REMOVAL OF ASPHALT PAVEMENT	SY	4,334.26

SEC. 23, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		REMOVALS
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R063

Preliminary Plans

R:\114574\Drawings\29657(04)\REMOVALS 11.dwg 10/26/2022 5:45 AM

DESCRIPTION	REVISIONS	DATE

SEC. 14, T2N, R5W

785+00

790+00

N00° 07' 31.88"W

SCALE: 1"=50'

R/W

R/W

R/W

R/W

STA. 780+00

STA. 795+00

REMOVAL OF FENCE 188 LF

REMOVAL OF EX. STRUCTURE

REMOVAL OF FENCE 1,354 LF

PROPOSED RIPRAP

N89° 49' 05.79"E

CRL SH 29

REMOVAL OF GUARDRAIL 114 LF

REMOVAL OF GUARDRAIL 164 LF

REMOVAL OF ASPHALT PAVEMENT 4,820.17 SY

N89° 49' 05.79"E

N89° 52' 46.78"E

℄ Survey

N89° 48' 54.74"E

Ex. Bdry

REMOVAL OF GUARDRAIL 164 LF

REMOVAL OF GUARDRAIL 115 LF

REMOVAL OF EX. STRUCTURE

REMOVAL QUANTITIES		
REMOVAL OF FENCE ◆	LF	1,542
REMOVAL OF ASPHALT PAVEMENT	SY	4,820.17
REMOVAL OF GUARDRAIL	LF	557

LEGEND

- REMOVAL OF ASPHALT PAVEMENT
- REMOVAL OF FENCE
- SAWING PAVEMENT
- REMOVAL OF GUARDRAIL

SEC. 23, T2N, R5W

N00° 06' 18"E

N 3,291.51 FT

SEC. 14, T2N, R5W

800+00

805+00

SCALE: 1"=50'

◆ ITEMS INCLUDED UNDER "REMOVAL OF STRUCTURES & OBSTRUCTIONS"

R/W

R/W

R/W

R/W

R/W

STA. 795+00

STA. 810+00

REMOVAL OF FENCE 932 LF

REMOVAL OF FENCE 972 LF

N89° 49' 05.79"E

CRL SH 29

REMOVAL OF ASPHALT PAVEMENT 4,937.74 SY

REMOVAL OF EX. STRUCTURE

N89° 49' 05.79"E

℄ Survey

N89° 48' 54.74"E

Ex. Bdry

REMOVAL OF EX. STRUCTURE

REMOVAL OF EX. STRUCTURE

REMOVAL OF EX. STRUCTURE

REMOVAL QUANTITIES		
REMOVAL OF FENCE ◆	LF	1,904
REMOVAL OF ASPHALT PAVEMENT	SY	4,937.74

SEC. 23, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		REMOVALS
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R064

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SEC. 14, T2N, R5W

SEC. 13, T2N, R5W

SCALE: 1"=50'

815+00

820+00

STA. 810+00

STA. 825+00

R/W

REMOVAL OF FENCE
92 LF

REMOVAL OF FENCE
537 LF

REMOVAL OF FENCE
109 LF

REMOVAL OF FENCE
445 LF

REMOVAL OF FENCE
514 LF

SAWING PAVEMENT
820 LF

REMOVAL OF
EX. STRUCTURE

N89° 40' 05.79"E
CRL SH 29

N89° 49' 05.79"E
℄ DETOUR 'A'

N89° 48' 54.74"E

N89° 58' 18.01"E
LAYOUT ℄

REMOVAL OF ASPHALT
PAVEMENT 6,140.94 SY

N00° 12' 56.98"W

N00° 03' 57.01"W

N-S 2626.8

ITEM INCLUDED UNDER "REMOVAL OF
STRUCTURES & OBSTRUCTIONS"

LEGEND

REMOVAL OF ASPHALT PAVEMENT

REMOVAL OF FENCE

SAWING PAVEMENT

REMOVAL OF GUARDRAIL

REMOVAL QUANTITIES		
REMOVAL OF FENCE ◆	LF	1,697
REMOVAL OF ASPHALT PAVEMENT	SY	6,140.94
SAWING PAVEMENT	LF	820

SEC. 23, T2N, R5W

SEC. 24, T2N, R5W

SEC. 1[illegible], T2N, R5W

830+00

835+00

STA. 825+00

STA. 840+00

SCALE: 1"=50'

R/W

REMOVAL OF
EX. STRUCTURE

REMOVAL OF FENCE
1,083 LF

REMOVAL OF FENCE
54[illegible] LF

N89° 49' 05.79"E
℄ DETOUR 'A'

S86° 08' 16.39"E
CRL SH 29

SAWING PAVEMENT
384 LF

℄ Survey N89° 49' 05.79"E

℄ Survey N89° 51' 05.79"E

LAYOUT ℄ N89° 58' 18.01"E

REMOVAL OF ASPHALT
PAVEMENT 5,592.83 SY

REMOVAL OF
EX. STRUCTURE

REMOVAL OF FENCE
332 LF

REMOVAL QUANTITIES		
REMOVAL OF FENCE ◆	LF	1,956
REMOVAL OF ASPHALT PAVEMENT	SY	5,592.83
SAWING PAVEMENT	LF	384

SEC. 24, T2N, R5W

DESCRIPTION	REVISIONS	DATE

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		REMOVALS
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R065

Preliminary Plans

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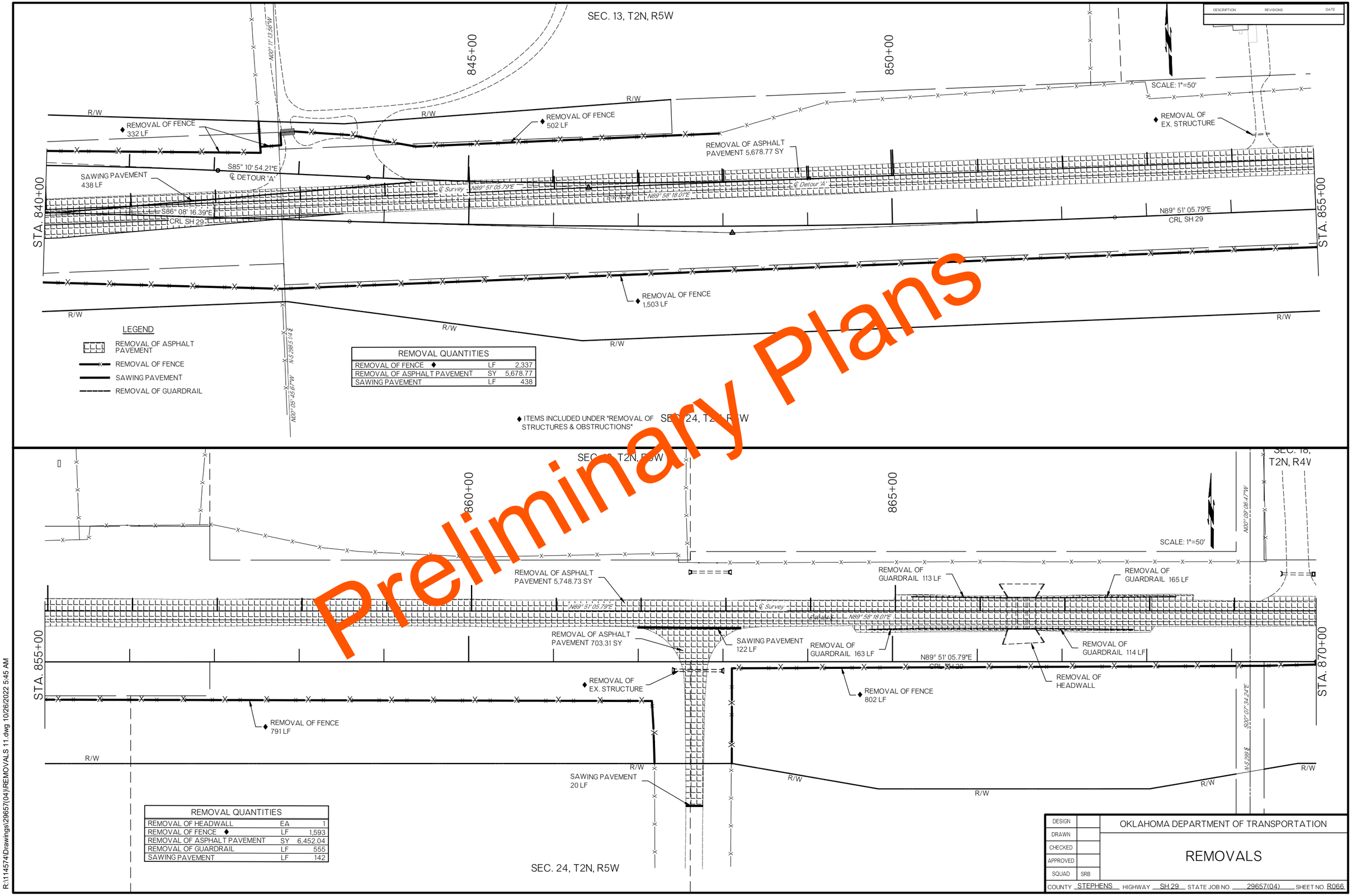

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SEC. 18, T2N, R4W

875+00

880+00

SCALE: 1"=50'

REMOVAL OF ASPHALT PAVEMENT 4,070.19 SY

SAWING PAVEMENT 625 LF

REMOVAL OF EX. STRUCTURE

N89° 51' 05.79"E (℄ Survey)

N89° 43' 16.77"E E-W 164.5'

℄ CROSSOVER

COLD MILLING 1,288.68 SY

SAWING PAVEMENT 50 LF

STA. 870+00

STA. 885+00

REMOVAL OF FENCE 562 LF

N89° 51' 05.79"E CRL SH 29

REMOVAL OF FENCE 977 LF

REMOVAL OF EX. STRUCTURE

REMOVAL OF HEADWALL

REMOVAL OF ASPHALT PAVEMENT 59.08 SY

REMOVAL OF FENCE 118 LF

R/W

R/W

LEGEND

- REMOVAL OF ASPHALT PAVEMENT
- REMOVAL OF FENCE
- SAWING PAVEMENT
- REMOVAL OF GUARDRAIL

REMOVAL QUANTITIES		
COLD MILLING PAVEMENT	SY	1,288.68
REMOVAL OF HEADWALL	EA	1
REMOVAL OF FENCE ♦	LF	1,657
REMOVAL OF ASPHALT PAVEMENT	SY	4,129.27
SAWING PAVEMENT	LF	675

♦ ITEMS INCLUDED UNDER "REMOVAL OF STRUCTURES & OBSTRUCTIONS"

SEC. 19, T2N, R4W

Preliminary Plans

SEC. 18, T2N, R4W

890+00

895+00

N20° 16' 52.53"W N/S 2645.11' ℄

SCALE: 1"=50'

SAWING PAVEMENT 55 LF

REMOVAL OF EX. STRUCTURE

REMOVAL OF ASPHALT PAVEMENT 12.26 SY

COLD MILLING 1,246.88 SY

N89° 51' 05.79"E (℄ Survey)

E-W 164.5' N89° 43' 16.77"E

N89° 51' 05.79"E

SAWING PAVEMENT 53 LF

REMOVAL OF FENCE 471 LF

STA. 885+00

REMOVAL OF ASPHALT PAVEMENT 61.90 SY

N89° 51' 05.79"E CRL SH 29

N89° 51' 05.79"E CRL SH 29

REMOVAL OF FENCE 24 LF

R/W

R/W

R/W 29657(10)

R/W

R/W

R/W

N20° 05' 37.21"W

REMOVAL QUANTITIES		
COLD MILLING PAVEMENT	SY	1,246.88
REMOVAL OF FENCE ♦	LF	495
REMOVAL OF ASPHALT PAVEMENT	SY	74.16
SAWING PAVEMENT	LF	108

SEC. 19, T2N, R4W

DESCRIPTION	REVISIONS	DATE

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

REMOVALS

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R067

R:\114574\Drawings\29657(04)\REMOVALS 11.dwg 10/26/2022 5:45 AM

DESCRIPTION	REVISIONS	DATE

Preliminary Plans

MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CONTRACTOR AND VOLUME OF MATERIAL ENCOUNTERED DURING GRADING OPERATIONS. WHENEVER POSSIBLE, THE CONTRACTOR SHALL SEQUENCE EARTHWORK OPERATIONS IN ORDER TO OBTAIN THE MATERIAL FROM THE CUT SECTION FOR USE AS FILL RATHER THAN OBTAINING UNCLASSIFIED BORROW. MATERIAL DEPICTED AS WASTE SHALL ONLY BE CONSIDERED WASTE ONCE ALL EARTHWORK OPERATIONS HAVE BEEN COMPLETED. THIS MATERIAL SHALL BE USED TO REDUCE THE NEED FOR UNCLASSIFIED BORROW AT ANY LOCATION AND TIME THROUGH THE DURATION OF THE PROJECT.

EARTHWORK ESTIMATE
PHASE 1
STA. 585+50.00 TO 885+45.00
UNCL. EXCAV. = 295,183 CY
ROCK EXCAV. = 121,042 CY
EMB. +15% = 313,685 CY
EXCESS EXCAV. = 102,540 CY

FOR THE PURPOSES OF ESTIMATING ROCK EXCAVATION, REGIONS WITHIN THE SANDSTONE STRATA, WHERE THE TEXAS CONE VALUES ARE LESS THAN 2 INCHES PER 100 BLOWS, WILL BE CONSIDERED AS ROCK EXCAVATION. THE REMAINING AREAS OF SANDSTONE WILL BE CONSIDERED AND PAID FOR AS UNCLASSIFIED EXCAVATION. FOR ADDITIONAL DETAILS REFER TO THE ROCK CUT ANALYSIS REPORT, AVAILABLE UPON REQUEST.

HORIZONTAL SCALE: 1"=2000 FT
VERTICAL SCALE: 1"= 20000 CY

PHASE 1

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		MASS DIAGRAM
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R068

R:\114574\DRAWINGS\29657(04)\29657(04) MASS DIAGRAM – PHASE 3.DWG 5/29/2024 10:34 AM

DESCRIPTION	REVISIONS	DATE

Preliminary Plans

MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CONTRACTOR AND VOLUME OF MATERIAL ENCOUNTERED DURING GRADING OPERATIONS. WHENEVER POSSIBLE, THE CONTRACTOR SHALL SEQUENCE EARTHWORK OPERATIONS IN ORDER TO OBTAIN THE MATERIAL FROM THE CUT SECTION FOR USE AS FILL RATHER THAN OBTAINING UNCLASSIFIED BORROW. MATERIAL DEPICTED AS WASTE SHALL ONLY BE CONSIDERED WASTE ONCE ALL EARTHWORK OPERATIONS HAVE BEEN COMPLETED. THIS MATERIAL SHALL BE USED TO REDUCE THE NEED FOR UNCLASSIFIED BORROW AT ANY LOCATION AND TIME THROUGH THE DURATION OF THE PROJECT.

EARTHWORK ESTIMATE
PHASE 2
STA. 585+50.00 TO 885+45.00
UNCL. EXCAV. = 102,617 CY
ROCK EXCAV. = 36,511 CY
EMB. +15% = 80,058 CY
EXCESS EXCAV. = 59,070 CY

FOR THE PURPOSES OF ESTIMATING ROCK EXCAVATION, REGIONS WITHIN THE SANDSTONE STRATA, WHERE THE TEXAS CONE VALUES ARE LESS THAN 2 INCHES PER 100 BLOWS, WILL BE CONSIDERED AS ROCK EXCAVATION. THE REMAINING AREAS OF SANDSTONE WILL BE CONSIDERED AND PAID FOR AS UNCLASSIFIED EXCAVATION. FOR ADDITIONAL DETAILS REFER TO THE ROCK CUT ANALYSIS REPORT, AVAILABLE UPON REQUEST.

HORIZONTAL SCALE: 1"=2000 FT
VERTICAL SCALE: 1"= 20000 CY

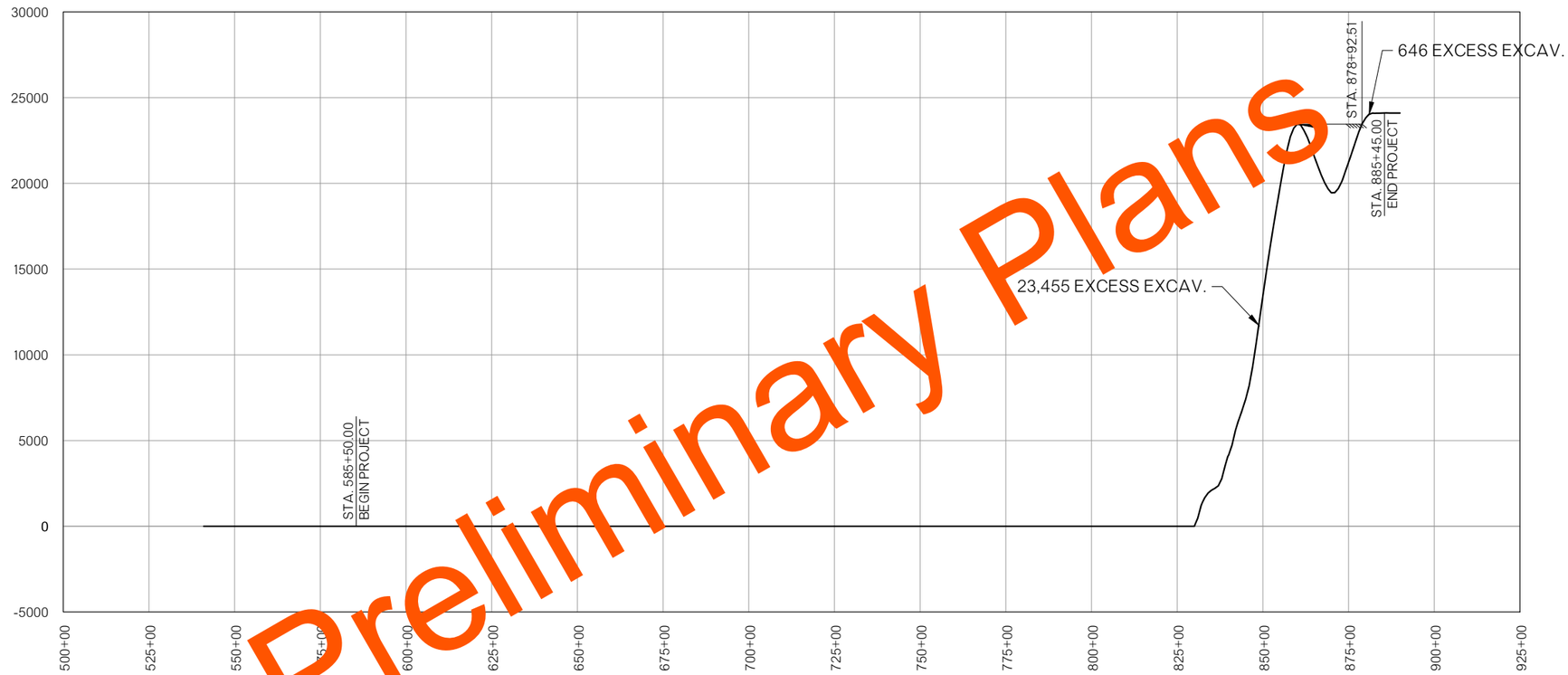
PHASE 2

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		MASS DIAGRAM
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R069

R:\114574\DRAWINGS\29657(04)\29657(04) MASS DIAGRAM – PHASE 3.DWG 5/29/2024 10:34 AM

DESCRIPTION	REVISIONS	DATE



Preliminary Plans

MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CONTRACTOR AND VOLUME OF MATERIAL ENCOUNTERED DURING GRADING OPERATIONS. WHENEVER POSSIBLE, THE CONTRACTOR SHALL SEQUENCE EARTHWORK OPERATIONS IN ORDER TO OBTAIN THE MATERIAL FROM THE CUT SECTION FOR USE AS FILL RATHER THAN OBTAINING UNCLASSIFIED BORROW. MATERIAL DEPICTED AS WASTE SHALL ONLY BE CONSIDERED WASTE ONCE ALL EARTHWORK OPERATIONS HAVE BEEN COMPLETED. THIS MATERIAL SHALL BE USED TO REDUCE THE NEED FOR UNCLASSIFIED BORROW AT ANY LOCATION AND TIME THROUGH THE DURATION OF THE PROJECT.

EARTHWORK ESTIMATE
PHASE 3
STA. 585+50.00 TO 885+45.00
UNCL. EXCAV. = 17,389 CY
ROCK EXCAV. = 13,223 CY
EMB. +15% = 6,511 CY
EXCESS EXCAV. = 24,101 CY

FOR THE PURPOSES OF ESTIMATING ROCK EXCAVATION, REGIONS WITHIN THE SANDSTONE STRATA, WHERE THE TEXAS CONE VALUES ARE LESS THAN 2 INCHES PER 100 BLOWS, WILL BE CONSIDERED AS ROCK EXCAVATION. THE REMAINING AREAS OF SANDSTONE WILL BE CONSIDERED AND PAID FOR AS UNCLASSIFIED EXCAVATION. FOR ADDITIONAL DETAILS REFER TO THE ROCK CUT ANALYSIS REPORT, AVAILABLE UPON REQUEST.

HORIZONTAL SCALE: 1"=2000 FT
VERTICAL SCALE: 1"= 20000 CY

PHASE 3

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		MASS DIAGRAM
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R070

R:\114574\DRAWINGS\29657(04)\29657(04) MASS DIAGRAM – PHASE 3.DWG 5/29/2024 10:34 AM

SEC. 18, T2N, R5W

575+00

580+00

SCALE: 1"=50'

CAUTION:
OVHD ELEC. XING
RURAL ELEC. COOP
STA. 578+70.68

CAUTION:
FIBER OPTIC XING
CHICKASAW TEL.
STA. 578+97.14

N89° 53' 43.61"E
CRL SH 29

STA. 585+00

TOC/TOS

℄ Survey

BM #1

PRES. R/W

LEGEND

- PROPOSED ASPHALT
- DETOUR
- TBSC
- PAVED DITCH
- MILL & OVERLAY

STA. 571+00.00 BEGIN INCIDENTAL CONST.

SEC. 19, T2N, R5W

BM #79 AS PER SWO4703
FOUND #6 REBAR X 30"
46.57' RT.
STA. 569+88.31 ELEV.= 1261.445

BM #78 AS PER SWO4703
FOUND #6 REBAR X 30"
44.05' RT.
STA. 578+49.56 ELEV.= 1262.694

UTILITY OWNERS		
SWB TELEPHONE	(405) 291-3156	BRIAN CREECH
CHICKASEAW TELEPHONE	(580) 618+0461	FRED WOMACK
WINDSTREAM	(918) 451-3437	ROGER RODRIGUEZ
RURAL ELECT. CO-OP	(405) 756-3104	ED BEAVERS
RURAL WATER DIST. #5	(580) 658-6109	BRENT KIMBRO
RURAL WAT. & SAN. DIST. #1	(580) 444-2277	ROSEMARY NICHOLS
DCP MIDSTREAM	(405) 605-3800	DAVID BEANE
ENABLE MIDSTREAM	(405) 224-5735	KENDAL CARR
NEWFIELD EX. MID-CONTINENT	(580) 432-5617	MIKE CANNON
LEGION ENERGY SER.	(918) 878-7807	CLAY MIDKIFF
ONEOK GAS	(918) 246-0744	CHRIS NOLL
MARATHON OIL CORP.	(405) 720-7373	DAVID GANNAWAY
SUNOCO	(405) 867-5677	MONA HA[illegible]
CHAPARRAL ENERGY	(405) 478-8770	JAMIE [illegible]ITH
ATLAS PIPELINE MID-CONTINENT	(580) 444-3308	CHRIS [illegible]RAVEN
PLAINS ALL AMERICAN PIPELINE	(918) 223-0205	[illegible]NIEL SO[illegible]
MOBIL PIPELINE	[illegible]795	JOE T[illegible]
ENTERPRISE CRUDE PIPELINE	(405) 23[illegible]191	RICK PA[illegible]
KINDER MORGAN ENERGY	(918) 588[illegible]021	MRIT SE[illegible]N

CRL EXISTING GROUND

℄ SURVEY PROFILE

O/H FO APPROX. LOC.

1275 1270 1265 1260 1255 1250 1245 1240 1235 1230

570+00 571 572 573 574 575+00 576 577 578 579 580+00 581 582 583 584 585+00

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R071

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Preliminary Plans

SEC. 18, T2N, R5W

SEC. 19, T2N, R5W

SCALE: 1"=50'

CAUTION:
GAS XING
SUNOCO
STA. 585+25.63

CAUTION:
OVHD ELEC. XING
RURAL ELEC. COOP
STA. 591+73.25

APPROX. STA. 588+00.00 LT.
TO STA 591+72.68 LT. CONST.
373 LF SWF 5-BW.

APPROX. STA. 592+01.16 LT.
TO STA 604+53.33 LT. CONST.
1,253 LF SWF 5-BW.

BEGIN PROJECT
STA. 585+50.00
CRL SH 29
N=474,895.5469
E=2,039,848.5163

STA. 585+50.00 END
INCIDENTAL CONST. AND
BEGIN PROJECT

STA. 600+00

N89° 53' 43.61"E
CRL SH 29

STA. 591+43.28 (CRL SH 29)
CONST. 12' FIELD ENTRANCE
LT. W/SD

STA. 591+85.28 (CRL SH 29)
CONST. 12' PRIVATE DRIVE
LT. W/SD

STA. 591+90.76 (CRL SH 29)
CONST. 18' TEMP DR. RT.
W/SD

STA. 594+48.84 (CRL SH 29)
CONST. 12' FIELD ENTRANCE
RT. W/SD

STA. 596+37.80 (CRL SH 29)
CONST. 16' PRIVATE DRIVE
RT. W/SD

STA. 597+82.75 (CRL SH 29)
CONST. 18' PRIVATE DRIVE
RT. AS DIKE

LEGEND
- PROPOSED ASPHALT
- DETOUR
- TBSC
- PAVED DITCH
- MILL & OVERLAY

BM #77 AS PER SWO4703
FOUND #6 REBAR X 30"
47.56' RT.
STA. 586+88.21 ELEV.= 1249.087

BM #76 AS PER SWO4703
CHISELED ON HEADWALL
24.1' RT.
STA. 590+87.[illegible] ELEV.= 1244.782

BM #75 AS PER SWO4703
FOUND #6 REBAR X 30"
50.52' RT.
STA. 595+77.45 ELEV.= 1253.329

STR. NO. 1 ~ STA. 585+67.48 (CRL SH 29)
CONST.24"X70' LG. CGSP SD 50.93' RT.
W/2 TYPE B6 CETS
FL IN = 1249.69 FL OUT = 1247.67

STR. NO. T1 ~ STA. 585+67.48 (CRL SH 29)
CONST. 18"X42' LG. CGSP SD 37.49' RT.
FL IN = 1250.70 FL OUT = 1249.83

STR. 2 ~ STA. 590+87.75
CONST. 3'x3'x66' RCB, 43' LG. LT. & 43' LG. RT.
W/STD. HDWL WINGS & APRON
FL IN = 1241.05 FL OUT = 1240.83

STR. NO. 3 ~ STA. 591+64.28 (CRL SH 29)
CONST 24"X114' LG. CGSP SD 54.98' LT.
W/2 TYPE B6 CETS
FL IN = 1244.94 FL OUT = 1241.32

STR. NO. T2 ~ STA. 591+90.76 (CRL SH 29)
CONST. 18"X64' LG. CGSP SD 31.14' RT.
FL IN = 1244.04 FL OUT = 1243.00

STR. NO. 4 ~ STA. 594+48.84 (CRL SH 29)
CONST 24"X66' LG. CGSP SD 50.93' RT.
W/2 TYPE B6 CETS
FL IN = 1247.92 FL OUT = 1247.17

STR. NO. 5 ~ STA. 596+37.80 (CRL SH 29)
CONST 24"X76' LG. CGSP SD 50.93' RT.
W/2 TYPE B6 CETS
FL IN = 1248.87 FL OUT = 1248.72

STR. NO. T3 ~ STA. 594+48.84 (CRL SH 29)
CONST. 18"X56' LG. CGSP SD 31.57' RT.
FL IN = 1247.92 FL OUT = 1247.04

STR. NO. T4 ~ STA. 596+37.80 (CRL SH 29)
CONST. 18"X60' LG. CGSP SD 31.64' RT.
FL IN = 1248.23 FL OUT = 1248.14

640.00' VC
K = 165.69
V = 65 MPH

800.00' VC
K = 201.22
V = 65 MPH

VPI STA. 585+50.00
VPI ELEV. = 1254.00

VPC STA. 585+77.94
VPC ELEV. = 1252.90

VPT STA. 592+17.94
VPT ELEV. = 1249.34

VPI STA. 588+97.94
VPI ELEV. = 1244.94

VPC STA. 594+00.00
VPC ELEV. = 1251.85

VPI STA. 596+00.00
VPI ELEV. = 1257.35

-2.49%
-0.31%
-2.76%
-2.03%
+3.16%
+1.38%
-2.60%

FINISHED GRADE
SPECIAL DITCH RT.
SPECIAL DITCH LT.
℄ SURVEY PROFILE
CRL EXISTING GROUND
3'x3'x43.63' LG. RCB
℄ LT. =1241.16
℄ RT. =1240.18
(REMOVE)

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		PLAN & PROFILE
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R072

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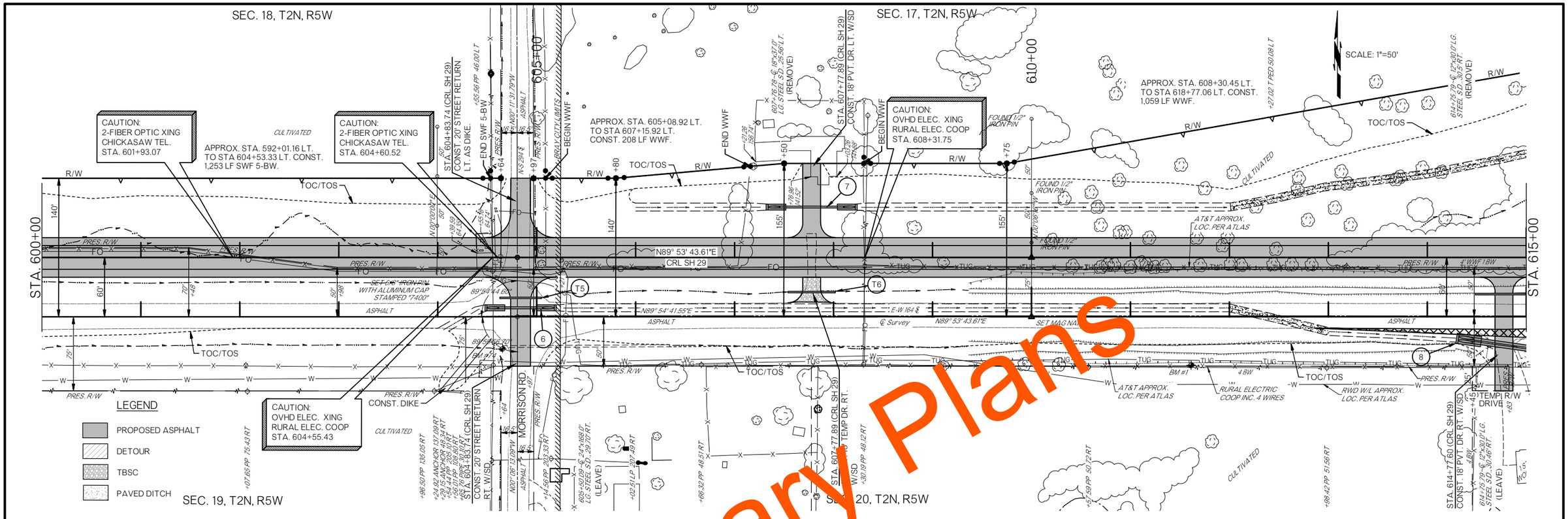
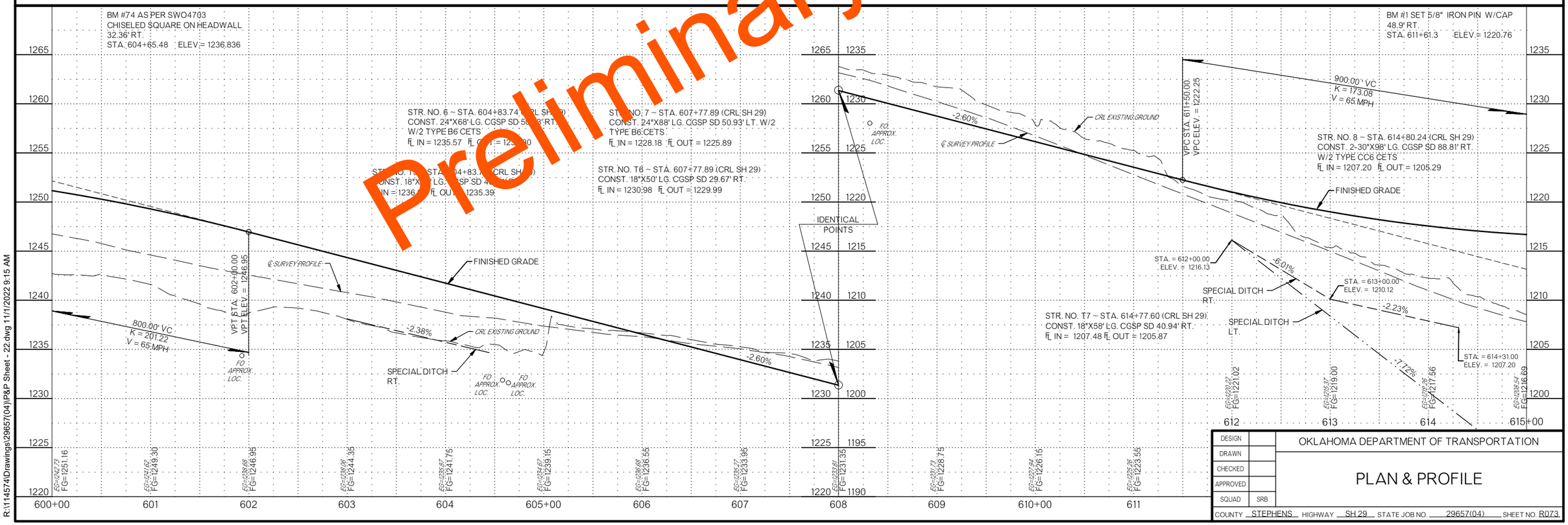


Preliminary Plans



DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R073

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Preliminary Plans

APPROX. STA. 608+30.45 LT
TO STA 618+77.06 LT.
CONST. 1,059 LF WWF.

SEC. 17, T2N, R5W

SCALE: 1"=50'

CAUTION:
OVHD ELEC. XING
RURAL ELEC. COOP
STA. 619+05.64

APPROX. STA. 619+42.89 LT.
TO STA 631+35.33 LT. CONST.
1,198 LF SWF 5-BW.

RURAL ELECTRIC COOP INC. 4 WIRES

RURAL ELECTRIC COOP INC. 1 WIRE

CAUTION:
OVHD ELEC. XING
RURAL ELEC. COOP
STA. 629+89.62

STA. 615+00

STA. 630+00

STA. 618+06.97 (CRL SH 29)
CONST. 17' PVT. DR. RT.
W/SD

SEC. 20, T2N, R5W

LEGEND
- PROPOSED ASPHALT
- DETOUR
- TBSC
- PAVED DITCH

BM #2 SET 5/8" IRON PIN W/CAP
50.5' LT.
STA. 618+60.4 ELEV.= 1209.21

BM #3 SET 5/8" IRON PIN W/CAP
50.2' LT.
STA. 625+55.7 ELEV.= 1236.36

STR. 9 ~ STA. 616+70.45
CONST. 6'x6'x194.76' LG. RCB 119' LT. & 71.85' RT
SKWD LT. FWD 11.5° W/CDIB DESIGN 13 W/11.5°
SKEW 80.5' RT. W/STD. 0° SKEW HDWL. WINGS
& APRON LT. TG.=1200.61
FL RT.=1190.27 FL LT.=1179.00

STR. NO. 10 ~ STA. 618+06.97 (CRL SH 29)
CONST. 30"X76' LG. CGSP SD 92° RT.
W/2 TYPE C6 CETS
FL IN = 1208.15 FL OUT = 1205.16

STR. NO. T8 ~ STA. 618+03.52 (CRL SH 29)
CONST. 18"X90' LG. CGSP SD 36.87° RT.
FL IN = 1208.34 FL OUT = 1205.58

3'x6'x60.0' LG. RCB
W/6'x9'-0 I. RT.
F. L.T.=1186.88
T.O.RT.=1200.75'
F. R.T.=1191.10
(REMOVE)

VPI STA. 616+00.00
VPI ELEV.=1210.55

VPC STA. 622+50.00
VPC ELEV. = 1227.45

VPI STA. 629+00.00
VPI ELEV.=1244.35

900.00' VC
K = 173.08
V = 65 MPH

1300.00' VC
K = 240.81
V = 65 MPH

+2.60%
-2.60%
+3.29%
+8.00%
-7.72%
-2.80%

IDENTICAL POINTS

SPECIAL DITCH LT.

FINISHED GRADE

℄ SURVEY PROFILE

CRL EXISTING GROUND

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R074

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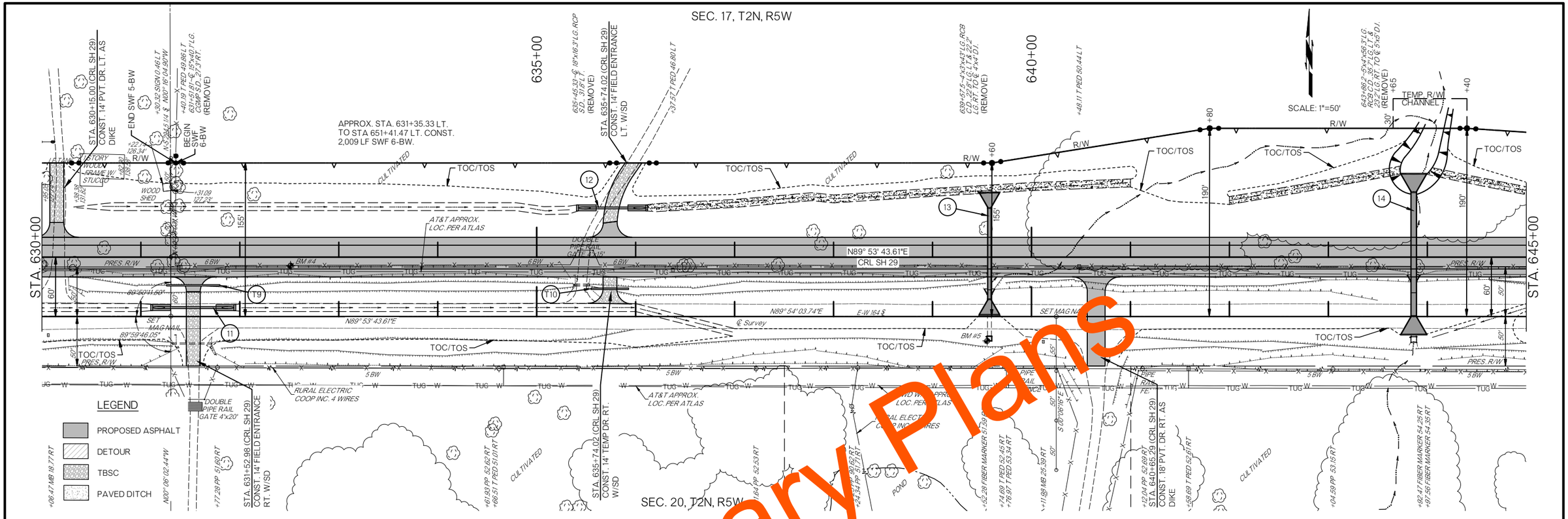

Preliminary Plans

Preliminary Plans

SEC. 17, T2N, R5W

SEC. 16, T2N, R5W

SEC. 21, T2N, R5W

SEC. T2N, R5W

APPROX. STA. 631+35.33 LT. TO STA 651+41.47 LT. CONST. 2,009 LF SWF 6-BW.

APPROX. STA. 651+41.47 LT. TO STA 657+80.16 LT. CONST. 639 LF SWF 5-BW.

SCALE: 1"=50'

TEMP. R/W CHANNEL

STA. 651+28.58 (CRL SH 29) CONST. 12' FIELD ENTRANCE LT. W/SD

END SWF 6-BW & BEGIN SWF 5-BW

END SWF 5-BW

STA. 657+95.68 (CRL SH 29) CONST. 12' PVT. DR. LT. W/SD

STA. 651+28.58 (CRL SH 29) CONST. 12' TEMP DR. RT. W/SD

STA. 657+95.68 (CRL SH 29) CONST. 12' TEMP DR. RT. W/SD

RURAL ELECTRIC COOP INC. 4 WIRES

AT&T APPROX. LOC. PER ATLAS

RWD W/L APPROX. LOC. PER ATLAS

PIPERAIL FENCE

GRAVEL PILE

SET MAG NAIL

℄ Survey

BM #6

BM #7

BM #8

LEGEND

- PROPOSED ASPHALT
- DETOUR
- TBSC
- PAVED DITCH

BM #6 SET 5/8" IRON PIN W/CAP
50.4' LT.
STA. 646+53.4 ELEV.= 1202.89

BM #7 SET 5/8" IRON PIN W/CAP
[illegible]' RT.
STA. 65[illegible]49.8 ELEV.= 1228.57

BM #8 SET 5/8" IRON PIN W/CAP
54.4' LT.
STA. 659+98.5 ELEV.= 1209.39

STR. 15 ~ STA. 647+77.58
CONST. 36"x137' LG. RCP
74.33' LT. & 62.33' RT. SKWD RT. FWD 8°
W/TYPE D4 CET LT. & D6 CET RT.
fl. LT.=1193.36 fl. RT.=1200.92

840.00' VC
K = 166.50
V = 65 MPH

VPC STA. 648+80.50
VPC ELEV. = 1210.12

-2.25%

+1.92%

+5.45%

VPI STA. 653+91.07
VPI ELEV. = 1221.59

℄ SURVEY PROFILE

CRL EXISTING GROUND

FINISHED GRADE

-2.65%

VPT STA. 658+71.07
VPT ELEV. = 1208.87

960.00' VC
K = 196.06
V = 65 MPH

+6.42%

+7.96%

SPECIAL DITCH LT.

SPECIAL DITCH RT.

+0.00%

-16.67%

+16.67%

3'x3'x75.3' LG. RCB
fl. LT.=1198.64
fl. RT.=1201.88
(REMOVE)

STR. NO. 16 ~ STA. 651+28.58 (CRL SH 29)
CONST. 24"X70' LG. CGSP SD 50.93' LT.
W/2 TYPE B6 CETS
fl. IN = 1209.96 fl. OUT = 1209.13

STR. NO. T11 ~ STA. 651+28.58 (CRL SH 29)
CONST. 24"X56' LG. CGSP SD 27.50' RT.
fl. IN = 1214.62 fl. OUT = 1213.54

STR. NO T12 ~ STA. 657+95.68 (CRL SH 29)
CONST. 24"X56' LG. CGSP SD 27.31' RT.
fl. IN = 1211.96 fl. OUT = 1210.07

STR. NO 17 ~ STA. 657+95.68 (CRL SH 29)
CONST. 24"X80' LG. CGSP SD 50.93' LT.
W/2 TYPE B6 CETS
fl. IN = 1206.70 fl. OUT = 1204.88

EG=1199.22 FG=1205.92
EG=1203.25 FG=1206.18
EG=1200.42 FG=1207.04
EG=1199.36 FG=1208.50
EG=1208.24 FG=1210.55
EG=1210.61 FG=1212.60
EG=1215.54 FG=1214.14
EG=1221.06 FG=1215.17
EG=1220.34 FG=1215.66
EG=1220.69 FG=1215.69
EG=1221.36 FG=1215.19
EG=1222.70 FG=1214.18
EG=1222.65 FG=1212.65
EG=1217.64 FG=1210.62
EG=1211.94 FG=1208.10
EG=1207.67 FG=1205.45

1225 1220 1215 1210 1205 1200 1195 1190 1185 1180

645+00 646 647 648 649 650+00 651 652 653 654 655+00 656 657 658 659 660+00

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R076

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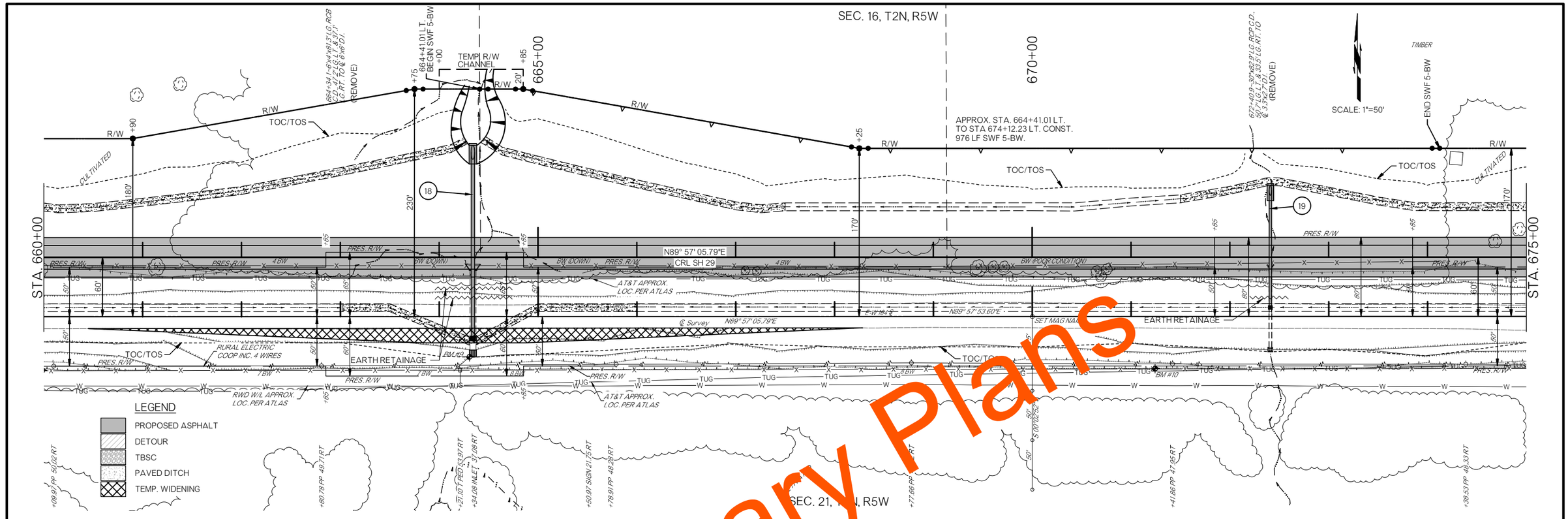

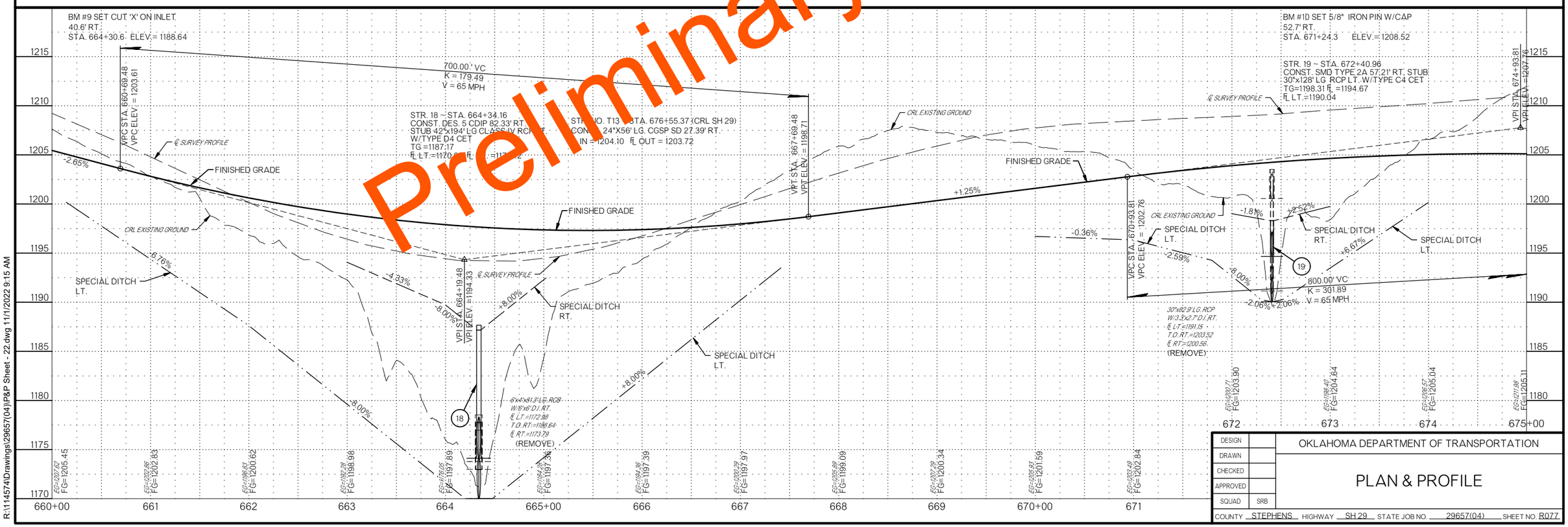

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R077

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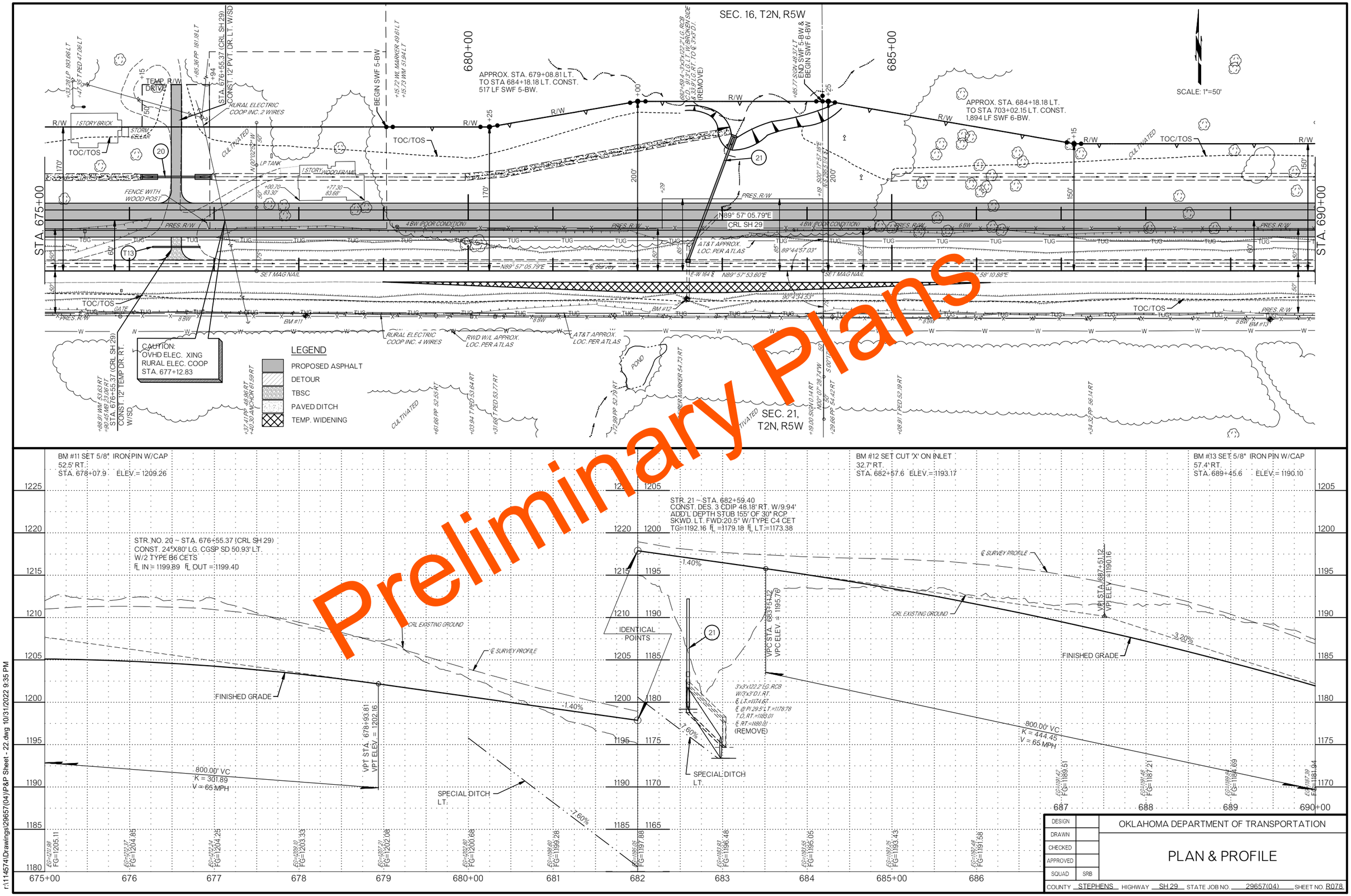

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R078

Preliminary Plans

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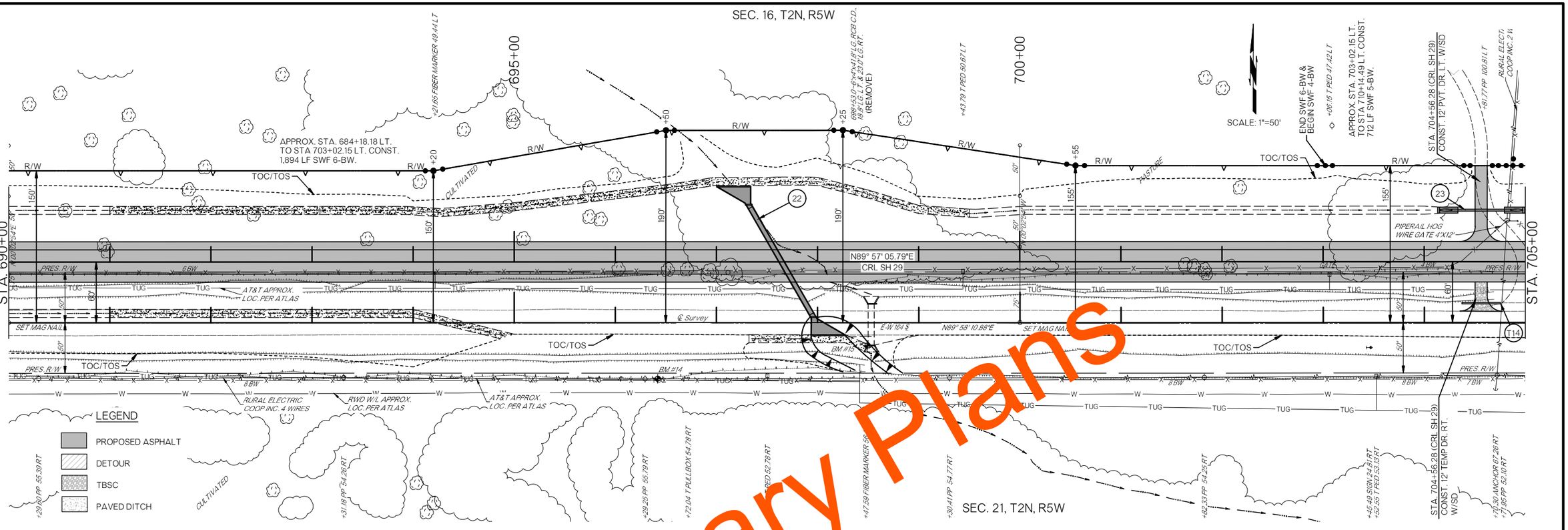

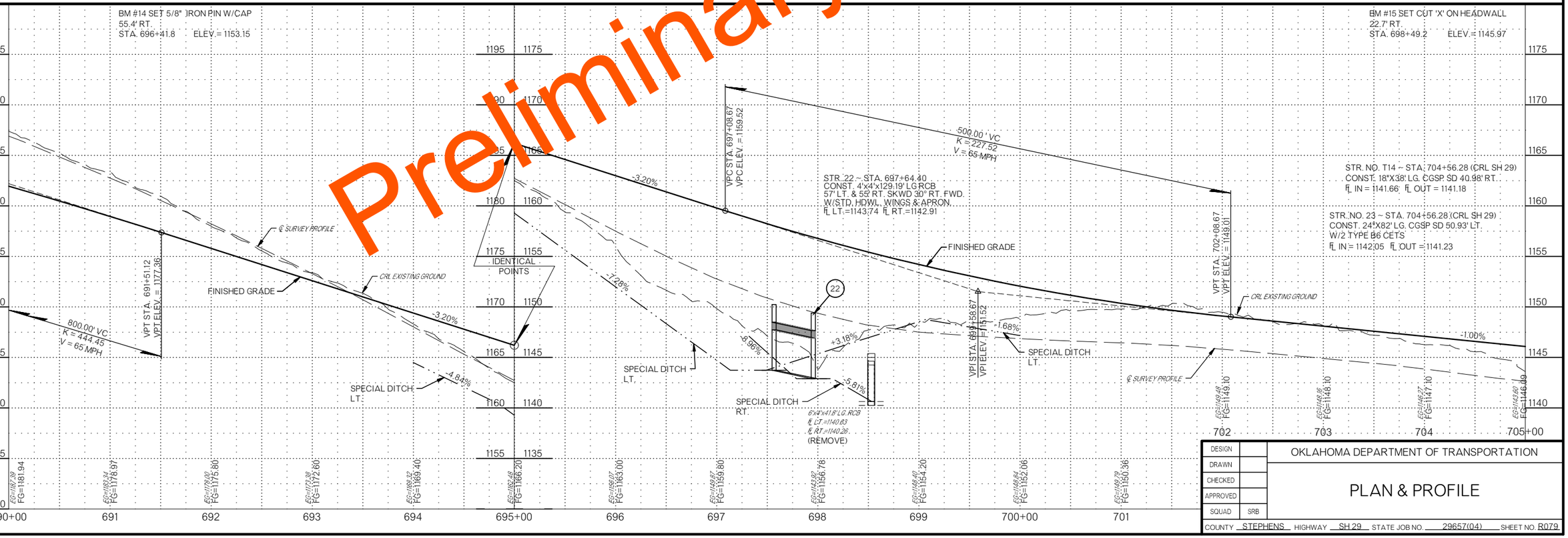

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R079

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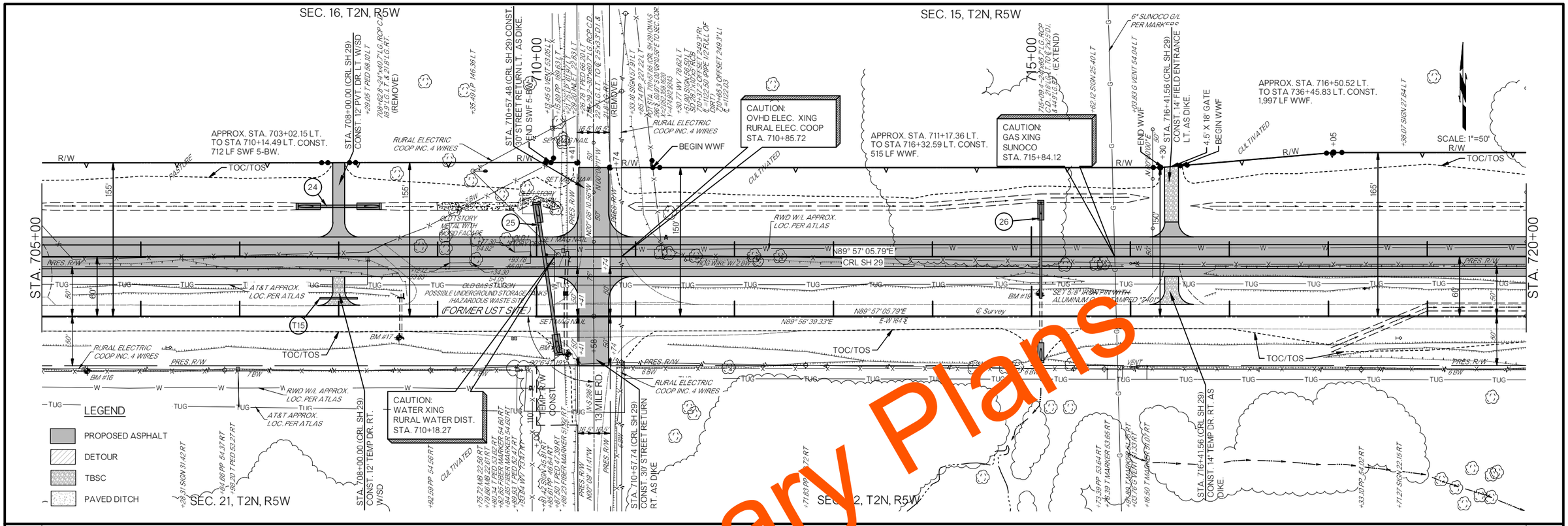

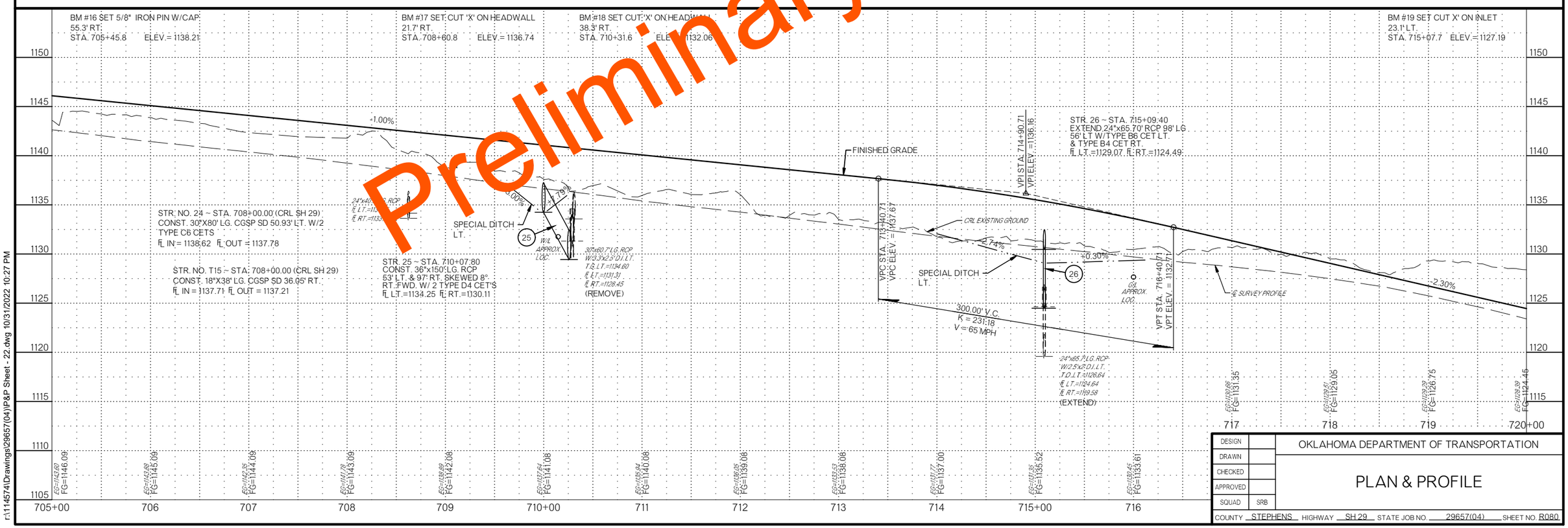

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R080

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SEC. 15, T2N, R5W

STA. 720+00

STA. 735+00

725+00

730+00

SCALE: 1"=50'

APPROX. STA. 716+50.52 LT.
TO STA 736+45.83 LT. CONST.
1,997 LF WWF.

724+91.0'-6'x4'x49.4' LG.RCB
CL & 25° LT. & RT.
(REMOVE)

CAUTION:
GAS XING
XPLORER PIPELINE
STA. 730+90.07

+93.80 G MARKER 205.87 LT

731+36.5'-24"x57.5' LG. RCP C.D.
24° LG. LT. & 33.5° LG. RT.
(REMOVE)

CAUTION:
GAS XING
ONEOK
STA. 731+10.00

R/W

TOC/TOS

CULTIVATED

RWD W/L APPROX.
LOC. PER ATLAS

N89° 57' 05.79"E

CRL SH 29

PRES. R/W

AT&T APPROX.
LOC. PER ATLAS

HOG WIRE W/ 2 BW

℄ Survey

N89° 56' 39.33"E

E-W 164.8'

N89° 57' 05.79"E

SET MAG NAIL

BM #20

BM #21

RURAL ELECTRIC
COOP INC. 4 WIRES

AT&T APPROX.
LOC. PER ATLAS

ONEOK STEEL G/L

STEEL G/L PER
XPLORER ATLAS

STA. 733+76.26 (CRL SH 29)
CONST. 18' FIELD ENTRANCE
RT. W\ SD

WOOD RAIL
PIPE RAIL
GATE 2'x20'
W\ CATTLE GUARD

RURAL ELECTRIC
COOP INC. 4 WIRES

LEGEND

- PROPOSED ASPHALT
- DETOUR
- TBSC
- PAVED DITCH

~+13.04 PP 54.35 RT
+81.61 T MARKER 53.81 RT
+01.61 T PED 51.97 RT
+48.32 PP 52.77 RT
+22.59 T MARKER 52.05 RT
+32.71 PP 52.81 RT
+22.99 PP 52.35 RT
+61.53 PP 53.76 RT
+93.02 SIGN 22.24 RT
+44.82 T MARKER 50.59 RT
+53.08 PP 53.34 RT
+81.18 SIGN 51.11 RT
+49.17 MARKER 51.16 RT
+54.34 T PED 51.09 RT
+56.34 MB 52.02 RT
+29.53 PP 53.73 RT
+51.57 PP 52.33 RT

Preliminary Plans

BM #20 SET CUT 'X' ON HEADWALL
26.8' RT.
STA. 724+94.8 ELEV.= 1105.69

BM #21 SET CUT 'X' ON HEADWALL
33.0' RT.
STA. 731+34.5 ELEV.= 1104.28

300.00' VC
K = 240.00
V = 65 MPH

VPC STA. 721+86.70
VPC ELEV.= 1120.16

VPT STA. 724+86.70
VPT ELEV.= 1114.99

-2.30%

-3.68%

-3.07%

-1.05%

+1.82%

FINISHED GRADE

SPECIAL DITCH
LT.

SPECIAL DITCH
LT.

CRL EXISTING GROUND

℄ SURVEY PROFILE

6'x4'x49.4' LG.RCB
W\ 6'x6' D.I. LT.
T.O. LT.=??
fl LT.=1101.56
fl RT.=1099.95
(REMOVE)

STR. NO. 27 ~ STA. 724+91.06
CONST. 6'x4'x109' LG. RCB
44° LT. & RT.
W\ SD. HDWL. WINGS & APRON.
fl LT.=1104.45, fl RT.=1103.21

IDENTICAL
POINTS

FINISHED GRADE

℄ SURVEY PROFILE

CRL EXISTING GROUND

G/L
APPROX.
LOC.

℄
APPROX.
LOC.

24"x57.5' LG. RCP
fl LT.=1103.26
fl RT.=1101.03
(REMOVE)

STR. NO. 28 ~ STA. 733+76.26 (CRL SH 29)
CONST. 24"X78' LG. CGSP SD 50.93' RT.
W/2 TYPE B6 CETS
fl IN = 1101.31 fl OUT = 1100.49

STR. NO. T16 ~ STA. 733+76.26 (CRL SH 29)
CONST. 18"X54' LG. CGSP SD 32.55' RT.
fl IN = 1103.04 fl OUT = 1102.23

EG=1128.39
FG= 1124.45

EG=1122.66
FG=1122.15

EG=1119.80
FG=1119.85

EG=1117.04
FG=1117.82

EG=1116.31
FG=1116.20

EG=1114.82
FG=1114.99

EG=1113.94
FG=1113.94

EG=1112.89
FG=1112.89

EG=1111.84
FG=1111.84

EG=1110.79
FG=1110.79

EG=1109.74
FG=1109.74

EG=1108.69
FG=1108.69

EG=1107.64
FG=1107.64

EG=1106.59
FG=1106.59

EG=1105.54
FG=1105.54

EG=1104.49
FG=1104.49

720+00 721 722 723 724 725+00 726 727 728 729 730+00 731 732 733 734 735+00

1130 1125 1120 1115 1110 1105 1100 1095 1090 1085 1080 1075 1070

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R081

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SEC. 15, T2N, R5W

APPROX. STA. 716+50.52 LT.
TO STA 736+45.83 LT. CONST.
1,997 LF WWF.

CAUTION:
OVHD ELEC. XING
RURAL ELEC. COOP
STA. 736+50.51

CAUTION:
GAS XING
ONEOK
STA. 742+57.65

APPROX. STA. 736+98.87 LT.
TO STA 757+20.00 LT. CONST.
2,021 LF SWF 5-BW.

SCALE: 1"=50'

STA. 735+00

STA. 750+00

740+00

745+00

R/W

TOC/TOS

PRES. R/W

TEMP. R/W DRIVE

BLACK BEAR CREEK

ONEOK STEEL G/L

STEEL G/L PER XPLORER ATLAS

RWD W/L APPROX. LOC. PER ATLAS

N89° 57' 05.79"E

CRL SH 29

AT&T APPROX. LOC. PER ATLAS

SET MAG NAIL

BM #22

BM #23

ONEOK 8" STEEL G/L

LEGEND

- PROPOSED ASPHALT
- DETOUR
- TBSC
- PAVED DITCH

Preliminary Plans

SEC. 22, T2N, R5W

BM #22 SET 5/8" IRON PIN W/CAP
57.0' RT.
STA. 738+33.4 ELEV.= 1092.01

BM #23 SET CUT 'X' ON WINGWALL
13.3' LT.
STA. 746+82.2 ELEV.= 1087.07

300.00' VC
K = 3[illegible]
[illegible] MPH

VPC STA. 739+55.71
VPC ELEV. = 1099.71

VPT STA. 742+55.71
VPT ELEV. = 1097.91

VPI STA. 741+05.71
VPI ELEV. = 1098.13

VPC STA. 742+67.21
VPC ELEV. = 1097.90

STA. 743+14.06
BEGIN BRIDGE "A"
ELEV. = 1097.82

BRIDGE "A"
LENGTH
601'-8"

BRIDGE A 8-75' TYPE III
PC BEAM SPAN BRIDGE
CRL STA. 746+14.89

VPI STA. 746+07.21
VPI ELEV. = 1097.40

STA. 749+15.72
END BRIDGE "A"
ELEV. = 1095.55

VPT STA. 749+47.21
VPT ELEV. = 1095.36

62" I-BEAM SPAN
BRIDGE 24' RDY.
STD. DES. IB-8

680.00' V.C.
K = 1497.41
V = 65 MPH

-1.05%
-2.30%
-5.00%
-1.5
-0.15%
-0.60%

FINISHED GRADE

℄ SURVEY PROFILE

ORL EXISTING GROUND

℄ APPROX. LOC.

BLACK BEAR CREEK PROFILE

STR. NO. 29 ~ STA. 736+70.69 (CRL SH 29)
CONST. 30"X78" LG. CGSP SD 50.93' LT.
W/2 TYPE C6 CETS
FL IN = 1097.82 FL OUT = 1095.77.

SPECIAL DITCH
LT.

HYDRAULIC DATA ~ BRIDGE "A"
TOTAL DRAINAGE AREA= 12.75 SQ. MILES
CONTROLLED DRAINAGE AREA= 0.00 SQ. MILES
EFFECTIVE DRAINAGE AREA= 12.75 SQ. MILES
EXTRM. H.W.E. = N/A

Q2=988 cfs	V2=0.70 fps	CHW=1086.58 ft.
Q5=2070 cfs	V5=0.92 fps	CHW=1088.16 ft.
Q10=3150 cfs	V10=1.09 fps	CHW=1089.34 ft.
Q25=4950 cfs	V25=1.33 fps	CHW=1090.88 ft.
Q50=6270 cfs	V50=1.50 fps	CHW=1091.92 ft.
Q100=7800 cfs	V100=1.72 fps	CHW=1093.32 ft.

RDWY. OVER TOPPING EL. = 1092.31

STR. NO. 30 ~ STA. 738+25.00 (CRL SH 29)
CONST. 36"X96" LG. CGSP SD 64.41' LT.
W/2 TYPE D6 CETS
FL IN = 1092.40 FL OUT = 1090.16

STR. NO. T17 ~ STA. 736+70.69 (CRL SH 29)
CONST. 18"X38" LG. CGSP SD 36.63' RT.
FL IN = 1099.52 FL OUT = 1098.71

STR. NO. T18 ~ STA. 738+25.00 (CRL SH 29)
CONST. 24"X52" LG. CGSP SD 35.63' RT.
FL IN = 1094.67 FL OUT = 1092.72

1110 1105 1100 1095 1090 1085 1080 1075 1070 1065

735+00 736 737 738 739 740+00 741 742 743 744 745+00 746 747 748 749 750+00

EG=1113.54 FG=1104.49
EG=1109.66 FG=1103.44
EG=1100.34 FG=1102.39
EG=1094.17 FG=1101.34
EG=1097.09 FG=1100.29
EG=1088.12 FG=1099.27
EG=1088.78 FG=1098.51
EG=1088.62 FG=1098.04
EG=1084.66 FG=1097.84
EG=1084.33 FG=1097.64
EG=1083.54 FG=1097.38
EG=1082.39 FG=1097.04
EG=1082.59 FG=1096.64
EG=1082.47 FG=1096.17
EG=1084.70 FG=1095.64
EG=1084.38 FG=1095.04

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R082

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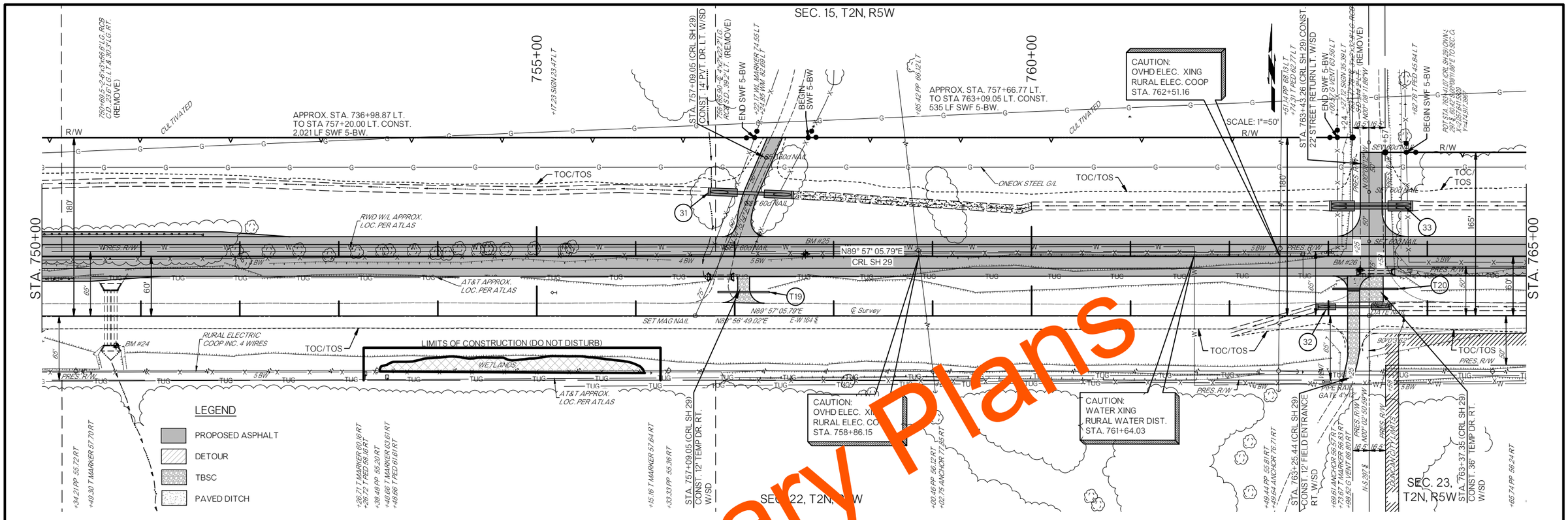
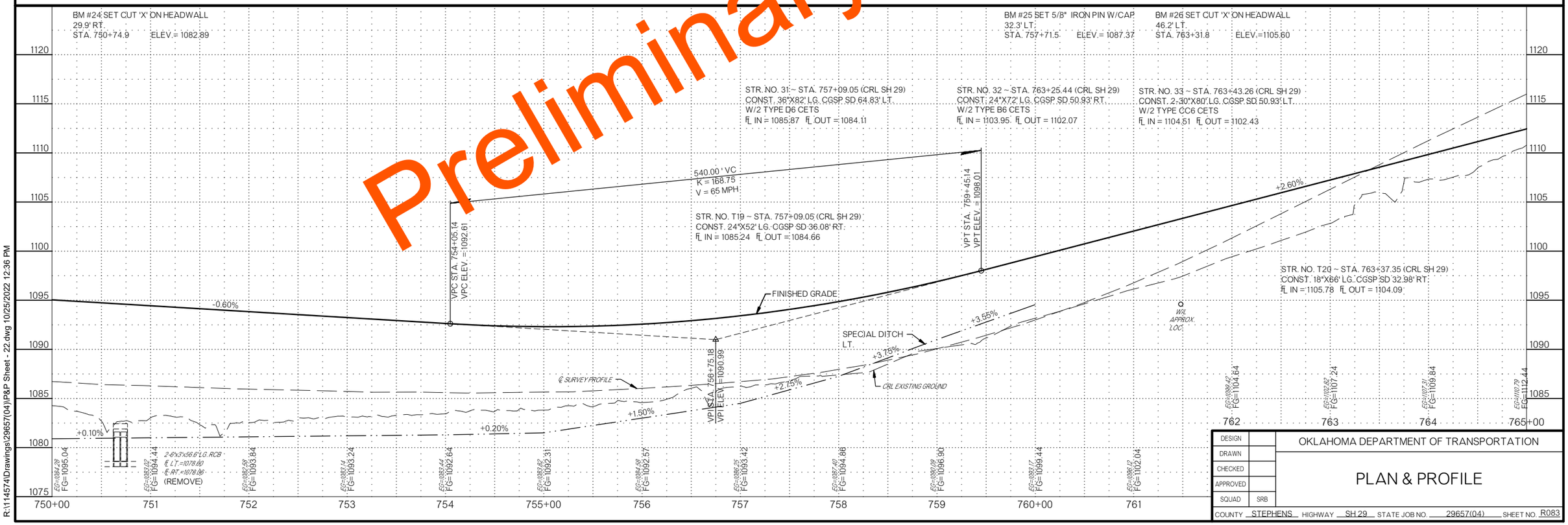

SEC. 15, T2N, R5W
STA. 750+00
STA. 765+00
755+00
760+00
APPROX. STA. 736+98.87 LT. TO STA 757+20.00 LT. CONST. 2,021 LF SWF 5-BW.
APPROX. STA. 757+66.77 LT. TO STA 763+09.05 LT. CONST. 535 LF SWF 5-BW.
STA. 757+09.05 (CRL SH 29) CONST. 44' PVT. DR. LT. W/SD
STA. 763+43.26 (CRL SH 29) CONST. 22' STREET RETURN LT. W/SD
CAUTION: OVHD ELEC. XING RURAL ELEC. COOP STA. 762+51.16
SCALE: 1"=50'
R/W
CULTIVATED
TOC/TOS
ONEOK STEEL G/L
RWD W/L APPROX. LOC. PER ATLAS
AT&T APPROX. LOC. PER ATLAS
RURAL ELECTRIC COOP INC. 4 WIRES
LIMITS OF CONSTRUCTION (DO NOT DISTURB)
WETLANDS
PRES. R/W
BM #25
BM #26
BM #24
N89° 57' 05.79"E
CRL SH 29
℄ Survey
SET MAG NAIL
SET 60d NAIL
T19
T20
31
32
33
CAUTION: OVHD ELEC. XI... RURAL ELEC. CO... STA. 758+86.15
CAUTION: WATER XING RURAL WATER DIST. STA. 761+64.03
PIPE RAIL GATE 4'W
SEC. 22, T2N, R5W
SEC. 23, T2N, R5W
LEGEND
PROPOSED ASPHALT
DETOUR
TBSC
PAVED DITCH
Preliminary Plans


BM #24 SET CUT 'X' ON HEADWALL
29.9' RT.
STA. 750+74.9 ELEV.= 1082.89
BM #25 SET 5/8" IRON PIN W/CAP
32.3' LT.
STA. 757+71.5 ELEV.= 1087.37
BM #26 SET CUT 'X' ON HEADWALL
46.2' LT.
STA. 763+31.8 ELEV.=1105.60
STR. NO. 31 ~ STA. 757+09.05 (CRL SH 29)
CONST. 36'X82' LG. CGSP SD 64.83' LT.
W/2 TYPE D6 CETS
fl. IN = 1085.87 fl. OUT = 1084.11
STR. NO. 32 ~ STA. 763+25.44 (CRL SH 29)
CONST. 24'X72' LG. CGSP SD 50.93' RT.
W/2 TYPE B6 CETS
fl. IN = 1103.95 fl. OUT = 1102.07
STR. NO. 33 ~ STA. 763+43.26 (CRL SH 29)
CONST. 2-30"X80' LG. CGSP SD 50.93' LT.
W/2 TYPE CC6 CETS
fl. IN = 1104.51 fl. OUT = 1102.43
STR. NO. T19 ~ STA. 757+09.05 (CRL SH 29)
CONST. 24'X52' LG. CGSP SD 36.08' RT.
fl. IN = 1085.24 fl. OUT = 1084.66
STR. NO. T20 ~ STA. 763+37.35 (CRL SH 29)
CONST. 18"X66' LG. CGSP SD 32.98' RT.
fl. IN = 1105.78 fl. OUT = 1104.09
540.00 ' VC
K = 168.75
V = 65 MPH
VPC STA. 754+05.14
VPC ELEV. = 1092.61
VPT STA. 759+45.14
VPT ELEV. = 1098.01
VPI STA. 756+75.18
VPI ELEV. = 1090.99
-0.60%
+0.10%
+0.20%
+1.50%
+2.15%
+3.76%
+3.55%
+2.60%
FINISHED GRADE
℄ SURVEY PROFILE
ORIG EXISTING GROUND
SPECIAL DITCH LT.
W/L APPROX. LOC.
2-6'x3'x56.6' LG. RCB fl. LT. =1078.60 fl. RT. =1078.06 (REMOVE)
EG=1084.28 FG=1095.04
EG=1093.02 FG=1094.44
EG=1092.59 FG=1093.84
EG=1092.14 FG=1093.24
EG=1092.44 FG=1092.64
EG=1092.82 FG=1092.31
EG=1084.58 FG=1092.57
EG=1086.25 FG=1093.42
EG=1087.40 FG=1094.86
EG=1090.09 FG=1096.90
EG=1091.17 FG=1099.44
EG=1092.12 FG=1102.04
EG=1099.42 FG=1104.64
EG=1102.62 FG=1107.24
EG=1107.31 FG=1109.84
EG=1111.79 FG=112.44
DESIGN
DRAWN
CHECKED
APPROVED
SQUAD
SRB
OKLAHOMA DEPARTMENT OF TRANSPORTATION
PLAN & PROFILE
COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R083
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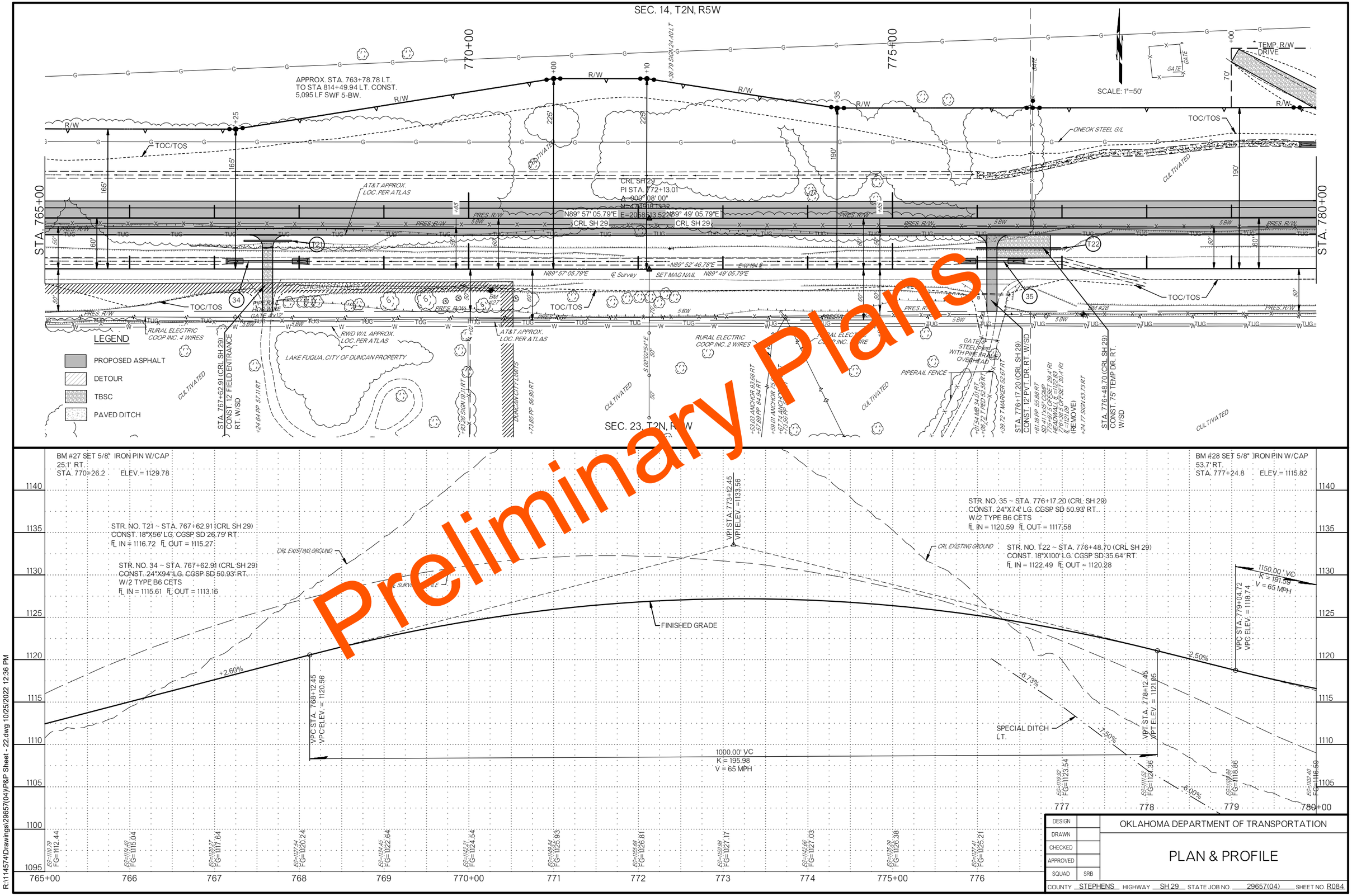

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R084

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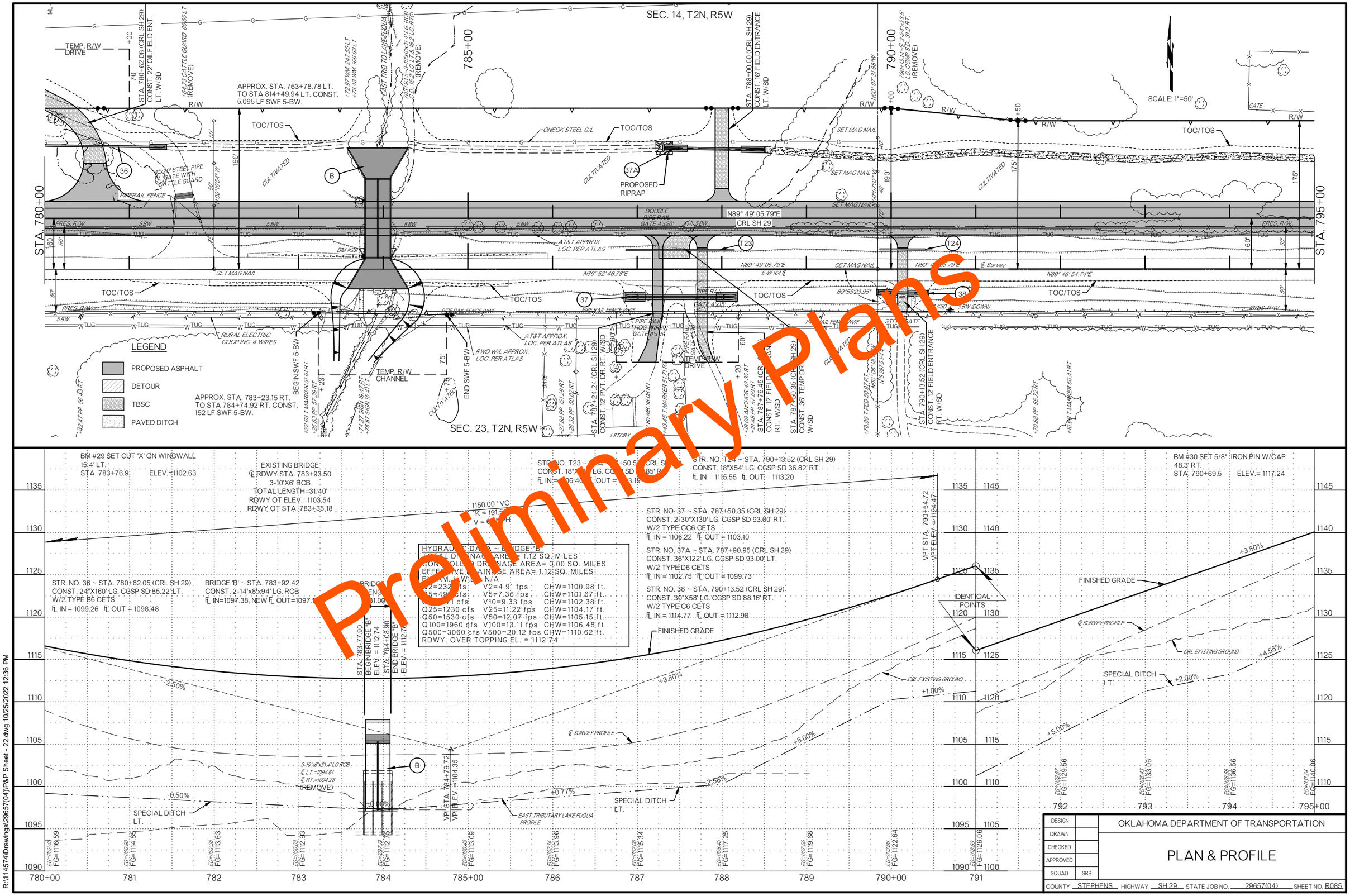

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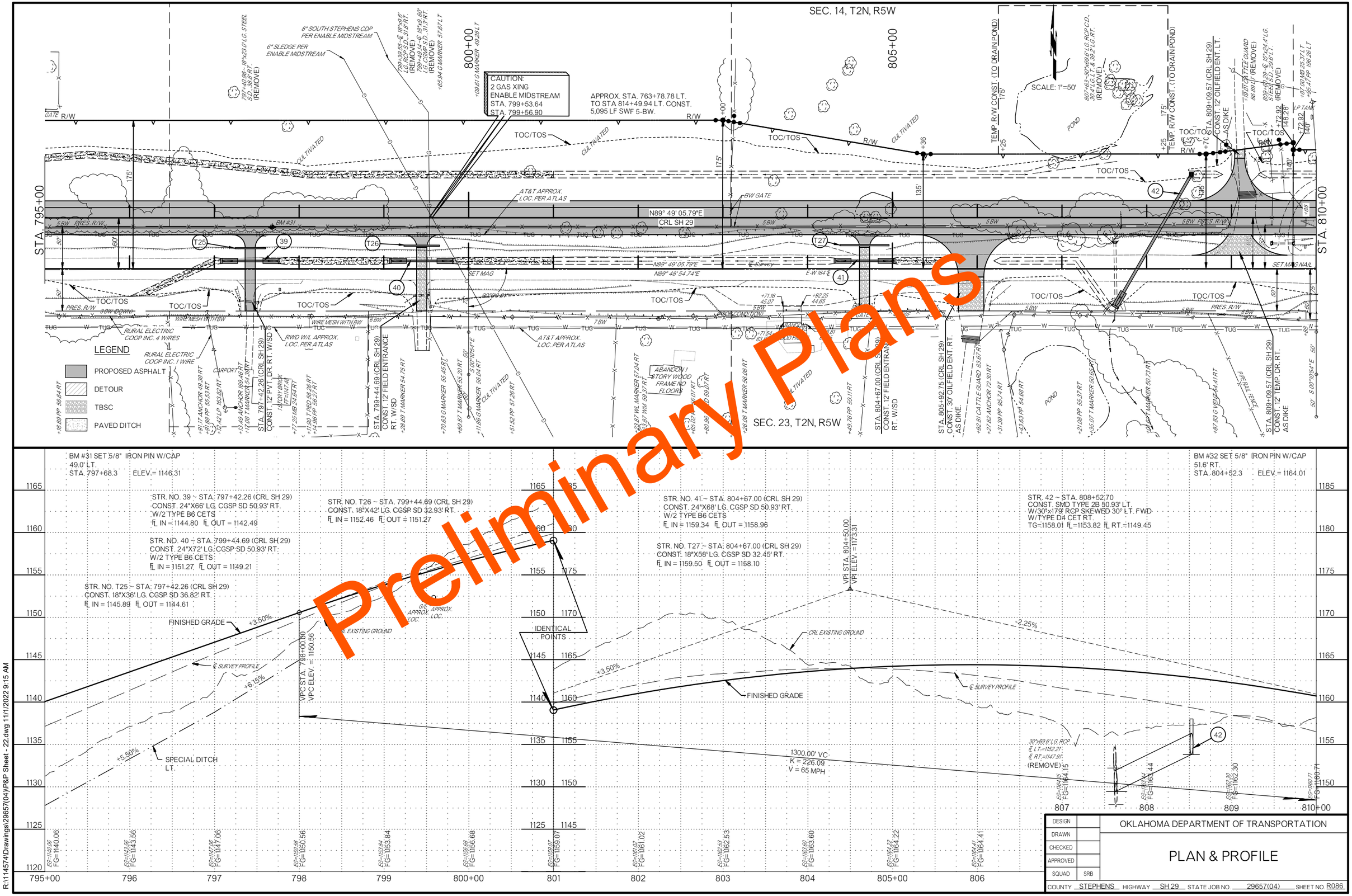

Preliminary Plans

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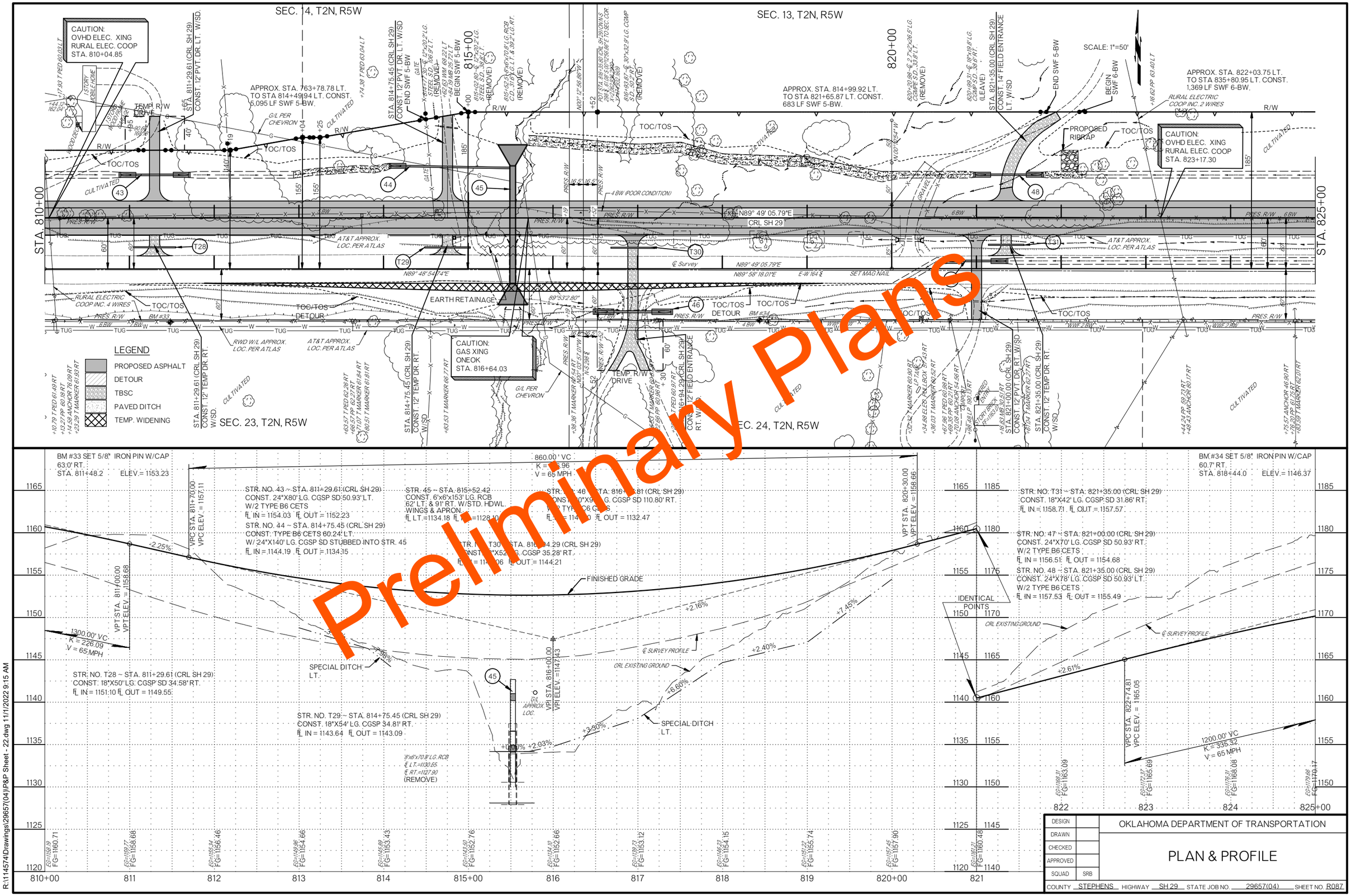
DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO R086



Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R087

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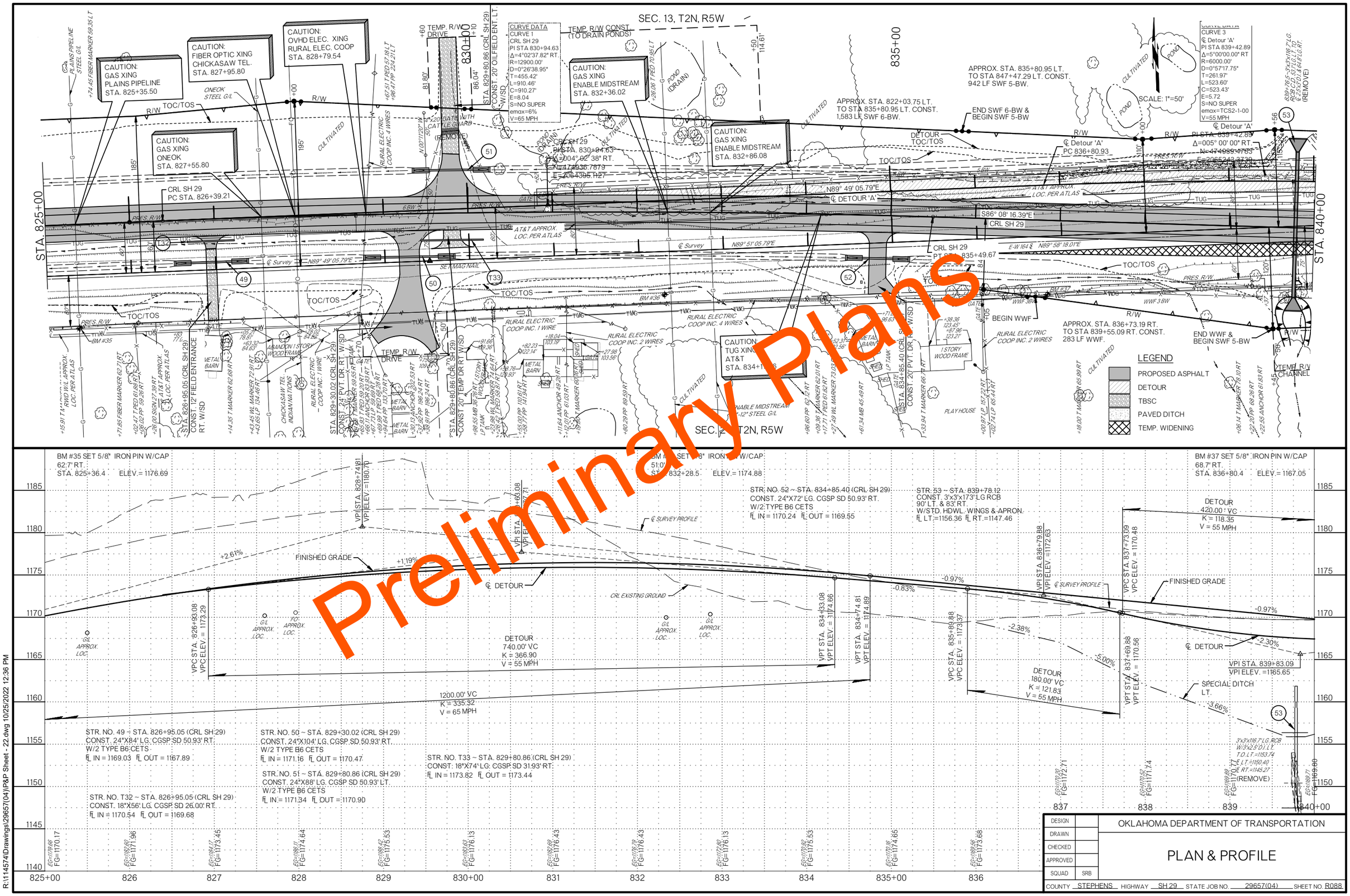

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R088

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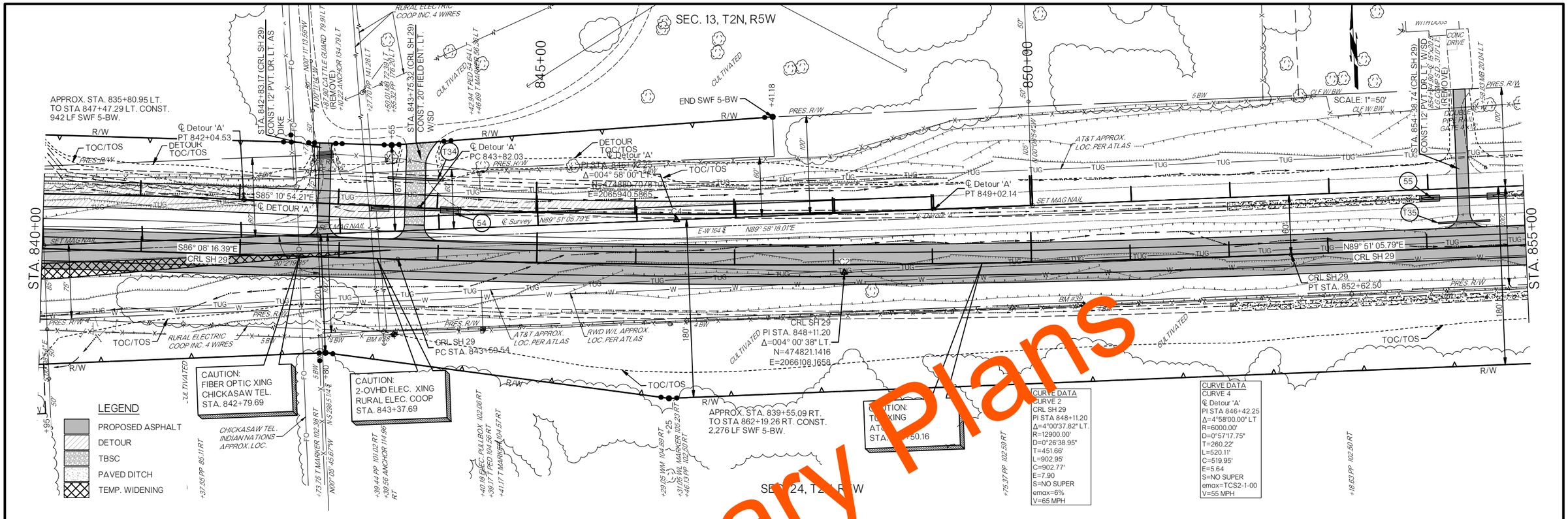

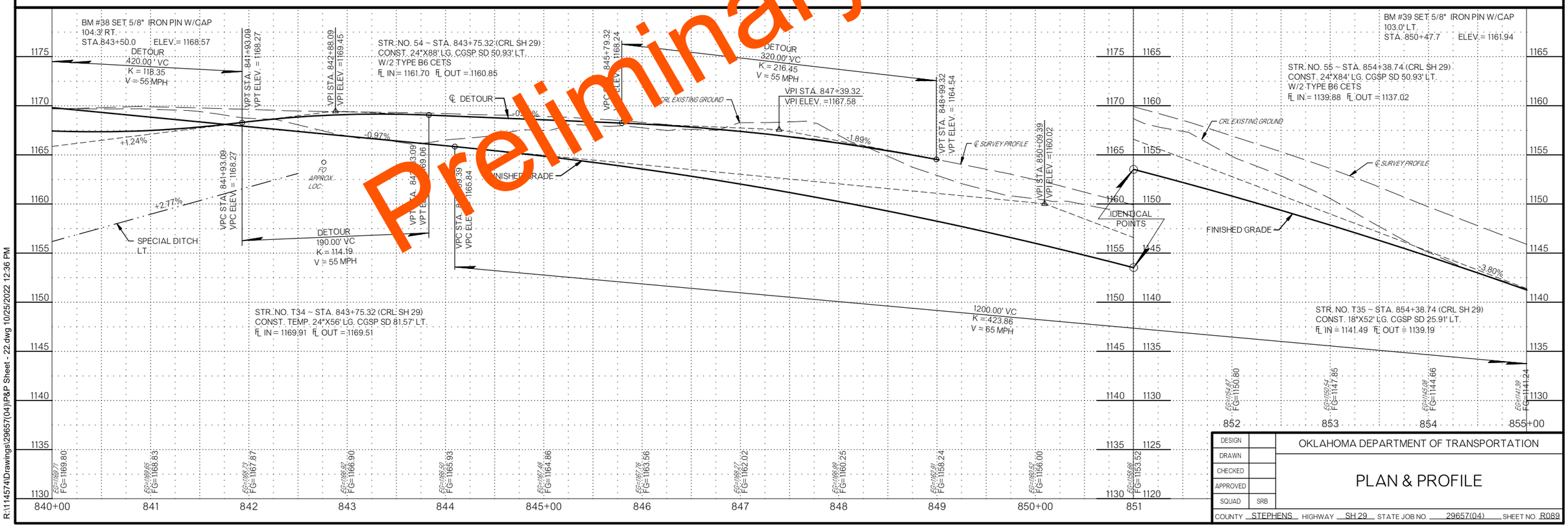

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		PLAN & PROFILE
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R089

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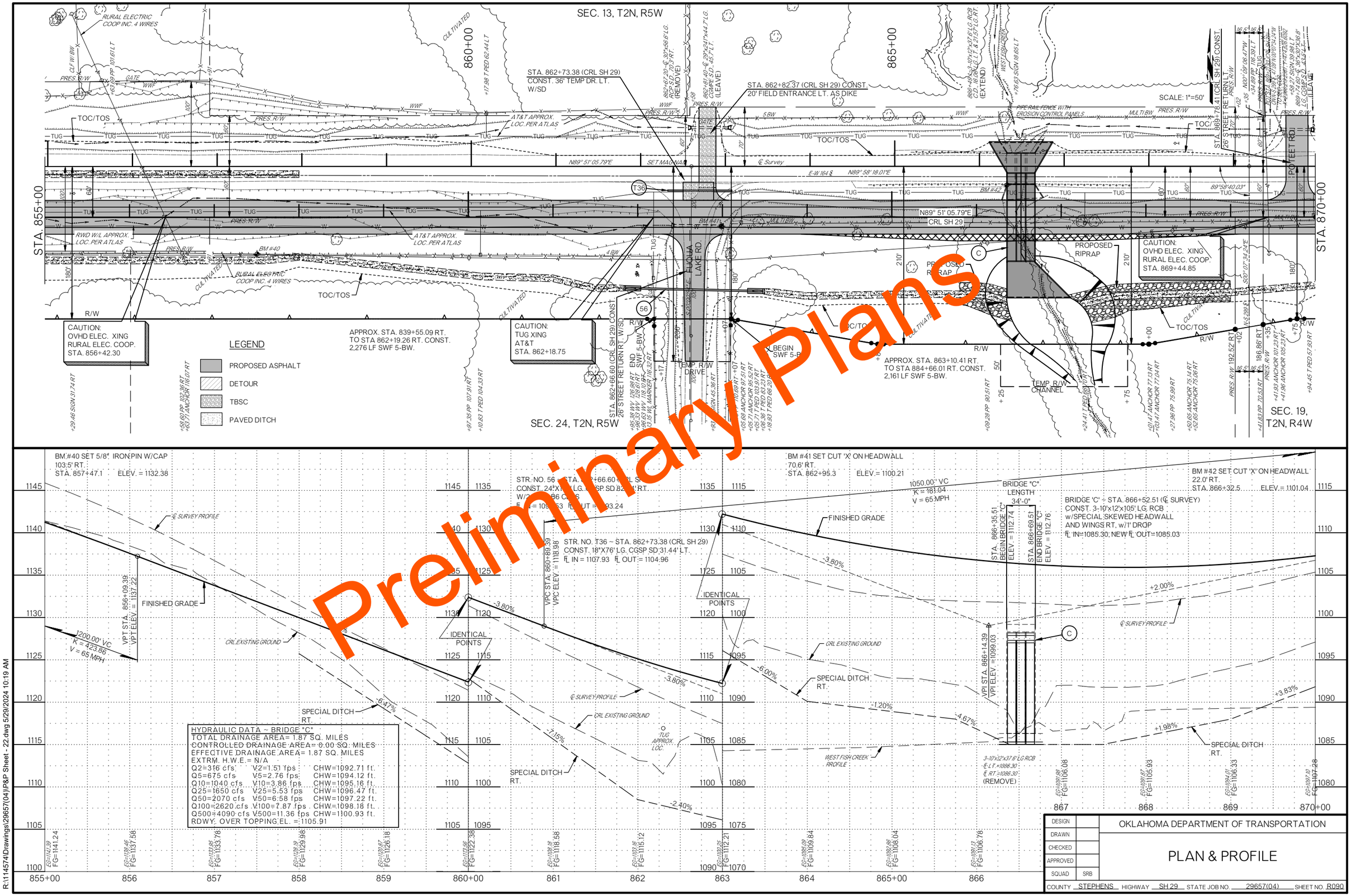

Preliminary Plans

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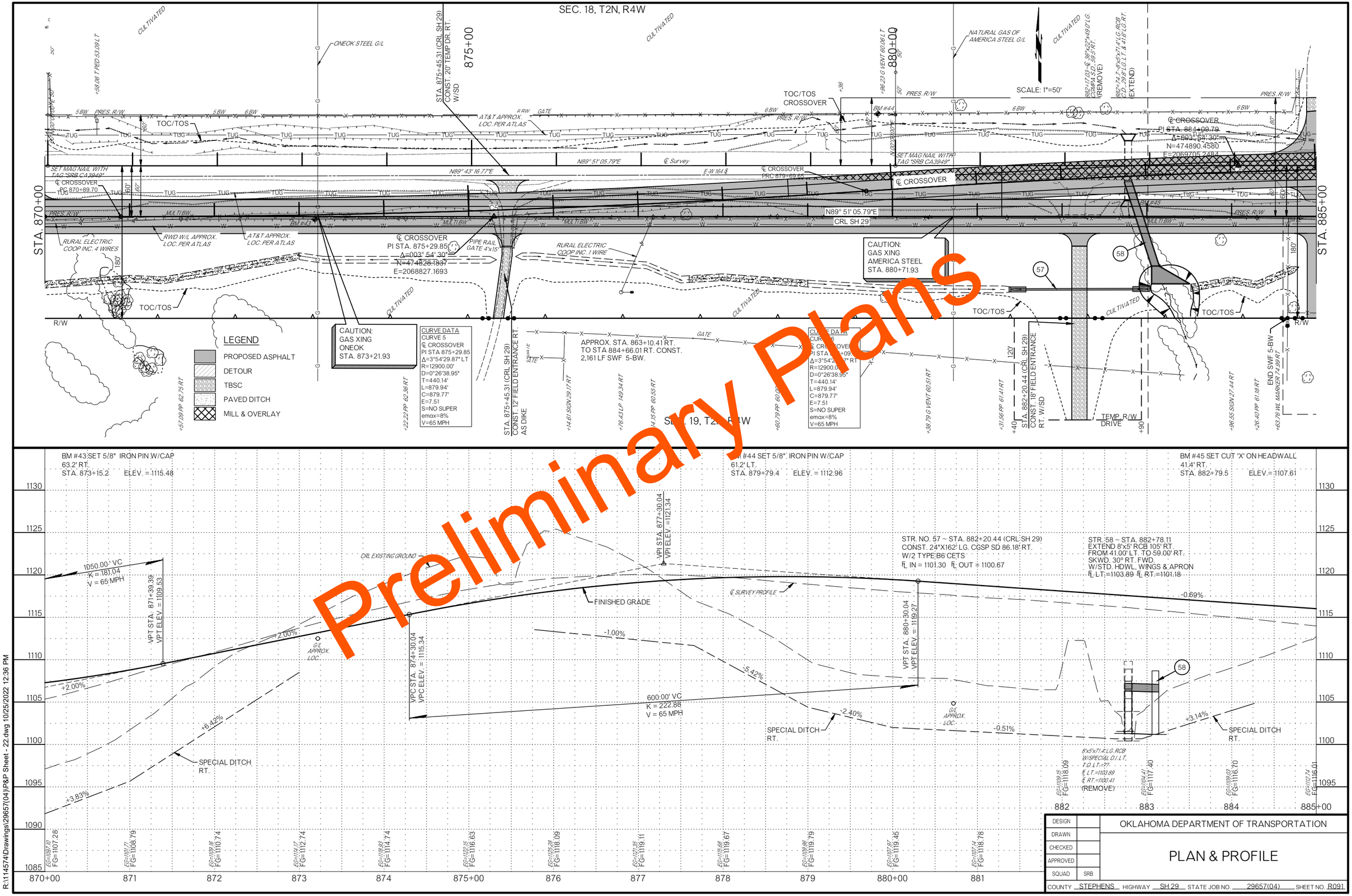

Preliminary Plans

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R091

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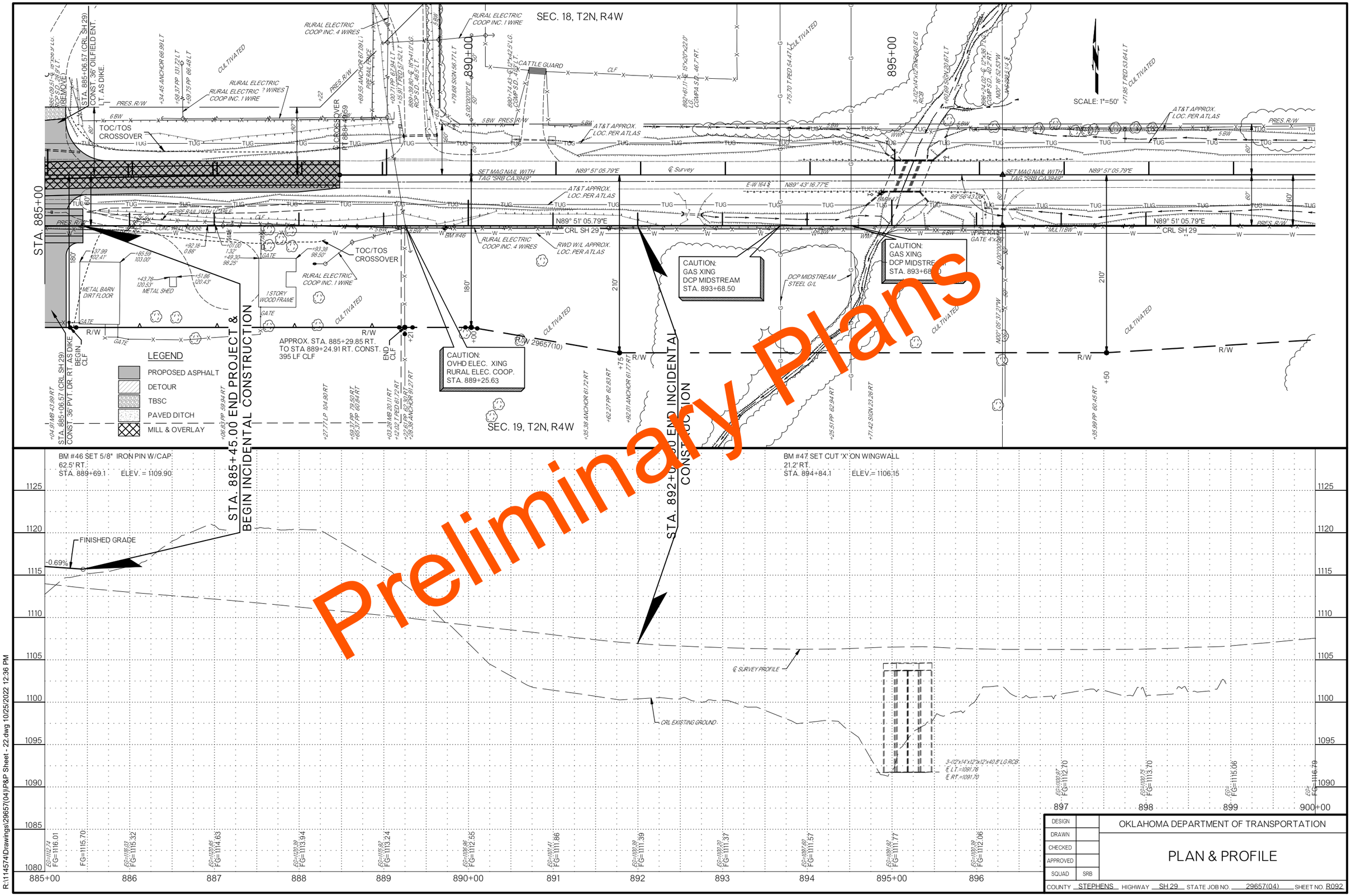

Preliminary Plans

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. R092

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STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SWO 5144(1) J/P 29657(04) : CO. Stephens

HORIZONTAL CONTROL:

( ) Oklahoma Coordinate System of 1927 Zone.
(X) Oklahoma Coordinate System of 1983 (CORS 2011) South Zone.
( ) Oklahoma Dept. of Transportation Plane Coordinate System of 1927 Zone.
( ) Oklahoma Dept. of Transportation Plane Coordinate System of 1983 Zone.
( ) Arbitrary Coordinate System

HORIZONTAL PLANE DATUM DEFINITION:

NGS Oklahoma State Plane Coordinate System, NAD 83 (CORS 2011), Lambert Conformal Conic Projection South Zone.

1. Primary Control adjusted to (CORS 2011) South (2nd) Order
   Stations OKDN, OKLW, TXNO
   A) Closure before adjustment X : Y Angles
   Trav. Length No. Angles : 1:
   B) ; is ( ) Order before adjustment.
   C) Method of Distance Measurement:
   ( ) Electronic (X) GPS ( ) Triangulation ( ) Chained
   D) Instrument used for angles Topcon GR3
2. Secondary Control adjusted to Primary Control (2nd) Order
   Stations 7401, 7402, 7403, 7404
   A) Closure before adjustment X : Y Angles
   B) ; is ( ) Order; Tied to
   C) Method of Distance Measurement:
   ( ) Electronic (X) GPS ( ) Triangulation ( ) Chained
   D) Instrument used for angles Topcon GR3

VERTICAL CONTROL IS 3rd order. Level Line taken from BM76, BM74, 7400, BM1-BM19, 7401, BM20-BM66, 7402, BM67-BM73, BM75, BM77-BM100, 7403, BM101, BM102
(3rd) order and tied to (1st) Order Class II.
( ) NGVD 29 datum
(X) NAVD 88 datum

ACCURACY DEFINITION:

(1) HORIZONTAL: (3rd Order = Class I = 1 : 10,000')
(3rd Order = Class II = 1 : 5,000')
(2) VERTICAL: (1st Order = 0.017 Ft. x sqrt. of Mi.) (2nd Order = 0.035 Ft. x sqrt. of Mi.)
(3rd Order = 0.050 Ft. x sqrt. of Mi.)

Distribution:
Copy w/survey reports
Copy in each Alignment and level book

Taylor Denniston
Professional Land Surveyor

14-Oct-16
Date

(FORM SD #20)
Rev. 11/03

Utilities	
Utility	**Phone Number**
Electric:	
Rural Electric Cooperative, Inc.	**(405) 756-3114 Ext 245**
Fiber Optic/Telephone:	
AT&T	**(405) 291-5545**
Chickasaw Telephone/Indian Nations	**(580) 622-2461**
Windstream	**(918) 451-3437**
Gas/Oil:	
Atlas Pipeline	**(580) 444-3119**
	(580) 467-7805
Chevron	**(580) 444-3363**
	(580) 475-4871
DCP Midstream	**(405) 605-3854**
Enable Midstream	**(405) 530-7419**
Natural Gas Pipeline of America	**(918) 588-5000**
ONEOK Field Services	**(918) 588-7641**
ONEOK Natural Gas Pipeline	**(918) 588-7641**
Plains Pipeline	**(918) 223-0205**
Sunoco Pipeline Midcontenent	**(281) 637-6417**
Woodford Express/Xplorer Midstream, LLC	**(405) 437-0854**
Water Lines:	
Stephens County RWD #5	**(580) 658-6109**

THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, MAY 17, 2010.

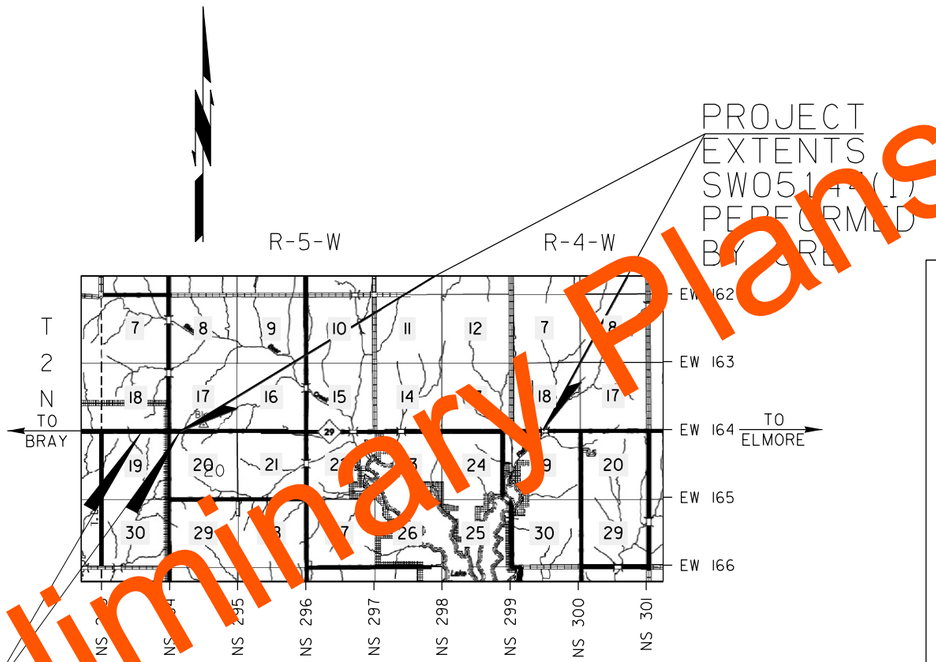
SPECIFICATIONS FOR SURVEYS FOR PRIMARY AND SECONDARY HIGHWAYS DATED MAY 1, 1999 GOVERN.

SDS 1 OF ~~42~~ 48

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SURVEY OF

SH 29
SWO 5144(1)
J/P NO. 29657(04)
STEPHENS COUNTY
FROM 11.48 MILES EAST OF US 81, EAST 5.42 MILES (INCLUDES BLACK BEAR CREEK)



SW04762(1) PERFORMED BY CEC

PROJECT EXTENTS SW05144(1) PERFORMED BY CEC

Preliminary Plans

SURVEY LENGTH 28627.37 Ft. 5.42 MI.

BEGINNING STATION : 610+00.00
ENDING STATION : 896+27.37

CONVENTIONAL SYMBOLS

- PROPOSED ROAD
- RAILROADS
- RANGE & TOWNSHIP
- SECTION LINES
- QUARTER SECTION LINES
- FENCES
- GROUND LINE
- EXISTING ROADS
- BASE LINE
- GRADE LINES
- TELEPHONE & TELEGRAPH
- POWER LINES
- BUILDINGS
- OILWELL
- DRAINAGE STRUCTURES - IN PLACE
- DRAINAGE STRUCTURES - NEW
- RIGHT-OF-WAY LINES - EXISTING
- RIGHT-OF-WAY LINES - NEW
- CONTROLLED ACCESS
- RIGHT-OF-WAY FENCE

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OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

Index of Sheets:

1	Title Sheet
2-6	Historical Letter/Written Report
7	Alignment Report
8-12	Check Levels
13-17	Check Levels
18	Horizontal Control
19	S.D. Form No. 11
20-30	Survey Data Sheets
31-42	Land Tie Data Sheets
	Information From SWO4762 Provided By CEC
45-47	
~~13-15~~	Survey Data Sheets
~~18-19~~	Land Tie Data Sheets
43-44	

Survey Began 11-18-15
Survey End 10-14-16

Personal:	Title:	Equipment:	Serial #
Taylor Denniston	Professional Land Surveyor	Ranger/TSC3BW	RG1F023837
Thomas D. Lee	Professional Land Surveyor	Sokkia 130R3 Total Station	141310
Christina Hendricks	Administrative Support	Topcon FC-2500 Data Collector	558-02012
Carissa Palmer	Utility Technician	Topcon FC-2500 Data Collector	558-01932
Brad Cypert	Senior Party Chief	Topcon GPS GR3 Base Receiver	444-0402
Sam Gibson	Party Chief	Topcon GPS GR3 Base Receiver	444-0456
Mat Herndon	Party Chief	Topcon GPS GR3 Base Receiver	442-2399
Andy McMurtry	Instrument Man	Topcon GPS GR3 Rover Receiver	444-0405
Caleb Avery	Instrument Man	Topcon GPS GR3 Rover Receiver	444-0458
Kyle Twibell	Instrument Man	Topcon GPS GR3 Rover Receiver	442-2423
Simon Lloyd	Instrument Man	Trimble Digital Level DiNi	707885
		Trimble GPS R10 Base/Rover	5434476967

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SWO 5144(1) Job / Piece 29657(04) Fedr Contract No. 1619- -

LAND SURVEYOR'S CERTIFICATION

I hereby certify that all land and property sub-divisions, distances, angles, corners 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 Surveying Instructions";
  its supplement; "Restoration of Lost or Obliterated Corners and Subdivision of Sections";
- "Oklahoma Minimum Standards for the Practice of Land Surveying" as adopted by the State Board of Registration for Professional Engineers and Land Surveyors; and
- sound land surveying practices;

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.

Dated this 14th day of October, 2016

Land Surveyor _____ Signature

Taylor Denniston
Printed Name

PROFESSIONAL LAND SURVEYOR LICENSED TAYLOR DENNISTON 1787 OKLAHOMA

Oklahoma Professional Land Surveyor No. 1787

Certificate of Authorization No. 3949 Exp. Date: June 30, 2017

BEFORE YOU DIG OKIE811 CALL OKIE

PLS	TDD	10/16	
DRAWN	TDL	10/16	
CHECKED	TDL	10/16	
APPROVED	TDD	10/16	
CREW	BC, SG, MH		

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone: (405) 840-7094
Oklahoma City, OK 73104 FAX: (405) 840-9116

TITLE SHEET

SWO 5144(1) PROJECT NO. 29657(04) SHEET NO. S001

Oklahoma Department of Transportation

Date: October 14, 2016

To: Mr. Leroy Tackett, Chief of Surveys

From: Taylor Denniston, Professional Land Surveyor

Subject: SWO 5144(1) - J/P No. 29657(04)
SH 29 - Stephens County
From 11.48 Miles East of US 81, East 5.42 Miles
(Includes Black Bear Creek)

HISTORICAL LETTER AND WRITTEN REPORT

1. ASSIGNMENT OF SURVEY:

This Survey was assigned by Leroy Tackett, P.L.S. Chief of Surveys, Oklahoma Department of Transportation, 200 N.E. 21st Street, Oklahoma City, Oklahoma on April, 2015.

2. GENERAL:

Method of Survey: This survey was performed using the Break Line Method, applying a combination of field conventional methods to obtain topography in the main project area, and real-time kinematic GPS (RTK) to obtain information on existing land tie evidence.

Units of measurement: U.S. Survey Foot

The **Present R/W** shown on this survey is based on plans listed below:

SAP No. 920 A&B Highway Plans: Year 1940
SWO 1838(1) Highway Survey: Year 1952
FAP No. F-146(6) Highway Plans: Year 1955
SWO 4762(1) Highway Survey: Year 2013
SWO 5145(1) Highway Survey: Year 2015 (This survey is immediately East of SWO 5144(1), and is being done more or less simultaneously).

3. SURVEY LIMITS:

The Survey will begin just East of the NS 294 Section Line (at the East end of the SWO 4762(1) Survey, and will extend East, along the existing SH 29, to the NS 299.5 Quarter Section Line (at the Beginning of the SWO 5145(1) Survey. Survey length is approximately 5.42 miles.

4. ALIGNMENT:

The Centerline of Survey for this project will be will be along and identical to the centerline of the existing SH 29, as depicted on the SAP No. 920 A&B Highway Plans, and the FAP No. F-146(6) Highway Plans. Portions of the alignment were re-established under the SWO 4762(1) Survey in 2013, and under SWO 5145(1) Survey in 2015 (more or less simultaneously with this survey). Those alignment points will be recovered and used on this survey.

5. STATIONING:

The Stationing for this survey will be derived from the Stationing established under SWO 4762(1). POT Station 610+00.00 at the East end of that survey will be held as fixed and Stationing will be carried forward (East) to the end of the survey. Station Equations will be shown at the beginning and end of the survey depicting the Station Differences between the previous surveys and the Highway Plans.

A control point (P.O.T., etc.), in addition to others required, is to be set and referenced at the Beginning and at the End of the Centerline of Survey.

6. PURPOSE OF SURVEY

The purpose of this survey is to develop plans to improve the Highway. The survey will be used in support of a preliminary engineering study to determine the most feasible side of the existing road to make the improvements. There are also three bridge-sized cross drains, at Black Bear Creek, and unnamed creek, and at West Walnut Creek, that will either be extended or replaced as part of the project. The survey will include the Alignment, Topographic Planimetric data, Surface Features/Digital Terrain Model Data, Land and Property Lines, Utilities, Drainage and all other pertinent information needed to aid in the design.

7. TOPOGRAPHY / DTM INFORMATION:

The Break Line Method applying conventional field methods to obtain topography to create a Digital Terrain Model (DTM) and has been archived within the MicroStation Design File (See: SUBMITTED DATA).

8. HORIZONTAL CONTROL:

Horizontal control for this survey was established by static and real time kinematic GPS (RTK) Survey Methods. Coordinates on this survey are NGS Oklahoma State Plane Coordinate system NAD 83 (2011 CORS) Lambert Conformal Conic Projection South Zone. The distances, coordinates, and elevations shown on this survey are in U.S. Survey Feet. All angles and bearings shown are in degrees, minutes, and seconds.

9. VERTICAL CONTROL:

Vertical Control for this survey is NGS, NAVD88. Total length of run = 12.23 miles. A benchmark list depicting existing and newly established benchmarks, as well as results of the control leveling has been placed and archived within the MicroStation Design File (See: SUBMITTED DATA).

10. PRESENT RIGHT-OF-WAY:

The Present R/W shown on this survey is based on plans listed below:
SAP 285(3) SH 5 Highway Plans. Year: 1955
FAP No. S-434(3)(S.H.) SH 5 Highway Plans. Revised As-Built Year: 1958
FASP No. S-434(5)(S.H.) SH 5 Highway Plans. Revised As-Built Year: 1958
SWO 1724(1) Survey: Year 1951
SWO 1723(1) Survey: Year 1951

11. ENVIRONMENTAL CONCERNS:

There is an old gas station as shown on SAP 920 A&B Highway Plans located between Station 708+50 to 710+40 offset 50' to 140' Left.

There is an oil well "McElroy No. 1H-19" located at 891+98 offset 267' left.

12. UTILITIES:

CALL OKIE was contacted on June 28, 2016, and utilities were located by June 30, 2016. All utility information has been shown and archived within the MicroStation Design File See: SUBMITTED DATA).

UTILITIES OWNERSHIPS:

1. Rural Electric Cooperative, Inc. (405) 756-3104 Ext 245
   Ed Beavers
   PO Box 609
   Lindsay, Ok 73052
2. AT&T (405) 291-3156
   Brian Creech
   7001 NW 23rd Street
   Bethany, Ok 73008
3. Chickasaw Telephone Company (580) 618-0461
   Fred Womack
   5 N McCormick
   Oklahoma City, Ok 73127
4. Windstream (918) 451-3437
   Roger Rodriguez
   1437 S. Boulder Ave., Suite 130
   Tulsa, OK 74119
5. Atlas Pipeline (580) 444-3119
   Chris Craven (580) 467-7805
   PO Box 610
   Velma, OK 74491

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

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SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Oklahoma City, OK 73104
Telephone: (405) 840-7094 FAX: (405) 840-9116

SURVEY REPORT

SWO 5144(1) PROJECT NO. 29657(04) SHEET NO. S002

6. Chevron (580) 444-3363
Bill Fowler (580) 475-4871
Old State Highway 7
Velma, OK 73491

7. DCP Midstream (405) 605-3854
John Sill
515 Central Park Drive, Bldg 2 #100
Oklahoma City, OK 73105

8. Enable Midstream (405) 530-7419
Donna Brown
PO Box 24300, M/C E358
Oklahoma City, OK 73124

9. Natural Gas Pipeline of America (918) 588-5000
Amrit Seegobin
8811 S Yale Avenue, #200
Tulsa, OK 74137

10. ONEOK Field Services (918) 588-7641
Tony Gedminas
100 w Fifth Street, MD12-3
Tulsa, OK 74103

11. ONEOK Natural Gas Pipeline (918) 588-7641
Tony Gedminas
100 w Fifth Street, MD12-3
Tulsa, OK 74103

12. Plains Pipeline (918) 223-0205
Daniel So
740306 S 3510 Road
Cushing, OK 74023

13. Sunoco Pipeline Midcontinent (281)637-6417
Mona Harvey
1 Fluor Daniel Drive
Sugarland,TX 77478

14. Woodford Express/Xplorer Midstream, LLC (405) 437-0854
Ken Yount
5550 N Francis Avenue
Oklahoma City, Ok 73118

15. Stephens County Rural Water District #5 (580) 6[illegible]6109
Brent Kimbro
1208 S Railroad Street
Marlo, Ok 73055

13. SECTION BOUNDARY SURVEYS:

Land Ties are to include establishing/re-establishing all section corners and 1/4 section corners, including the center section corner, of each section through which the main line passes and any other quarter (1/4) section from which right-of-way may need to be acquired. All section corners and 1/4 section corners so established are to be monumented and referenced in accordance with the Survey Specifications.

T-2-N, R-5-W, I.M.: All of Sections 13, 14, 15, 16, 17, 20, 21, 22, 23 and 24 also the East 1/4 corner of Section 25.

SECTION 13;

NW CORNER - ODOT Sta. No. S-69-733 - FOUND 1/2" IRON PIN WITH CAP "M&M" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ALBERT C. McDONALD FOR McDONALD LAND SURVEYING & MAPPING PC FILED ON MAY 11, 2005. THIS CORNER FURTHER AGREES WITH REFERENCE 1 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005 (NOTED AS REFERENCE 1 HERE ON).

N 1/4 CORNER - ODOT Sta. No. S-69-734 - FOUND 1/2" IRON PIN WHICH AGREES WITH REFERENCES 1 AND 2 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005.

NE CORNER - ODOT Sta. No. S-69-735 - FOUND 1/2" IRON PIN AND REFERENCES 1, 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON JANUARY 21, 1998.

W 1/4 CORNER - ODOT Sta. No. S-69-736 - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AND REFERENCES 1, 2, 3 AND 5 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005.

CENTER - ODOT Sta. No. S-69-741 - FOUND 3/8" IRON PIN AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 13 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON JANUARY 31, 2005.

SW CORNER - ODOT Sta. No. S-69-748 - FOUND CST/BERGER MASONRY NAIL WHICH APPEARS TO AGREE WITH REFERENCE 1 MORE OR LESS AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE PREPARED FOR UELS LLC FILED ON NOVEMBER 18, 2013.

S 1/4 CORNER - ODOT Sta. No. S-69-749 - SET MAG NAIL WITH TAG "SRB CA3949" AT EQUIDISTANT AND ON LINE BETWEEN THE SW AND SE CORNERS OF SECTION 13 WHICH AGREES WITH THE DESCRIPTION OF CORNER EVIDENCE SET AND REFERENCE 3 AS SHOWN OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005.

SE CORNER - ODOT Sta. No. S-69-750 - FOUND RAILROAD SPIKE AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 21, 1998.

SECTION 14;

NE CORNER - ODOT Sta. No. S-69-731 - FOUND 5/8" IRON PIN AND REFERENCES 1, 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013. THIS OCCR FURTHER AGREES WITH REFERENCES 1 AND 2 AS SHOWN ON OCCR PREPARED T. WAYNE FISCH FOR TOPOGRAPHIC LAND SURVEYORS FILED ON MARCH 23, 1995 (NOTED AS REFERENCES 2 AND 3 HEREON).

N 1/4 CORNER - ODOT Sta. No. S-69-732 - FOUND 5/8" IRON PIN WITH ALUMINUM CAP STAMPED "LS 1822" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013. THIS POINT FURTHER AGREES WITH REFERENCE 1 OF OCCR PREPARED BY ALBERT C. McDONALD SURVEYING & MAPPING, PC FILED ON MAY 11, 2005 NOTED AS REFERENCE 3 HEREON.

NE CORNER - ODOT Sta. No. S-69-733 - FOUND 1/2" IRON PIN WITH CAP "M&M" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ALBERT C. McDONALD FOR McDONALD LAND SURVEYING & MAPPING PC FILED ON MAY 11, 2005. THIS CORNER FURTHER AGREES WITH REFERENCE 1 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005 (NOTED AS REFERENCE 1 HERE ON).

W 1/4 CORNER - ODOT Sta. No. S-69-739 - FOUND 1/2" IRON PIN BEING AT EQUIDISTANT AND ON LINE MORE OR LESS BETWEEN THE NE AND SE CORNERS OF SECTION 15 AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES FOR THE 1899 SURVEY.

E 1/4 CORNER - ODOT Sta. No. S-69-740 - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AND REFERENCES 1, 2, 3 AND 5 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005.

SW CORNER - ODOT Sta. No. S-69-746 - FOUND MAG NAIL WHICH AGREES WITH REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. L. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

S 1/4 CORNER - ODOT Sta. No. S-69-747 - FOUND MAG NAIL AT EQUIDISTANT AND ON LINE MORE OR LESS BETWEEN THE NW AND NE CORNERS OF SECTION 14 AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES FOR THE 1899 SURVEY WHICH FURTHER AGREES WITH "SAP 920 A&B HIGHWAY PLANS" AS SUPPLIED BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION.

SE CORNER - ODOT Sta. No. S-69-748 - FOUND CST/BERGER MASONRY NAIL WHICH APPEARS TO AGREE WITH REFERENCE 1 MORE OR LESS AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE PREPARED FOR UELS LLC FILED ON NOVEMBER 18, 2013.

SECTION 15;

NW CORNER - ODOT Sta. No. S-69-729 - FOUND I/2" IRON PIN AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES PREPARED ON FEBRUARY 23, 2004 (FILED ON DATE NOT LEGIBLE).

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
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FAX: (405) 840-9116

SURVEY REPORT

SWO 5144(I) PROJECT NO. 29657(04) SHEET NO. S003

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

N 1/4 CORNER - ODOT Sta. No. S-69-730 - FOUND 60d NAIL AT EQUIDISTANT AND ON LINE BETWEEN THE NW AND NE CORNERS OF SECTION 15 AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES OF 1899.

NE CORNER - ODOT Sta. No. S-69-731 - FOUND 5/8" IRON PIN AND REFERENCES 1, 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013. THIS OCCR FURTHER AGREES WITH REFERENCES 1 AND 2 AS SHOWN ON OCCR PREPARED T. WAYNE FISCH FOR TOPOGRAPHIC LAND SURVEYORS FILED ON MARCH 23, 1995 (NOTED AS REFERENCES 2 AND 3 HEREON).

W 1/4 CORNER - ODOT Sta. No. S-69-738 - FOUND 40d NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013.

E 1/4 CORNER - ODOT Sta. No. S-69-739 - FOUND 1/2" IRON PIN BEING AT EQUIDISTANT AND ON LINE MORE OR LESS BETWEEN THE NE AND SE CORNERS OF SECTION 15 AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES FOR THE 1899 SURVEY.

SW CORNER - ODOT Sta. No. S-69-744 - FOUND RAILROAD SPIKE AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

S 1/4 CORNER - ODOT Sta. No. S-69-745 - FOUND MAG NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013.

SE CORNER - ODOT Sta. No. S-69-746 - FOUND MAG NAIL WHICH AGREES WITH REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. L. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

SECTION 16;

NW CORNER - ODOT Sta. No. S-69-614 (REVISED) - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AND REFERENCE 1 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

N 1/4 CORNER - ODOT Sta. No. S-69-728 - FOUND ORIGINAL 12"x4" SANDSTONE MONUMENT AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES OF 1899.

NE CORNER - ODOT Sta. No. S-69-729 - FOUND I/2" IRON PIN AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES PREPARED ON FEBRUARY 23, 2004 (FILED ON DATE NOT LEGIBLE).

W 1/4 CORNER - ODOT Sta. No. S-69-615 (REVISED) - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING FILED ON JANUARY 25, 2013.

E 1/4 CORNER - ODOT Sta. No. S-69-738 - FOUND 40d NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013.

SW CORNER - ODOT Sta. No. S-69-616 (REVISED) - FOUND PARKER-KALON MASONRY NAIL AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

S 1/4 CORNER - ODOT Sta. No. S-69-743 - FOUND MAG NAIL AND TAG "MJLA LS 1326" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON FEBRUARY 25, 2013.

SE CORNER - ODOT Sta. No. S-69-744 - FOUND RAILROAD SPIKE AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

SECTION 17;

NW CORNER - ODOT Sta. No. S-69-605 (REVISED) - FOUND 3/8" IRON PIN AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

N 1/4 CORNER - ODOT Sta. No. S-69-613 (REVISED) - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326 CAP" AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

NE CORNER - ODOT Sta. No. S-69-614 (REVISED) - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AND REFERENCE 1 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

W 1/4 CORNER - ODOT Sta. No. S-69-615 (REVISED) - FOUND RAILROAD SPIKE AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

C 1/4 CORNER - ODOT Sta. No. S-69-612 (REVISED) FOUND 1/2" IRON PIN AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

E 1/4 CORNER - ODOT Sta. No. S-69-615 (REVISED) - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING FILED ON JANUARY 25, 2013.

NW CORNER - ODOT Sta. No. S-69-607 (REVISED) - FOUND CST/BERGER MASONRY NAIL AND REFERENCES 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

S 1/4 CORNER - ODOT Sta. No. S-69-611 (REVISED) - FOUND MAG NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

SE CORNER - ODOT Sta. No. S-69-616 (REVISED) - FOUND PARKER-KALON MASONRY NAIL AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

SECTION 20;

NW CORNER - ODOT Sta. No. S-69-607 (REVISED) - FOUND CST/BERGER MASONRY NAIL AND REFERENCES 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

N 1/4 CORNER - ODOT Sta. No. S-69-611 (REVISED) - FOUND MAG NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

NE CORNER - ODOT Sta. No. S-69-616 (REVISED) - FOUND PARKER-KALON MASONRY NAIL AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

W 1/4 CORNER - ODOT Sta. No. S-69-608 (REVISED) - FOUND 60d NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

E 1/4 CORNER - ODOT Sta. No. S-69-617 (REVISED) - FOUND ORIGINAL 8"x4" SANDSTONE MONUMENT AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

SW CORNER - ODOT Sta. No. S-69-609 (REVISED) - FOUND PARKER-KALON MASONRY NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

S 1/4 CORNER - ODOT Sta. No. S-69-610 (REVISED) - FOUND 1/2" IRON PIN WITHOUT CAP AND REFERENCES 1, 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

SE CORNER - ODOT Sta. No. S-69-618 (REVISED) - FOUND 1/2" IRON PIN AND REFERENCES 1 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

SECTION 21;

NW CORNER - ODOT Sta. No. S-69-616 (REVISED) - FOUND PARKER-KALON MASONRY NAIL AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

N 1/4 CORNER - ODOT Sta. No. S-69-743 - FOUND MAG NAIL AND TAG "MJLA LS 1326" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON FEBRUARY 25, 2013.

NE CORNER - ODOT Sta. No. S-69-744 - FOUND RAILROAD SPIKE AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

W 1/4 CORNER - ODOT Sta. No. S-69-617 (REVISED) - FOUND ORIGINAL 8"x4" SANDSTONE MONUMENT AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
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CREW	BC, SG, MH	

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FAX: (405) 840-9116

SURVEY REPORT

SWO 5144(I) PROJECT NO. 29657(04) SHEET NO. S004

E 1/4 CORNER - ODOT Sta. No. S-69-753 - FOUND 1/2" IRON PIN WITH CAP "LS 1071" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON NOVEMBER 15, 1999.

SW CORNER - ODOT Sta. No. S-69-618 (REVISED) - FOUND 1/2" IRON PIN AND REFERENCES 1 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

S 1/4 CORNER - ODOT Sta. No. S-69-758 - FOUND 1/2" IRON PIN WHICH AGREES WITH REFERENCES 2 AND 3 ON OCCR PREPARED BY ALBERT C. McDONALD FOR McDONALD SURVEYING & MAPPING, P. C., FILED ON SEPTEMBER 3, 2009.

SE CORNER - ODOT Sta. No. S-69-759 - FOUND I/2" IRON PIN WITH RED CAP AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICES FILED ON NOVEMBER 15, 1999.

SECTION 22;

NW CORNER - ODOT Sta. No. S-69-744 - FOUND RAILROAD SPIKE AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

N 1/4 CORNER - ODOT Sta. No. S-69-745 - FOUND MAG NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013.

NE CORNER - ODOT Sta. No. S-69-746 - FOUND MAG NAIL WHICH AGREES WITH REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. L. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

W 1/4 CORNER - ODOT Sta. No. S-69-753 - FOUND 1/2" IRON PIN WITH CAP "LS 1071" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON NOVEMBER 15, 1999.

E 1/4 CORNER - ODOT Sta. No. S-69-754 - FOUND AND SET NOTHING POINT FALLS IN LAKE FUQUA. THE CALCULATED VALUE SHOWN HEREON FOR THIS POINT IS AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 22.

SW CORNER - ODOT Sta. No. S-69-759 - FOUND I/2" IRON PIN WITH RED CAP AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICES FILED ON NOVEMBER 15, 1999.

S 1/4 CORNER - ODOT Sta. No. S-69-760 - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1071" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013.

SECTION 23;

NW CORNER - ODOT Sta. No. S-69-746 - FOUND MAG NAIL WHICH AGREES WITH REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. L. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

N 1/4 CORNER - ODOT Sta. No. S-69-747 - FOUND MAG NAIL AT EQUIDISTANT AND ON LINE MORE OR LESS BETWEEN THE NW AND NE CORNERS OF SECTION 14 AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES FOR THE 1899 SURVEY WHICH FURTHER AGREES WITH "SAP 920 A&B HIGHWAY PLANS" AS SUPPLIED BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION.

NE CORNER - ODOT Sta. No. S-69-748 - FOUND CST/BERGER MASONRY NAIL WHICH APPEARS TO AGREE WITH REFERENCE 1 MORE OR LESS AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE PREPARED FOR UELS LLC FILED ON NOVEMBER 18, 2013.

W 1/4 CORNER - ODOT Sta. No. S-69-754 - FOUND AND SET NOTHING POINT FALLS IN LAKE FUQUA. THE CALCULATED VALUE SHOWN HEREON FOR THIS POINT IS AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 22.

E 1/4 CORNER - ODOT Sta. No. S-69-755 - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 23 AS CALLED FOR IN THE ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY.

SW CORNER - ODOT Sta. No. S-69-761 - FOUND ORIGINAL 10"x8" SANDSTONE MONUMENT WITH 2 NOTCHES ON SOUTH AND EAST SIDES AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON NOVEMBER 15, 1999.

S 1/4 CORNER - ODOT Sta. No. S-69-762 - FOUND AND SET NOTHING POINT FALLS IN LAKE FUQUA. THE CALCULATED VALUE SHOWN HEREON FOR THIS POINT IS AT EQUIDISTANT AND ON LINE BETWEEN THE SW AND SE CORNERS OF SECTION 23.

SE CORNER - ODOT Sta. No. S-69-763 - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" WHICH AGREES WITH ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY MORE OR LESS.

SECTION 24;

NW CORNER - ODOT Sta. No. S-69-748 - FOUND CST/BERGER MASONRY NAIL WHICH APPEARS TO AGREE WITH REFERENCE 1 MORE OR LESS AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE PREPARED FOR UELS LLC FILED ON NOVEMBER 18, 2013.

N 1/4 CORNER - ODOT Sta. No. S-69-749 - SET MAG NAIL WITH TAG "SRB CA3949" AT EQUIDISTANT AND ON LINE BETWEEN THE SW AND SE CORNERS OF SECTION 13 WHICH AGREES WITH THE DESCRIPTION OF CORNER EVIDENCE SET AND REFERENCE 3 AS SHOWN OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005.

NE CORNER - ODOT Sta. No. S-69-750 - FOUND RAILROAD SPIKE AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 21, 1998.

W 1/4 CORNER - ODOT Sta. No. S-69-755 - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 23 AS CALLED FOR IN THE ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY.

E 1/4 CORNER - ODOT Sta. No. S-69-756 - SET 1/2" IRON PIN AND CAP "SRB CA3949" AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 24 AS CALLED FOR IN THE ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY WHICH AGREES WITH REFERENCE 2 AS SHOWN ON OCCR PREPARED BY JESSE L. CARROLL FOR CARROLL SURVEYING SERVICE, LLC FILED ON FEBRUARY 23, 2004.

SW CORNER - ODOT Sta. No. S-69-763 - FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" WHICH AGREES WITH ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY MORE OR LESS.

S 1/4 CORNER - ODOT Sta. No. S-69-764 - SET 1/2" IRON PIN WITH CAP "SRB CA3949" AT EQUIDISTANT AND ON LINE BETWEEN THE SW CORNER OF SECTION 24 AND THE CALCULATED POSITION OF THE SE CORNER OF SECTION 24, AS THIS LOCATION FALLS IN LAKE FAQUA.

SE CORNER - ODOT Sta. No. S-69-765 - FOUND AND SET NOTHING POINT FALLS IN LAKE FUQUA. THE CALCULATED VALUE SHOWN HEREON FOR THIS POINT IS AT EQUIDISTANT AND ON LINE BETWEEN THE EAST 1/4 QUARTER CORNER OF SECTION 24 AND THE EAST 1/4 QUARTER CORNER OF SECTION 25.

SECTION 25;

E 1/4 CORNER - ODOT Sta. No. S-69-754 - FOUND 80d SPIKE AND REFERENCE 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE PREPARED ON OCTOBER 23, 2000 (FILED ON DATE NOT SHOWN).

T-2-N, R-4-W, I.M.: All of Sections 18 and 19 also the West 1/4 corner of Section 30.

SECTION 18;

NW CORNER - ODOT Sta. No. S-69-735 - FOUND 1/2" IRON PIN AND REFERENCES 1, 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON JANUARY 21, 1990.

N 1/4 CORNER - ODOT Sta. No. S-69-736 - FOUND ORIGINAL 12"x6" SANDSTONE MONUMENT AS CALLED FOR IN THE GOVERNMENT SURVEY NOTES OF 1899.

NE CORNER - ODOT Sta. No. S-69-737 - FOUND 1/2" IRON PIN WITH CAP "KING CAP" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY MONTE DUANE KING FOR KING LAND SURVEYING FILED ON JANUARY 20, 1999.

W 1/4 CORNER - ODOT Sta. No. S-69-741 - FOUND 3/8" IRON PIN AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 13 AS SHOWN ON OCC PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON JANUARY 31, 2005.

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION
CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-5116

SURVEY REPORT

SWO 5144 (I) PROJECT NO. 29657(04) SHEET NO. S005

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

E 1/4 CORNER - ODOT Sta. No. S-69-742 - FOUND I/2" IRON PIN WITH CAP "KING CAP" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY MONTE DUANE KING FOR KING LAND SURVEYING FILED ON JANUARY 20, 1999.

SW CORNER - ODOT Sta. No. S-69-750 - FOUND RAILROAD SPIKE AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 21, 1998.

S 1/4 CORNER - ODOT Sta. No. S-69-751 - SET MAG WITH TAG "SRB CA3949" BY SINGLE PROPORTIONATE METHOD BETWEEN THE SW AND SE CORNERS OF SECTION 18 WITH THE RECORD DISTANCES BEING APPLIED. NO EVIDENCE OF PREVIOUS CORNER OR REFERENCES WERE FOUND AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON MAY 24, 1994.

SE CORNER - ODOT Sta. No. S-69-752 - FOUND CST/BERGER MASONRY NAIL WHICH AGREES WITH REFERENCE 1 AS SHOWN ON OCCR PREPARED BY MONTE DUANE KING FOR KING LAND SURVEYING FILED ON JANUARY 20, 1999.

SECTION 19;

NW CORNER - ODOT Sta. No. S-69-750 - FOUND RAILROAD SPIKE AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 21, 1998.

N 1/4 CORNER - ODOT Sta. No. S-69-751 - SET MAG WITH TAG "SRB CA3949" BY SINGLE PROPORTIONATE METHOD BETWEEN THE NW AND NE CORNERS OF SECTION 19 WITH THE RECORD DISTANCES BEING APPLIED. NO EVIDENCE OF PREVIOUS CORNER OR REFERENCES WERE FOUND AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON MAY 24, 1994.

NE CORNER - ODOT Sta. No. S-69-752 - FOUND CST/BERGER MASONRY NAIL WHICH AGREES WITH REFERENCE 1 AS SHOWN ON OCCR PREPARED BY MONTE DUANE KING FOR KING LAND SURVEYING FILED ON JANUARY 20, 1999.

W 1/4 CORNER - ODOT Sta. No. S-69-756 - SET 1/2" IRON PIN AND CAP "SRB CA3949" AT EQUIDISTANT AND ON LINE BETWEEN THE SW AND NW CORNERS OF SECTION 19 AS CALLED FOR IN THE ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY WHICH AGREES WITH REFERENCE 2 AS SHOWN ON OCCR PREPARED BY JESSE L. CARROLL FOR CARROLL SURVEYING SERVICE, LLC FILED ON FEBRUARY 23, 2004.

E 1/4 CORNER - ODOT Sta. No. S-69-757 - FOUND 3/8" IRON PIN AND REFER[illegible] AS SHOWN ON OCCR PREPARED BY JESSE L. CARROLL FOR CA[illegible]OLL LAND SURVEYING SERVICE, LLC FILED ON FEBRUARY 23, 2004.

SW CORNER - ODOT Sta. No. S-69-765 - FOUND AND SET NOTHING PO[illegible]T F[illegible]S IN LAKE FUQUA. THE CALCULATED VALUE SHOWN HEREON FOR THIS [illegible]NT IS AT EQUIDISTANT AND ON LINE BETWEEN THE WEST 1/4 QUARTER CORNER O[illegible]SECTION 30 AND THE WEST 1/4 QUARTER CORNER OF SECTION 19.

S 1/4 CORNER - ODOT Sta. No. S-69-766 - FOUND ORIGINAL 10"x5" SANDSTONE MONUMENT WITH "1/4" MARKED ON NORTH FACE AS CALLED FOR IN THE ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY AND AS SHOWN ON OCCR PREPARED BY JESSE L. CARROLL FOR CARROLL SURVEYING SERVICE, LLC FILED ON FEBRUARY 23, 2004 (ALSO FOUND 1/2" IRON PIN WITHOUT CAP SOUTHEAST OF STONE MONUMENT).

SE CORNER - ODOT Sta. No. S-69-767 - FOUND 3/8" IRON PIN AND REFERENCE 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON MAY 24, 1994.

SECTION 30;

W 1/4 CORNER SECTION 30 - ODOT Sta. No. S-69-754 - FOUND 80[illegible] SPIKE AN[illegible] REFERENCE 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CA[illegible]ROLL [illegible]X CARROLL SURVEYING SERVICE PREPARED ON OCTOBER 23, 2000 (FILE[illegible]DATE NOT SHOWN).

14. DRAINAGE:

The drainage information on this survey will be lim[illegible]to flowlin[illegible]ro[illegible]s 1,000 feet upstream and 1,000 feet downstream from the Centerline of s[illegible]vey. Flowlin[illegible]iles will be shown as three dimensional line strings in the .dg[illegible]rainag[illegible]reas were tak[illegible]from StreamStat and overlayed on top of a USGS Topogra[illegible]ic Map[illegible]levati[illegible]s were verifie[illegible]from field information gathered on the ground. This info[illegible]a[illegible] ca[illegible]be foun[illegible]in computer file SWO5144_1_V1_DRA.dg[illegible]

15. SUBMITTED D[illegible]TA:

Civil

1. SWO5144\Civil\SWO5144_1_V1.alg – InRoads Alignment
2. SWO5144\Civil\SWO5144_1_V1.dtm – InRoads Digital Terrain Model
3. SWO5144\Civil\SWO5144_1_V1_ALIGN.pdf – InRoads Alignment Report
4. SWO5144\Civil\SWO5144_1_V1_SURF.pdf – InRoads Surface Report

Dgn

1. SWO5144\Dgn\SWO5144_1_V1.dgn - All Survey Drawings
2. SWO5144\Dgn\SWO5144_1_V1_DRA.dgn – Drainage Map
3. SWO5144\Dgn\SWO5144_1_V1_DRA_USGS.tif - Drainage Map Image
4. SWO5144\Dgn\SWO5144_1_V1_Full_Size.pdf - All Survey Drawings
5. SWO5144\Dgn\SWO5144_1_V1_Half_Size.pdf - All Survey Drawings
6. SWO5144\Dgn\SWO5144_1_V1_Location Map Cover.tif - Location Map
7. SWO5144\Dgn\SWO5144_1_V1_Location Map Horizontal.tif - Location Map
8. SWO5144\Dgn\SWO5144_1_V1_Perimeter.dgn - Exterior File
9. SWO5144\Dgn\SWO5144_1_V1_SFF.dgn - Surface Feature File
10. SWO5144\Dgn\SWO5144_1_V1_TOPO.dgn - Topography Identification File
11. SWO5144\Dgn\SWO5144_1_V1_TRI.dgn - Triangle File

Reports:

1. SWO5144\Reports\SWO5144_1_V1_Check_Levels.pdf
2. SWO5144\Reports\SWO5144_1_V1_GPS Adjustment Report.pdf
3. SWO5144\Reports\SWO5144_1_V1_COGO_Points.pdf
4. SWO5144\Reports\SWO5144_1_V1_COGO_Points.txt
5. SWO5144\Reports\SWO5144_1_V1_Historical Letter and Written Report.pdf
6. SWO5144\Reports\SWO5144_1_V1_Index.pdf
7. SWO5144\Reports\SWO5144_1_V1_OCCR.pdf
8. SWO5144\Reports\SWO5144_1_V1_SD 7 Public and Private Utilities.pdf
9. SWO5144\Reports\SWO5144_1_V1_SD 11 Static Monumentation.pdf
10. SWO5144\Reports\SWO5144_1_V1_SD 20 Survey Control Accuracy Statement.pdf
11. SWO5144\Reports\SWO5144_1_V1_SD 41 Surveyors Certification.pdf

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3849 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone:(405) 840-7094
Oklahoma City, OK 73104 FAX:(405) 840-9116

SURVEY REPORT

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S006

Project Name: SWOS144_1_V1
Description: SH 29 Existing Condition
Horizontal Alignment Name: A001
Description: Centerline Survey SH 29
Style: Centerline

		STATION	NORTHING	EASTING
Element: Linear				
POB (	300)	393+70.9700	474810.1207	2020671.7347
PC (	301)	423+01.7456	474795.1141	2023602.4719
Tangent Direction: S 89°42'23.8440" E				
Tangent Length:	2930.7756			
Element: Circular				
PC (	301)	423+01.7456	474795.1141	2023602.4719
PI (	304)	423+90.2456	474794.6609	2023690.9708
CC (	302)		488547.0240	2023672.8876
PT (	303)	424+78.7432	474795.3468	2023779.4681
Radius:	13752.0902			
Delta:	00°44'14.7504" Left			
Degree of Curvature(Arc):	00°24'59.8797"			
Length:	176.9976			
Tangent:	88.5000			
Chord:	176.9963			
Middle Ordinate:	0.2848			
External:	0.2848			
Tangent Direction: S 89°42'23.8440" E				
Radial Direction: S 00°17'36.1560" W				
Chord Direction: N 89°55'28.7808" E				
Radial Direction: S 00°26'38.5944" E				
Tangent Direction: N 89°33'21.4056" E				
Element: Linear				
PT (	303)	424+78.7432	474795.3468	2023779.4681
PI (	305)	446+64.9579	474812.2903	2025965.6171
Tangent Direction: N 89°33'21.4056" E				
Tangent Length:	2186.2147			
Element: Linear				
PI (	305)	446+64.9579	474812.2903	2025965.6171
PI (	306)	478+39.1013	474816.0053	2029139.7584
Tangent Direction: N 89°55'58.5858" E				
Tangent Length:	3174.1434			
Element: Linear				
PI (	306)	478+39.1013	474816.0053	2029139.7584
POT (	307)	610+00.0000	474840.0215	2042300.6352
Tangent Direction: N 89°53'43.6051" E				
Tangent Length:	13160.8987			
Element: Linear				
POT (	307)	610+00.0000	474840.0215	2042300.6352
PI (	308)	655+07.4000	474848.2467	2046808.0277
Tangent Direction: N 89°53'43.6051" E				
Tangent Length:	4507.4000			
Element: Linear				
PI (	308)	655+07.4000	474848.2467	2046808.0277
PI (	309)	772+13.0197	474858.1332	2058513.6432
Tangent Direction: N 89°57'05.7885" E				
Tangent Length:	11705.6197			

Element: Linear				
PI (	309)	772+13.0197	474858.1332	2058513.6432
PI (	310)	829+52.7803	474876.3380	2064253.3749
Tangent Direction: N 89°49'05.7885" E				
Tangent Length:	5739.7606			
Element: Linear				
PI (	310)	829+52.7803	474876.3380	2064253.3749
PI (	311)	896+27.3726	474893.6247	2070927.9448
Tangent Direction: N 89°51'05.7885" E				
Tangent Length:	6674.5923			
Element: Linear				
PI (	311)	896+27.3726	474893.6247	2070927.9448
PI (	312)	1075+17.0345	474939.9577	2088817.5468
Tangent Direction: N 89°51'05.7885" E				
Tangent Length:	17889.6619			
Element: Circular				
PC (	312)	1075+17.0345	474939.9577	2088817.54
PI (	315)	1081+19.2374	474941.5173	2089419.747
CC (	313)		480669.5165	2088802.7076
PT (	314)	1087+17.0345	475068.2475	2090008.4647
Radius:	5729.5780			
Delta:	12°00'00.0000" Left			
Degree of Curvature(Arc):	01°00'00.0000"			
Length:	1200.0000			
Tangent:	602.202			
Chord:	1197.8080			
Middle Ordinate:	31.872			
External:	31.901			
Tangent Direction: N 89°	05.78	E		
Radial Direction: S 00°	54.21	E		
Chord Direc	83°51'05.7885"			
Radial Direc	2°08'54.2115"	E		
Tangent Dir	°51'05.7885"	E		
Element: Linea				
P	314)	1087+17.0345	475068.2475	2090008.4647
PC	316)	1129+03.6355	475949.2939	2094101.3103
Tangent Direct	N 77°51'05.7885" E			
Tangen	Length:	4186.6009		
Element: Circular				
PC (	316)	1129+03.6355	475949.2939	2094101.3103
PI (	319)	1148+97.7074	476368.9351	2096050.7266
CC (	317)		472215.1147	2094905.1484
PT (	318)	1165+79.1910	475009.3646	2097509.4559
Radius:	3819.7186			
Delta:	55°08'00.0000" Right			
Degree of Curvature(Arc):	01°30'00.0000"			
Length:	3675.5555			
Tangent:	1994.0719			
Chord:	3535.3817			
Middle Ordinate:	433.6413			
External:	489.1760			
Tangent Direction: N 77°51'05.7885" E				
Radial Direction: S 12°08'54.2115" E				
Chord Direction: S 74°34'54.2115" E				
Radial Direction: S 42°59'05.7885" W				
Tangent Direction: S 47°00'54.2115" E				

Element: Linear				
PT (	318)	1165+79.1910	475009.3646	2097509.4559
PC (	320)	1196+24.4866	472933.0634	2099737.1899
Tangent Direction: S 47°00'54.2115" E				
Tangent Length:	3045.2956			
Element: Circular				
PC (	320)	1196+24.4866	472933.0634	2099737.1899
PI (	323)	1205+30.1521	472315.5752	2100399.7140
CC (	321)		474609.6134	2101299.7744
PT (	322)	1213+49.4866	472317.7891	2101305.3768
Radius:	2291.8312			
Delta:	43°07'30.0000" Left			
Degree of Curvature(Arc):	02°30'00.0000"			
Length:	1725.0000			
Tangent:	905.6655			
Chord:	1684.5690			
Middle Ordinate:	160.3887			
External:	172.4578			
Tangent Direction: S 47°00'54.2115" E				
Radial Direction: S 42°59'05.7885" W				
Chord Direction: S 68°34'39.2115" E				
Radial Direction: S 00°08'24.2115" E				
Tangent Direction: N 89°51'35.7885" E				
Element: Linear				
PT (	322)	1213+49.4866	472317.7891	2101305.3768
PC (	324)	1285+92.4420	472335.4943	2108548.3106
Tangent Direction: N 89°51'35.7885" E				
Tangent Length:	7242.9554			
Element: Circular				
PC (	324)	1285+92.4420	472335.4943	2108548.3106
PI (	327)	1292+19.6864	472337.0276	2109175.5530
CC (	325)		469470.7139	2108555.3135
PT (	326)	1298+27.4420	472076.3167	2109746.0487
Radius:	2864.7890			
Delta:	24°42'00.0000" Right			
Degree of Curvature(Arc):	02°00'00.0000"			
Length:	1235.0000			
Tangent:	627.2444			
Chord:	1225.4590			
Middle Ordinate:	66.2932			
External:	67.8636			
Tangent Direction: N 89°51'35.7885" E				
Radial Direction: S 00°08'24.2115" E				
Chord Direction: S 77°47'24.2115" E				
Radial Direction: S 24°33'35.7885" W				
Tangent Direction: S 65°26'24.2115" E				

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-9116

ALIGNMENT & CHECK LEVELS

SWO 5144(I) PROJECT NO. 29657(04) SHEET NO. S007

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 1 of 19
BM-76				1244.781	1244.781	1244.781	BM 76 - FOUND CUT "X" ON CENTER OF HEADWALL AS SHOWN ON SWO4762(1) PLAN SHEET 14 OF 20 LOCATED 1400'+/- WEST OF THE NS-294 ROAD AT STATION 590+87.5 OFFSET 24.2' Rt SAME BEING 80'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 10'+/- SOUTH OF THE SOUTH EDGE OF STATE HIGHWAY 29.
	-7.934	-7.931	-7.933				
BM-74				1236.847	1236.848	1236.836 0.012	BM 74 - FOUND CUT "[" ON CENTER OF SOUTH HEADWALL AS SHOWN ON SWO4762(1) PLAN SHEET 15 OF 20 LOCATED AT THE SW CORNER OF STATE HIGHWAY 29 AND NS-294 ROAD AT STATION 604+65.8 OFFSET 32.3' RIGHT SAME BEING 7.0'+/- WEST OF WEST EDGE OF NS-294 ROAD (MORRISON ROAD) AND 20'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-0.052	-0.052	-0.052				
CP 7400				1236.795	1236.797		ODOT Sta No S-69-738 - SET 5/8" IRON PIN IN CONCRETE WITH ALUMINUM CAP STAMPED "7400" LOCATED AT THE NW CORNER OF STATE HIGHWAY 29 AND NS-294 ROAD AT STATION 603+99.3 OFFSET 42.0' LEFT SAME BEING 81'+/- WEST OF THE CENTERLINE OF NS-294 ROAD (MORRISON ROAD) AND 25'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-16.043	-16.041	-16.042				
BM 1				1220.752	1220.755		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 680'+/- EAST OF THE NS-294 ROAD AT STATION 611+61.3 OFFSET 48.9'+/- RIGHT SAME BEING 10'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 36.7'+/- SOUTH OF THE SOUTH EDGE OF STATE HIGHWAY 29.
	-11.546	-11.545	-11.545				
BM 2				1209.206	1209.209		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1380'+/- EAST OF THE NS-294 ROAD AT STATION 618+50.4 OFFSET 50.5'+/- LEFT SAME BEING 7'+/- WEST OF WEST GATE POST AND 36.8'+/- NORTH OF THE NORTH EDGE OF STATE HIGHWAY 29.
	27.156	27.157	27.157				

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 2 of 19
BM 3				1236.363	1236.366		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2075'+/- EAST OF THE NS-294 ROAD AT STATION 625+55.7 OFFSET 50.2'+/- LEFT SAME BEING 115'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 36.6'+/- NORTH OF THE NORTH EDGE OF STATE HIGHWAY 29.
	1.567	1.568	1.568				
7301				1237.930	1237.934	1237.884 0.050	ODOT Sta No S-69-574 - FOUND 5/8" IRON PIN WITH 1.5" ALUMINUM CAP AS SHOWN ON SWO4762(1) PLAN SHEET 15 OF 20 LOCATED 2648'+/- EAST OF THE NS-294 ROAD AT STATION 631+29.4 OFFSET 38.3' RIGHT SAME BEING 48'+/- WEST OF A WOOD UTILITY ALONG THE SOUTH PRES. R/W LINE AND 26.3'+/- SOUTH OF THE SOUTH EDGE OF STATE HIGHWAY 29.
	-3.207	-3.208	-3.208				
BM 4				1234.722	1234.726		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2770'+/- EAST OF THE NS-294 ROAD AT STATION 632+51.3 OFFSET 51.4'+/- LEFT SAME BEING 111'+/- EAST OF A TELEPHONE PEDESTAL AND 38.1'+/- NORTH OF THE NORTH EDGE OF STATE HIGHWAY 29.
	-29.070	-29.070	-29.070				
BM 5				1205.653	1205.656		SET CUT "X" SW CORNER OF DROP INLET LOCATED 1825'+/- WEST OF NS-295 ROAD AT STATION 639+55.2 OFFSET 24.5' RIGHT SAME BEING 131'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 12.2'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-2.763	-2.765	-2.764				
BM 6				1202.889	1202.892		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1127'+/- WEST OF NS-295 ROAD AT STATION [illegible]4 OFFSET 50.4' LEFT SAME BEING 76'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 3[illegible]'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	25.675	25.678	25.677				
BM 7				1228.565	1228.568		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 430'+/- WEST OF NS-295 ROAD AT STATION [illegible]53+[illegible] OFFSET 58.9' RIGHT SAME BEING 128'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 46.9'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-19.178	-19.177	-19.177				

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 3 of 19
BM 8				1209.387	1209.391		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 218'+/- EAST OF NS-295 ROAD AT STATION 659+98.5 OFFSET 54.4' RIGHT SAME BEING 11.5'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 42.2'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-20.750	-20.750	-20.750				
BM 9				1188.637	1188.641	1188.670 -0.029	SET CUT "X" AT SW CORNER OF DROP INLET AS SHOWN ON SAP No. 920 A&B HIGHWAY PLANS LOCATED 651'+/- EAST OF NS-295 ROAD AT STATION 664+30.6 OFFSET [illegible] BEING 148.5'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 28.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	19.878	19.882	19.880				
BM 10				1208.515	1208.521		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 134[illegible]+/- EAST OF NS-295 ROAD AT STATION [illegible]571+24.3 OFFSET 52.7' RIGHT SAME BEING 17.5'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 41.0'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	0.742	0.745	0.744				
BM 11				1209.257	1209.265		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2028'+/- EAST OF NS-295 ROAD AT STATION 678+07.9 OFFSET 52.5' RIGHT SAME BEING 70.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 39.1'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-16.088	-16.085	-16.087				
BM 12				1193.159	1193.178		SET CUT "X" 1.0'+/- SOUTH OF NW CORNER 3'x3' DROP INLET LOCATED 2477'+/- EAST OF NS-295 ROAD AT STATION 682+57.6 OFFSET 32.7' RIGHT SAME BEING 84.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 19.6'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-3.070	-3.070	-3.070				
BM 13				1190.099	1190.108		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2111'+/- WEST OF NS-296 ROAD AT STATION 689+46.6 OFFSET 57.4' RIGHT SAME BEING 83'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 44.5'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-36.954	-36.955	-36.954				

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 4 of 19
BM [illegible]				1153.144	1153.154		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1416'+/- WEST OF NS-2956 ROAD AT STATION 696+41.8 OFFSET 55.4' RIGHT SAME BEING 12.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 43.8'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-7.182	-7.182	-7.182				
BM 15				1145.962	1145.972		SET CUT "X" SW CORNER SOUTH HEADWALL FOR 6'x4' BOX CULVERT LOCATED 1209'+/- WEST OF NS-296 ROAD AT STATION 698+49.2 OFFSET 22.7' RIGHT SAME BEING 81.5+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 10.4'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-7.759	-7.759	-7.759				
BM 16				1138.203	1138.212		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 512'+/- WEST OF NS-296 ROAD AT STATION 705+45.8 OFFSET 55.3' RIGHT SAME BEING 74'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 40.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-1.467	-1.468	-1.467				
BM 17				1136.736	1136.745	1136.780 -0.035	SET CUT "X" SW CORNER OF SOUTH HEADWALL AS SHOWN ON SAP No. 920 A&B HIGHWAY PLANS LOCATED 197'+/- WEST OF NS-296 ROAD AT STATION 708+60.8 OFFSET 21.7' RIGHT SAME BEING 32'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 6.2'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-4.680	-4.677	-4.678				
BM 18				1132.056	1132.067		SET CUT "X" NE CORNER HEADWALL LOCATED 26.2'+/- WEST OF NS-296 ROAD AT STATION 710+31.6 OFFSET 38.3' RIGHT SAME BEING 139'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 23.2'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-4.868	-4.869	-4.868				
BM 19				1127.188	1127.199		SET CUT "X" NW CORNER DROP INLET LOCATED 450'+/- EAST OF NS-296 ROAD AT STATION 715+07.7 OFFSET 23.1' LEFT SAME BEING 95'+/- WEST OF A SUNOCO GAS MARKER SIGN AND 11.6'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	2.008	2.008	2.008				

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
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100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone:(405) 840-7094
FAX:(405) 840-9116

CHECK LEVELS

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S008

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION
							Page 5 of 19
CP 7401				1129.195	1129.206		ODOT Sta No S-69-769 - SET 5/8" IRON PIN WITH 2" ALUMINUM CAP STAMPED "7401" LOCATED 565'+/- EAST OF NS-296 ROAD AT STATION 716+22.4 OFFSET 38.4' LEFT SAME BEING 18.5'+/- EAST OF A SUNOCO GAS MARKER SIGN AND 26.8'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-23.512	-23.516	-23.514				
BM 20				1105.683	1105.692		SET CUT "X" SE CORNER HEADWALL LOCATED 1437'+/- EAST OF NS-296 ROAD AT STATION 724+94.8 OFFSET 26.8' RIGHT SAME BEING 38'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 14.0'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-1.405	-1.402	-1.404				
BM 21				1104.278	1104.288		SET CUT "X" NW CORNER SOUTH HEADWALL LOCATED 2077'+/- EAST OF NS-296 ROAD AT STATION 731+34.5 OFFSET 33.0' RIGHT SAME BEING 18.5'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 20.0'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-12.270	-12.271	-12.270				
BM 22				1092.008	1092.018		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2508'+/- WEST OF NS-297 ROAD AT STATION 738+33.4 OFFSET 57.0' RIGHT SAME BEING 180'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 44.1'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-4.943	-4.947	-4.945				
BM 23				1087.066	1087.073		SET CUT "X" NE WINGWALL FOR BRIDGE OVER BLACK BEAR CREEK LOCATED 1659'+/- WEST OF NS-297 ROAD AT STATION 746+82.20 OFFSET 13.3' LEFT SAME BEING 2.2'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-4.177	-4.177	-4.177				
BM 24				1082.889	1082.896	1082.960 -0.064	SET CUT "X" 2' WEST OF SE CORNER SOUTH HEADWALL AS SHOWN ON SAP No. 920 A&B HIGHWAY PLANS LOCATED 1266'+/- WEST OF NS-297 ROAD AT STATION 750+74.9 OFFSET 29.9' RIGHT SAME BEING 41'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 17.2'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	4.485	4.488	4.487				

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION
							Page 6 of 19
BM 25				1087.374	1087.382		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 570'+/- WEST OF NS-297 ROAD AT STATION 757+71.5 OFFSET 32.3' LEFT SAME BEING 114'+/- WEST OF A WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND 49.8'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	18.219	18.217	18.218				
BM 26				1105.592	1105.601	1105.640 -0.040	SET CUT "X" NORTH CORNER OF WEST HEADWALL AS SHOWN ON SAP No. 920 A&B HIGHWAY PLANS LOCATED 9'+/- WEST OF NS-297 ROAD AT STATION 763+31.8 OFFSET 46.2' LEFT SAME BEING 5'+/- WEST OF A STOP SIGN AND 32.5'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	24.187	24.188	24.188				
BM 27				1129.780	1129.788		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 685'+/- EAST OF NS-297 ROAD AT STATION 770+25.2 OFFSET 25.1' RIGHT SAME BEING 48'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 13.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-13.962	-13.961	-13.962				
BM 28				1115.818	1115.826		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1384'+/- EAST OF NS-297 ROAD AT STATION 777+24.8 OFFSET 53.7' RIGHT SAME BEING 43.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 40.8'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-13.191	-13.190	-13.191				
BM 29				1102.627	1102.636	1102.660 -0.024	SET CUT "X" NW WINGWALL FOR TRIPLE BOX CULVERT AS SHOWN ON SAP No. 920 A&B HIGHWAY PLANS LOCATED 2036' EAST OF NS-297 ROAD AT STATION 783+[illegible] OFFSET 15.4' LEFT SAME BEING 3.5'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	14.608	14.609	14.609				
BM 30				1117.235	1117.245		SET 5/8" IRON PIN WITH NO CAP LOCATED 567'+/- WEST OF NS-297 ROAD AT STATION 790+[illegible] OFFSET 48.3' LEFT SAME BEING 102' WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 36.9'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	29.078	29.078	29.078				

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION
							Page 7 of 19
BM 31				1146.313	1146.323		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1868'+/- WEST OF NS-298 ROAD AT STATION 797+68.3 OFFSET 49.0' LEFT SAME BEING 47'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 35.8'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	17.701	17.703	17.702				
BM 32				1164.014	1164.024		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1184'+/- WEST OF NS-298 ROAD AT STATION 804+52.3 OFFSET [illegible]5' RIGHT SAME BEING 2.5'+/- EAST OF A WOO[illegible]TY POLE ALONG THE SOUTH PRES. R/W LINE AND 3[illegible] SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-10.786	-10.786	-10.786				
BM 33				1153.228	1153.238		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 46[illegible] WEST OF NS-298 ROAD AT STATION 8[illegible] OFFSET 63.0' RIGHT SAME BEING 135'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 45.8'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-6.864	-6.864	-6.864				
BM 34				1146.364	1146.374		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 208'+/- EAST OF NS-298 ROAD AT STATION 818+44.0 OFFSET 60.7' RIGHT SAME BEING 8.5'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 43.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	30.322	30.321	30.321				
BM 35				1176.686	1176.695		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 901'+/- EAST OF NS-298 ROAD AT STATION 825+36.4 OFFSET 62.7' RIGHT SAME BEING 60.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 44.2'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-1.805	-1.804	-1.804				
BM 36				1174.881	1174.891		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1593'+/- EAST OF NS-298 ROAD AT STATION 832+28.5 OFFSET 51.0' RIGHT SAME BEING 117'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 34.8'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-7.827	-7.825	-7.826				

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION
							Page 8 of 19
BM [illegible]				1167.054	1167.065		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2045'+/- EAST OF NS-298 ROAD AT STATION 836+80.4 OFFSET 68.7' RIGHT SAME BEING 77.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 50.7'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	1.502	1.500	1.501				
BM 38				1168.566	1168.566		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2569'+/- WEST OF NS-299 ROAD AT STATION 843+50.0 OFFSET 104.3' RIGHT SAME BEING 10.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 85.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-6.617	-6.617	-6.617				
BM 39				1161.939	1161.949		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1871'+/- WEST OF NS-299 ROAD AT STATION 850+47.7 OFFSET 103.0' LEFT SAME BEING 72.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 84.8'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-29.564	-29.561	-29.563				
BM 40				1132.375	1132.387		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1171'+/- WEST OF NS-299 ROAD AT STATION 857+47.1 OFFSET 103.5' RIGHT SAME BEING 88.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 86.0'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-32.168	-32.167	-32.167				
BM 41				1100.207	1100.220		SET CUT "X" CENTER OF EAST HEADWALL LOCATED 623'+/- WEST OF NS-299 ROAD AT STATION 862+95.3 OFFSET 70.6' RIGHT SAME BEING 10.5'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 51.9'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	0.8356	0.835	0.8353				
BM 42				1101.043	1101.055		SET CUT "X" SW WINGWALL TRIPLE BOX CULVERT OVER WEST FISH CREEK LOCATED 286'+/- WEST OF NS-299 ROAD AT STATION 866+32.5 OFFSET 22.0' RIGHT SAME BEING 23.0'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 4.2' +/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	14.436	14.432	14.434				

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
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CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

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CHECK LEVELS

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S009

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

SWO 5144(1) — **CHECK LEVELS** — **BENCH MARK LIST** — **NAVD 88 DATUM (-0.31 TO 29 NGVD)**

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION
							Page 9 of 19
BM 43				1115.479	1115.489		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 397'+/- EAST OF NS-299 ROAD AT STATION 873+15.2 OFFSET 63.2' RIGHT SAME BEING 107'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 45.3+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-2.520	-2.524	-2.522				
BM 44				1112.959	1112.967		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1061'+/- EAST OF NS-299 ROAD AT STATION 879+79.4 OFFSET 61.2' LEFT SAME BEING 17.0'+/- WEST OF A KINDER MORGAN GAS MARKER AND 45.6'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-5.354	-5.352	-5.353				
BM 45				1107.605	1107.614		SET CUT "X" SE CORNER SOUTH HEADWALL LOCATED 1361'+/- EAST OF NS-299 ROAD AT STATION 882+79.5 OFFSET 41.4' RIGHT SAME BEING 147'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 24.6'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	2.291	2.291	2.291				
BM 46				1109.896	1109.905		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2051'+/- EAST OF NS-299 ROAD AT STATION 889+69.1 OFFSET 62.5' RIGHT SAME BEING 46.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 46.4'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-3.749	-3.750	-3.749				
BM 47				1106.147	1106.156		SET CUT "X" SW WINGWALL FOR TRIPLE BOX CULVERT OVER EAST FISH CREEK LOCATED 2566'+/- EAST OF NS-299 ROAD AT STATION 894+84.1 OFFSET 21.2' RIGHT SAME BEING 58.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 5.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-0.580	-0.580	-0.580				
BM 48				1105.567	1105.576		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2152'+/- WEST OF NS-300 ROAD AT STATION 901+34.0 OFFSET 58.3' RIGHT SAME BEING 91.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 42.1'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	32.596	32.598	32.597				

SWO 5144(1) — **CHECK LEVELS** — **BENCH MARK LIST** — **NAVD 88 DATUM (-0.31 TO 29 NGVD)**

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION
							Page 10 of 19
BM 49				1138.163	1138.173		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1471'+/- WEST OF NS-300 ROAD AT STATION 908+14.9 OFFSET 60.4' RIGHT SAME BEING 16.0'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 44.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	9.748	9.747	9.747				
BM 50				1147.911	1147.920		SET CUT "X" EAST END OF SOUTH HEADWALL LOCATED 1082'+/- WEST OF NS-300 ROAD AT STATION 912+04.4 OFFSET 28.4' RIGHT SAME BEING 97.0'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 12.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	31.103	31.102	31.102				
BM 51				1179.014	1179.022		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 396'+/- WEST OF NS-300 ROAD AT STATION 918+90.3 OFFSET 61.8' RIGHT SAME BEING 33.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 45.1'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	5.714	5.712	5.713				
BM 52				1184.728	1184.735	1184.630 0.105	FOUND CUT "X" WEST END OF STORM CELLAR AS SHOWN ON FAP No. F-146(6) HIGHWAY PLANS LOCATED 287'+/- EAST OF NS-300 ROAD AT STATION 919+99.4 OFFSET 78.9' LEFT SAME BEING 93.0'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 63.8'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-12.548	-12.546	-12.547				
BM 53				1172.180	1172.188		SET CUT "X" SW CORNER OF HEADWALL FOR DROP INLET LOCATED 66.5'+/- EAST OF NS-300 ROAD AT STATION 923+53.0 OFFSET 38.8' LEFT SAME BEING 22.0'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 23.0'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	14.424	14.420	14.422				
BM 54				1186.603	1186.610		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 763'+/- EAST OF NS-300 ROAD AT STATION 930+49.3 OFFSET 61.3' RIGHT SAME BEING 16.0'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 44.6'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29 (WEST OF WEST GATE POST).
	-9.072	-9.076	-9.074				

SWO 5144(1) — **CHECK LEVELS** — **BENCH MARK LIST** — **NAVD 88 DATUM (-0.31 TO 29 NGVD)**

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION
							Page 11 of 19
BM 55				1177.531	1177.536		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1272'+/- EAST OF NS-300 ROAD AT STATION 935+57.7 OFFSET 62.9' RIGHT SAME BEING 3.0'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 45.5'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-10.553	-10.554	-10.553				
BM 56				1166.979	1166.983		SET CUT "X" SE CORNER SOUTH HEADWALL LOCATED 1504' EAST OF NS-300 ROAD AT STATION 937+90.0 OFFSET [illegible] RIGHT SAME BEING 54.0'+/- WEST OF A WO[illegible] UTILITY P[illegible] ALONG SOUTH PRES. R/W LINE AND 2[illegible] SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	17.957	17.959	17.958				
BM 57				1184.935	1184.941		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 21[illegible]' EAST OF NS-300 ROAD AT STA[illegible]+29.3 OFFSET 63.[illegible] LEFT SAME BEING 159'+/- WEST OF A W[illegible]OD UTILITY P[illegible] ALONG THE SOUTH PRES. R/W LINE AND 49.5'[illegible] NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	21.800	21.803	21.801				
BM 58				1206.736	1206.742		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2455'+/- WEST OF NS-301 ROAD AT STATION 951+16.1 OFFSET 61.4' RIGHT SAME BEING 59.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 44.1+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	4.561	4.562	4.562				
BM 59				1211.297	1211.304		SET CUT "X" SE CORNER DROP INLET LOCATED 1732'+/- WEST OF NS-301 ROAD AT STATION 958+39.4 OFFSET 33.1' LEFT SAME BEING 70'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 18.7'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	22.017	22.015	22.016				
BM 60				1233.313	1233.320		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1070+/- WEST OF NS-301 ROAD AT STATION 965+01.6 OFFSET 68.4' LEFT SAME BEING 63.5'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 54.4+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-18.037	-18.038	-18.037				

SWO 5144(1) — **CHECK LEVELS** — **BENCH MARK LIST** — **NAVD 88 DATUM (-0.31 TO 29 NGVD)**

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION
							Page 12 of 19
BM [illegible]				1215.277	1215.282		SET CUT "X" NE CORNER DROP INLET LOCATED 413'+/- WEST OF NS-301 ROAD AT STATION 971+59.1 OFFSET 56.2' LEFT SAME BEING 70.0'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 42.1'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	12.645	12.644	12.644				
BM 62				1227.922	1227.927		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 274'+/- EAST OF NS-301 ROAD AT STATION 978+45.1 OFFSET 68.2' RIGHT SAME BEING 71.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE ALSO 8.5'+/- EAST OF A VENT PIPE AND 51.1'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-18.926	-18.923	-18.924				
BM 63				1208.996	1209.002		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 657'+/- EAST OF NS-301 ROAD AT STATION 982+28.4 OFFSET 69.6' RIGHT SAME BEING 7.2'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 53.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-23.5233	-23.524	-23.523				
BM 64				1185.472	1185.479		SET CUT "X" SE CORNER HEADWALL LOCATED 1124'+/- EAST OF NS-301 ROAD AT STATION 986+95.2 OFFSET 36.6' RIGHT SAME BEING 112'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 20.9'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	23.450	23.451	23.451				
BM 65				1208.922	1208.930		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1807'+/- EAST OF NS-301 ROAD AT STATION 993+78.9 OFFSET 66.5' LEFT SAME BEING 144'+/- WEST OF A WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND 50.6'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	26.532	26.530	26.531				
BM 66				1235.454	1235.461		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2511'+/- EAST OF NS-301 ROAD AT STATION 1000+83.2 OFFSET 69.8' LEFT SAME BEING 100'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 54.4'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-4.067	-4.070	-4.069				

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone:(405) 840-7094
FAX:(405) 840-9176

CHECK LEVELS

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S010

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 13 of 19
CP 7402				1231.387	1231.392		ODOT Sta No S-69-770 - SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2536'+/- WEST OF NS-302 ROAD AT STATION 1003+18.7 OFFSET 46.7'+/- RIGHT SAME BEING 72'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 30.2'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-11.441	-11.441	-11.441				
BM 67				1219.946	1219.951		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2072'+/- WEST OF NS-302 ROAD AT STATION 1007+82.4 OFFSET 60.0' RIGHT SAME BEING 0.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 42.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-18.332	-18.334	-18.333				
BM 68				1201.615	1201.618		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1409'+/- WEST OF NS-302 ROAD AT STATION 1014+44.8 OFFSET 52.5' LEFT SAME BEING 5.0'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 36.4'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-14.890	-14.892	-14.891				
BM 69				1186.724	1186.727		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 839'+/- WEST OF NS-302 ROAD AT STATION 1020+14.9 OFFSET 61.4' RIGHT SAME BEING 99.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 44.7'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-17.775	-17.772	-17.774				
BM 70				1168.949	1168.954		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 171'+/- WEST OF NS-302 ROAD AT STATION 1026+83.5 OFFSET 72.2' RIGHT SAME BEING 3'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 55.7'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	18.889	18.892	18.891				
BM 71				1187.839	1187.844		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 488'+/- EAST OF NS-302 ROAD AT STATION 1033+42.4 OFFSET 82.3' RIGHT SAME BEING 33.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 64.9'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-25.435	-25.434	-25.434				

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 14 of 19
BM 72				1162.404	1162.410		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1183'+/- EAST OF NS-302 ROAD AT STATION 1040+37.6 OFFSET 59.7' RIGHT SAME BEING 76.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 43.3+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-9.461	-9.461	-9.461				
BM 73				1152.943	1152.949		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1881'+/- EAST OF NS-302 ROAD AT STATION 1047+35.1 OFFSET 60.4' LEFT SAME BEING 52.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 43.2'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	18.591	18.591	18.591				
BM 75				1171.534	1171.540		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2580'+/- EAST OF NS-302 ROAD AT STATION 1054+34.2 OFFSET 58.2' RIGHT SAME BEING 29.5'+/- WEST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 43.9'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-6.474	-6.474	-6.474				
BM 77				1165.060	1165.067		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2108'+/- WEST OF NS-303 ROAD AT STATION 1060+22.3 OFFSET 56.9' LEFT SAME BEING 21.0'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 38.7'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-12.085	-12.085	-12.085				
BM 78				1152.975	1152.982		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1420'+/- WEST OF NS-303 ROAD AT STATION 1070+10.6 OFFSET 58.1' LEFT SAME BEING 62.0'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 43'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-15.075	-15.076	-15.076				
BM 79				1137.900	1137.906		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 735'+/- WEST OF NS-303 ROAD AT STATION 1073+[illegible] OFFSET 62.2' RIGHT SAME BEING [illegible]'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 24.9'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-32.347	-32.346	-32.346				

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 15 of 19
BM 80				1105.553	1105.560		SET CUT "X" SE CORNER OF SOUTH HEADWALL LOCATED 28.5'+/- WEST OF NS-303 ROAD AT STATION 1080+96.3 OFFSET 70.9' RIGHT SAME BEING 25.0'+/- EAST OF A WOOD UTILITY POLE ALONG THE SOUTH PRES. R/W LINE AND 23.7'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-11.923	-11.922	-11.923				
BM 81				1093.630	1093.637		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 512'+/- EASTERLY OF NS-303 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1086+43.[illegible] OFFSET 68.[illegible] RIGHT SAME BEING 145.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND [illegible].6'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-22.360	-22.361	-22.360				
BM 82				1071.270	1071.277	1071.320 -0.043	SET CUT "X" SE CORNER SOUTH HEADWALL AS SHOWN ON FAP No. F-146(6) HIGHWAY PLANS LOCATED 1008'+/- EASTERLY OF NS-303 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1091+40.0 OFFSET 43.5' RIGHT SAME BEING 30'+/- WEST OF THE WEST EDGE OF ASPHALT DRIVE AND [illegible].8'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	10.665	10.660	10.663				
BM 83				1081.935	1081.939		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1699'+/- EASTERLY OF NS-303 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1098+30.9 OFFSET 42.0' RIGHT SAME BEING 144'+/- WEST OF A WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND 24.5'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-10.580	-10.579	-10.580				
BM 84				1071.355	1071.359		SET CUT "X" SW CORNER NORTH HEADWALL LOCATED 2316'+/- EASTERLY OF NS-303 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1104+48.0 OFFSET 32.1' LEFT SAME BEING 86.5'+/- WEST OF A WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND 18.6'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-1.745	-1.746	-1.745				

SWO 5144(1) — CHECK LEVELS — BENCH MARK LIST — NAVD 88 DATUM (-0.31 TO 29 NGVD)

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 16 of 19
BM [illegible]				1069.610	1069.614		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2386'+/- WESTERLY OF NS-304 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1111+29.8 OFFSET 39.7' RIGHT SAME BEING 40.5'+/- EAST OF WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND 21.5'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-6.446	-6.447	-6.447				
BM 86				1063.163	1063.167	1063.090 0.077	SET CUT "X" SE CORNER SOUTH HEADWALL AS SHOWN ON FAP No. F-146(6) HIGHWAY PLANS LOCATED 1871'+/- WESTERLY OF NS-304 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1116+45.1 OFFSET 30.5' RIGHT SAME BEING 54.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND 11.9'+/-SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-0.469	-0.466	-0.468				
BM 87				1062.695	1062.700		SET CUT "X" SW CORNER NORTH HEADWALL LOCATED 1200'+/- WESTERLY OF NS-304 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1123+16.3 OFFSET 23.9' LEFT SAME BEING 49.5'+/- EAST OF A WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND 10.7'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	9.755	9.756	9.756				
BM 88				1072.450	1072.455		SET CUT "X" SE CORNER SOUTH HEADWALL LOCATED 487'+/- WESTERLY OF NS-304 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1130+28.6 OFFSET 29.2' RIGHT SAME BEING 69'+/- WEST OF A WOOD UTILITY POLE LYING NORTH OF STATE HIGHWAY 29 AND 10.4'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	3.746	3.748	3.747				
BM 89				1076.196	1076.202		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 218'+/- EASTERLY OF NS-304 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1137+33.9 OFFSET 45.2' LEFT SAME BEING 106'+/- WEST OF A WOOD UTILITY POLE LYING NORTH OF STATE HIGHWAY 29 AND 29.5'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	-25.406	-25.407	-25.407				

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone:(405) 840-7094
FAX:(405) 840-9116

CHECK LEVELS

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S011

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

CHECK LEVELS — **BENCH MARK LIST**

SWO 5144(1) — **NAVD 88 DATUM (-0.31 TO 29 NGVD)**

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 17 of 19
BM 90				1050.790	1050.796		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 964'+/- EASTERLY OF NS-304 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1144+80.4 OFFSET 55.4' LEFT SAME BEING 100'+/- WEST OF A WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND 40.7'+/- NORTH OF NORTH EDGE OF STATE HIGHWAY 29.
	1.438	1.440	1.439				
BM 91				1052.228	1052.235		SET CUT "X" CENTER OF WEST HEADWALL LOCATED 1340'+/- EASTERLY OF NS-304 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1148+56.5 OFFSET 35.7' RIGHT SAME BEING 30'+/- EAST OF A WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND 18.0'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-2.064	-2.066	-2.065				
BM 92				1050.164	1050.170		SET CUT "X" SE CORNER SOUTH HEADWALL LOCATED 1665'+/- EASTERLY OF NS-304 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1151+81.4 OFFSET 25.1' RIGHT SAME BEING 107'+/- EAST OF A WOOD UTILITY POLE ALONG THE NORTH PRES. R/W LINE AND 8.8'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	-6.060	-6.060	-6.060				
BM 93				1044.104	1044.110		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2335'+/- EASTERLY OF NS-304 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1159+50.6 OFFSET 56.5' RIGHT SAME BEING 332'+/- EAST OF A SIGN "SCHOOL BUS STOP AHEAD" AND 41.3'+/- SOUTH OF SOUTH EDGE OF STATE HIGHWAY 29.
	0.331	0.331	0.331				
BM 94				1044.435	1044.441		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 3208'+/- NW OF NS-305 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1167+47.8 OFFSET 61.1' RIGHT SAME BEING 2.0'+/- SE OF A WOOD UTILITY POLE ALONG THE NE PRES. R/W LINE AND 43.2'+/- SE OF SE EDGE OF STATE HIGHWAY 29.
	-11.534	-11.531	-11.532				

CHECK LEVELS — **BENCH MARK LIST**

SWO 5144(1) — **NAVD 88 DATUM (-0.31 TO 29 NGVD)**

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 18 of 19
BM 95				1032.901	1032.909		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 2262'+/- NW OF NS-305 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1176+94.2 OFFSET 66.5' RIGHT SAME BEING 106'+/- NW OF A WOOD UTILITY POLE ALONG THE NE PRES. R/W LINE AND 48.6+/- SE OF SE EDGE OF STATE HIGHWAY 29.
	2.494	2.490	2.492				
BM 96				1035.395	1035.400		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 1479'+/- NW OF NS-305 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1184+76.6 OFFSET 70.9' RIGHT SAME BEING 81.0'+/- SE OF A WOOD UTILITY POLE ALONG THE NE PRES. R/W LINE AND 55.2'+/- SE OF SE EDGE OF STATE HIGHWAY 29.
	1.407	1.406	1.406				
BM 97				1036.802	1036.807		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 956'+/- NW OF NS-305 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1190+00.3 OFFSET 60.5' LEFT SAME BEING 106'+/- SE OF A WOOD UTILITY POLE ALONG THE NE PRES. R/W LINE AND 44.8+/- NE OF NE EDGE OF STATE HIGHWAY 29.
	2.747	2.747	2.747				
BM 98				1039.549	1039.554		SET CUT "X" NW CORNER SOUTH HEADWALL LOCATED 630'+/- NW OF NS-305 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1193+25.7 OFFSET 24.9' RIGHT SAME BEING 111'+/- NW OF A WOOD UTILITY POLE ALONG THE NE PRES. R/W LINE AND 9.1'+/- SW OF SW EDGE OF STATE HIGHWAY.
	-0.708	-0.709	-0.709				
BM 99				1038.841	1038.845		SET CUT "X" NE CORNER NORTH HEADWALL LOCATED 365'+/- NW OF NS-305 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1195+91.2 OFFSET 31.4' LEFT SAME BEING 108'+/- NW OF A WOOD UTILITY POLE ALONG THE NE PRES. R/W LINE AND 13.0+/- NE OF NE EDGE OF STATE HIGHWAY.
	10.171	10.171	10.171				
BM 100				1049.012	1049.016		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 340'+/- EASTERLY OF NS-305 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1205+95.2 OFFSET 68.6' LEFT SAME BEING 3.0'+/- WESTERLY OF THE WEST POST FOR A GATE AND 57.5'+/- NORTHERLY OF NORTHERLY EDGE OF STATE HIGHWAY 29.
	4.911	4.910	4.911				

CHECK LEVELS — **BENCH MARK LIST**

SWO 5144(1) — **NAVD 88 DATUM (-0.31 TO 29 NGVD)**

BM NO.	RUN 1	RUN 2	MEAN DIFF.	UNADJ. ELEV.	ADJ. ELEV	PUBLISHED ELEV.	BM DESCRIPTION Page 19 of 19
CP 7403				1053.923	1053.927		ODOT Sta No G-25-709 - SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED 438'+/- EASTERLY OF NS-305 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1203+94.3 OFFSET 63.4' LEFT SAME BEING 18.5'+/- EASTERLY OF THE EAST EDGE OF A GRAVEL DRIVE AND 50.0'+/-SOUTHERLY OF SOUTHERLY EDGE OF STATE HIGHWAY 29.
	-27.062	-27.062	-27.062				
BM 101				1026.861	1026.865		SET 5/8" IRON PIN WITH 2" ALUMINUM CAP LOCATED [illegible]'+/- EASTERLY OF NS-305 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 121[illegible].0 OFFSET 55.9' LEFT SAME BEING 3.0'+/- WESTERLY OF SIGN "KEEP A[illegible] LAN[illegible]RAND" LYING SOUTH OF STATE HIGHWAY 29 AND [illegible]7'+/- NORTHERLY OF NORTHERLY EDGE OF STATE HIGHWAY 29.
	1.016	1.017	1.016				
BM 102				1027.877	1027.881	1027.754 0.127	SET CUT "X" ON NORTHWEST WING WALL OF BRIDGE OVER WEST SALT CREEK LOCATED 181[illegible] EASTERLY OF NS-305 ROAD (AS MEASURED ALONG THE CENTERLINE) AT STATION 1217+70.1 OFFSET 18.4' LEFT. THIS ELEVATION IS BASED ON GPS OBSERVATION UTILIZING NGS DATA POINT PID EL1055.

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone:(405) 840-7094
FAX:(405) 840-9116

CHECK LEVELS

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S012

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
1	2042462.0320000	474791.3960000	1220.7550	42	2067933.1270000	474863.8510000	1101.0550
2	2043160.8930000	474892.1180000	1209.2090	43	2068615.9520000	474824.4900000	1115.4890
3	2043856.2590000	474893.0680000	1236.3660	44	2069279.8070000	474950.5920000	1112.9670
4	2044551.8130000	474895.5130000	1234.7260	45	2069580.1350000	474848.7120000	1107.6140
5	2045255.8230000	474820.8820000	1205.6560	46	2070269.8730000	474829.4630000	1109.9050
6	2045953.8900000	474897.0410000	1202.8920	47	2070784.7160000	474872.0270000	1106.1560
7	2046650.5270000	474789.0180000	1228.5680	48	2071434.6890000	474836.6500000	1105.5760
8	2047299.1510000	474794.3140000	1209.3910	49	2072115.6000000	474836.2680000	1138.1730
9	2047731.2400000	474808.4460000	1188.6410	50	2072505.0050000	474869.3320000	1147.9200
10	2048424.9300000	474796.9120000	1208.5210	51	2073191.0610000	474837.7100000	1179.0220
11	2049108.5700000	474797.7350000	1209.2650	52	2073299.8020000	474978.6360000	1184.7350
12	2049558.2630000	474817.8820000	1193.1780	53	2073653.4640000	474939.5060000	1172.1880
13	2050247.3160000	474793.7800000	1190.1080	54	2074350.0210000	474841.1960000	1186.6100
14	2050942.4240000	474796.3480000	1153.1540	55	2074858.4170000	474840.9370000	1177.5360
15	2051149.8670000	474829.1720000	1145.9720	56	2075090.7120000	474859.8980000	1166.9830
16	2051846.5100000	474797.1870000	1138.2120	57	2075729.6840000	474969.2090000	1184.9410
17	2052161.4180000	474831.1200000	1136.7450	58	2076416.8530000	474846.4100000	1206.7420
18	2052332.2180000	474814.5780000	1132.0670	59	2077139.8320000	474942.7860000	1211.3040
19	2052808.2690000	474876.4290000	1127.1990	60	2077801.9660000	474979.8110000	1233.3200
20	2053795.4340000	474827.4010000	1105.6920	61	2078459.4530000	474969.3390000	1215.2820
21	2054435.1520000	474821.6540000	1104.2880	62	2079145.8470000	474846.6860000	1227.9270
22	2055134.0240000	474798.2430000	1092.0180	63	2079529.1520000	474846.3370000	1209.0020
23	2055982.8090000	474869.2720000	1087.0730	64	2079995.8180000	474880.4660000	1185.4790
24	2056375.5510000	474826.4820000	1082.8960	65	2080679.2940000	474985.3970000	1208.9300
25	2057072.0860000	474919.2240000	1087.3820	66	2081383.5620000	474990.4710000	1235.4610
26	2057632.3780000	474903.6020000	1105.6010	67	2082083.0610000	474862.5150000	1219.9510
27	2058326.8140000	474832.8410000	1129.7880	68	2082745.1940000	474976.7690000	1201.6180
28	2059025.5560000	474806.0290000	1115.8260	69	2083315.5730000	474864.2970000	1186.7270
29	2059677.4370000	474877.2400000	1102.6360	70	2083984.1940000	474855.2540000	1168.9540
30	2060369.9230000	474912.3480000	1117.2450	71	2084643.1720000	474846.9010000	1187.8440
31	2061068.7330000	474915.2570000	1146.3230	72	2085338.3220000	474871.2840000	1162.4100
32	2061753.0750000	474816.7730000	1164.0240	73	2086035.4320000	474993.1520000	1152.9490
33	2062449.0120000	474807.6280000	1153.2380	74	2041766.4630000	474806.7610000	1236.8360
34	2063144.7620000	474812.0910000	1146.3740	75	2086734.8450000	474876.3870000	1171.5400
35	2063837.1640000	474812.3230000	1176.6950	76	2040388.4370000	474812.3520000	1244.7810
36	2064529.1830000	474826.0320000	1174.8910	77	2087322.6840000	474993.0170	067
37	2064981.2050000	474809.5130000	1167.0650	78	2088010.9370000	474995	820
38	2065650.8980000	474775.6860000	1168.5560	79	2088696.7560000	474	060
39	2066348.5020000	474778.7700000	1161.9490	80	2089403.1290000	474	600
40	2067047.9350000	474780.1110000	1132.3870	81	2089923.0900000	475119.	6370
41	2067596.0170000	474814.4040000	1100.2200	82	2090431.1540000	475114.75	1071.2770

Page 1 of 18

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
83	2091106.2230000	475261.5840000	1081.9390	321	2101299.7744324	474609.6133852	0.0000
84	2091693.9270000	475463.8880000	1071.3590	322	2101305.3767767	472317.7890526	0.0000
85	2092375.5790000	475537.1570000	1069.6140	323	2100399.7140162	472315.5751680	0.0000
86	2092877.4100000	475654.6340000	1063.1670	324	2108548.3105528	472335.4943403	0.0000
87	2093522.1290000	475849.0870000	1062.7000	325	2108555.3134832	469470.7139296	0.0000
88	2094229.1130000	475944.8270000	1072.4550	326	2109746.0486709	472076.3166536	0.0000
89	2094925.7560000	476079.9820000	1076.2020	327	2109175.5530353	472337.027629	0000
90	2095677.9440000	476012.3910000	1050.7960	328	2041781.1391859	474839.0	0000
91	2096020.6680000	475831.0190000	1052.2350	329	2044430.9518155	47484	0000
92	2096327.7600000	475733.0010000	1050.1700	330	2047080.9323592	474848.	0000
93	2096902.4500000	475404.5450000	1044.1100	331	2049719.6192121	474850.70	0.0000
94	2097591.1400000	474849.6500000	1044.4410	332	2052358.3046896	474852.934	0.0000
95	2098279.8160000	474200.4880000	1032.9090	333	2054999.926945	474855.1655	0.0000
96	2098849.1710000	473663.8380000	1035.4000	334	2057641.726003	474857.3968087	0.0000
97	2099321.8110000	473402.8750000	1036.8070	335	2060	474863.7503844	0.0000
98	2099501.6320000	473118.5510000	1039.5540	336	2	474872.1613339	0.0000
99	2099734.1200000	472978.3800000	1038.8450	337	2065577.81	474879.7682458	0.0000
100	2100317.6260000	472615.0290000	1049.0160	338	2068219.1187	474886.6090621	0.0000
101	2100971.3550000	472397.9090000	1026	339	59598.4512884	474890.1814453	0.0000
102	2101726.0170000	472337.1730000	10	3810	2	586.9416294	474900.5113808	0.0000
300	2020671.7347476	474810.1207342	0.0	000	3	29.5846756	474907.3556577	0.0000
301	2023602.4710	474795	0.0	0	3	2078872.2277440	474914.1999347	0.0000
302	2023672.8876498	48	0.0	239779	0.0	2081513.5022350	474921.0406671	0.0000
303	2023779.4680937	4747	0.0	468237	0.0000	2084154.7791001	474927.8814057	0.0000
304	2023690.9707518	4747	0.0	209375	0.0000	2086793.1861766	474934.7147117	0.0000
305	2025	4812.	0.0	650	0.0000	2089431.1274006	474974.5052601	0.0000
306	2	4816.	0.0	00	0.0000	2092070.2277912	475512.0729534	0.0000
307	2	4	0.0	4899	0.0000	2094707.7641089	476029.7299732	0.0000
308	2044	474858.2466524	0.0000	349	2097352.5255961	475147.7918081	0.0000	
309	2058	474858.1332311	0.0000	350	2097577.9614418	474945.5158195	0.0000	
310	2064	474876.3380385	0.0000	351	2099995.1104149	472725.3782727	0.0000	
311	2070927.9448268	474893.6247487	0.0000	352	2102600.2243455	472320.9542961	0.0000	
312	2088817.5467571	474939.9576764	0.0000	353	2105257.7973970	472327.4507099	0.0000	
313	2088802.7075654	480669.5164600	0.0000	354	2043300.6335051	474841.8463030	0.0000	
314	2090008.4647395	475068.2475240	0.0000	355	2045325.6300026	474845.5415492	0.0000	
315	2089419.7476514	474941.5173383	0.0000	356	2046300.6285102	474847.3207422	0.0000	
316	2094101.3102850	475949.2939325	0.0000	357	2048300.6271330	474849.5073039	0.0000	
317	2094905.1483871	472215.1147069	0.0000	358	2049050.6269994	474850.1407548	0.0000	
318	2097509.4559001	475009.3646171	0.0000	359	2050300.6264196	474851.1965060	0.0000	
319	2096050.7266437	476368.9350507	0.0000	360	2051300.6260630	474852.0411071	0.0000	
320	2099737.1899109	472933.0634244	0.0000	361	2053300.6253496	474853.7303092	0.0000

Page 2 of 18

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
3	2	49573	474854.6593703	0.0000	403	2047300.6274897	474848.6627028	0.0000
363	2056100	43509	474856.0951921	0.0000	404	2052300.6257063	474852.8857081	0.0000
364	2056	6242796	474856.2641123	0.0000	405	2060300.6145020	474863.8009992	0.0000
365	2056960.6271497		474856.8215517	0.0000	406	2068300.5810462	474886.8200442	0.0000
367	2058300.6235662		474857.9533145	0.0000	407	2076300.5542153	474907.5394643	0.0000
368	2058300.6235662		474857.9533145	0.0000	408	2084300.5273844	474928.2588844	0.0000
369	2059500.6179980		474861.2636364	0.0000	409	2092240.3051221	475548.6846506	0.0000
370	2061300.6094721		474866.9727008	0.0000	410	2105510.8544484	472328.0693057	0.0000
371	2062300.6044023		474870.1444023	0.0000	411	2089428.9477937	474943.4978070	0.0000
372	2063300.5911078		474873.3161038	0.0000	412	2089431.2165965	474943.9862008	0.0000
373	2065300.5877540		474879.0502616	0.0000	413	2094707.4765733	476079.7803203	0.0000
374	2066300.5840000		474881.6401891	0.0000	414	2097352.4852687	475155.6649868	0.0000
375	2067560.5840000		474884.9034990	0.0000	415	2099995.1998901	472692.5919745	0.0000
376	2069300.5776924		474889.4099717	0.0000	416	2101278.2323355	472317.7226983	0.0000
377	2070300.5743385		474891.9998992	0.0000	7300	2037387.4993170	474867.6608810	1274.5800
378	2071300.5709846		474894.5898267	0.0000	7301	2044430.0614000	474805.5644500	1237.9340
379	2072300.5676308		474897.1797542	0.0000	7400	2041699.8240000	474880.9590000	1236.7970
380	2073300.5642769		474899.7696817	0.0000	7401	2052922.9520000	474891.8070000	1129.2060
381	2074300.5609230		474902.3596092	0.0000	7402	2081619.3680000	474874.6010000	1231.3920
382	2075300.5575692		474904.9495368	0.0000	7403	2100351.5630000	472453.6560000	1053.9270
383	2077300.5508614		474910.1293918	0.0000	7404	2068195.8991000	466983.8671000	1109.2270
384	2078300.5475076		474912.7193193	0.0000	7600	2041797.4733495	474889.1033954	0.0000
385	2079300.5441537		474915.3092468	0.0000	7601	2042883.0461105	474891.0843660	0.0000
386	2080300.5407998		474917.8991743	0.0000	7602	2042883.0004902	474916.0843244	0.0000
387	2081300.5374460		474920.4891019	0.0000	7603	2042983.0003237	474916.2668057	0.0000
388	2082300.5340921		474923.0790294	0.0000	7604	2042983.0459440	474891.2668473	0.0000
389	2083300.5307382		474925.6689569	0.0000	7605	2044430.7192732	474893.9085849	0.0000
390	2085300.5240305		474930.8488119	0.0000	7606	2046807.9609685	474898.2466139	0.0000
391	2086300.5206766		474933.4387394	0.0000	7607	2047064.1248205	474898.4629702	0.0000
392	2087300.5173227		474936.0286670	0.0000	7608	2047097.1252851	474898.4908424	0.0000
393	2088300.5139689		474938.6185945	0.0000	7609	2047600.5851526	474898.9160653	0.0000
394	2091262.6992782		475338.2403257	0.0000	7610	2047600.5724836	474913.9160600	0.0000
395	2095191.3516378		476024.0959201	0.0000	7611	2047800.5724123	474914.0849802	0.0000
396	2096167.4363874		475820.2331776	0.0000	7612	2047800.5850813	474899.0849855	0.0000
397	2097057.4982943		475370.6875646	0.0000	7613	2048485.2084885	474899.6632194	0.0000
398	2098183.0580022		474381.5514037	0.0000	7614	2048485.1831505	474929.6632087	0.0000
399	2098914.5909246		473699.7452850	0.0000	7615	2048685.3142030	474929.8322397	0.0000
400	2100474.8304910		472471.3997262	0.0000	7616	2048685.3395410	474899.8322504	0.0000
401	2101278.2316509		472317.8834565	0.0000	7617	2049529.5770734	474900.5452945	0.0000
402	2044300.6318401		474843.6711160	0.0000	7618	2049529.5475124	474935.5452820	0.0000
					7619	2049719.1753132	474935.7054419	0.0000

Page 3 of 18

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-9116

COGO REPORT

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S013

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
7620	2049719.3580951	474900.7055838	0.0000	7661	2075130.7163072	474989.5099438	0.0000
7621	2052341.6857600	474902.9204053	0.0000	7662	2075130.7810554	474964.5100277	0.0000
7622	2052374.6857871	474902.9482772	0.0000	7663	2076229.2007216	474967.3548645	0.0000
7623	2054999.7645735	474905.1654223	0.0000	7664	2077225.4259395	474969.9350243	0.0000
7624	2055885.6844000	474905.9136714	0.0000	7665	2077225.4000402	474979.9349907	0.0000
7625	2055885.6718004	474920.9136661	0.0000	7666	2078855.3338908	474984.1564154	0.0000
7626	2057625.0709904	474922.3827650	0.0000	7667	2078888.3901940	474974.2419956	0.0000
7627	2057658.1067869	474907.4106617	0.0000	7668	2080000.3864103	474977.1219949	0.0000
7628	2058285.6835439	474907.9407139	0.0000	7670	2081513.1537862	474996.0400162	0.0000
7629	2058285.6750979	474917.9407104	0.0000	7671	2082568.2901758	474998.7727521	0.0000
7630	2058785.5343579	474918.9958949	0.0000	7672	2082568.3290247	474983.7728024	0.0000
7631	2058785.5660749	474908.9959452	0.0000	7673	2083800.3736656	474986.9637194	0.0000
7632	2060284.5467872	474913.7502885	0.0000	7674	2083800.3348167	475001.9636691	0.0000
7633	2062288.3606129	474920.1058198	0.0000	7675	2084138.0210187	475002.8382548	0.0000
7634	2062288.3288959	474930.1057695	0.0000	7676	2084171.0725462	474987.9238059	0.0000
7635	2062919.7900397	474932.1085858	0.0000	7677	2084349.3230514	474988.3854633	0.0000
7636	2062952.7898795	474932.2132520	0.0000	7678	2084349.3101018	474993.3854465	0.0000
7637	2064382.6605151	474936.6730812	0.0000	7679	2084868.3083612	474994.7296189	0.0000
7638	2064382.6087165	474956.6730141	0.0000	7680	2084868.3213108	474989.7296357	0.0000
7639	2065577.5506618	474959.7678375	0.0000	7681	2086792.9948060	474994.7144173	0.0000
7640	2065577.6159721	474939.7679396	0.0000	7682	2088277.0258038	474998.5579629	0.0000
7641	2066041.6162829	474940.9696708	0.0000	7683	2088276.9740052	475018.5578958	0.0000
7642	2066041.5126858	474980.9695366	0.0000	7684	2088712.9725429	475019.6871042	0.0000
7643	2066991.5094996	474983.4299677	0.0000	7685	2088712.9984422	475009.6871377	0.0000
7644	2066991.6130967	474943.4301019	0.0000	7686	2088817.3654622	475009.9574416	0.0000
7645	2067558.6232229	474944.8986220	0.0000	7687	2089165.1796840	475021.5577934	0.0000
7646	2067558.5951891	474954.8985829	0.0000	7688	2089413.8434718	475242.7081455	0.0000
7647	2068202.4333854	474956.5660827	0.0000	7689	2089446.8329736	475246.3484093	0.0000
7648	2068235.4597685	474946.6515854	0.0000	7690	2089655.9547474	475074.6266146	0.0000
7649	2069235.9599793	474949.2428171	0.0000	7691	2089993.7336367	475136.6799331	0.0000
7650	2069235.9081807	474969.2427501	0.0000	7692	2089995.8380800	475126.9038746	0.0000
7651	2070121.9908685	474971.5376477	0.0000	7693	2092069.9651924	475573.3908537	0.0000
7652	2070240.0047557	475111.8437657	0.0000	7694	2093437.5991017	475867.7945712	0.0000
7653	2070240.4191441	474951.8443023	0.0000	7695	2093980.4125759	476103.8031638	0.0000
7654	2070927.6502931	474953.6241871	0.0000	7696	2094690.3006665	476197.3857233	0.0000
7655	2073275.4089651	474959.7047323	0.0000	7697	2094723.3103370	476195.7908	0.0000
7656	2073275.3830658	474969.7046988	0.0000	7699	2095183.7484344	476084	0000
7657	2073569.9107803	474970.4675068	0.0000	7700	2097352.1257798	475 8485136	0000
7658	2073602.9868948	474960.5531383	0.0000	7701	2097550.3642673	475055655925	0.0000
7659	2074230.7840738	474962.1790929	0.0000	7702	2097648.1730251	474962. 98	0.0000
7660	2074230.7193257	474987.1790090	0.0000	7703	2097683.5362749	474929.13 4	0.0000

Page 4 of 18

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
7704	2099743.4675095	473009.2321014	0.0000	7746	2062288.7095001	474810.1063731	0.0000
7705	2099977.8132096	473017.4773011	0.0000	7747	2062920.0877547	474812.1089265	0.0000
7706	2100011.0645541	472925.4225570	0.0000	7748	2062953.0876563	474812.2135929	0.0000
7707	2100034.5644590	472925.4866893	0.0000	7749	2064253.5477673	474816.3382849	0.0000
7708	2100034.9867155	472770.7598164	0.0000	7750	2065238.2258884	474818.8885384	0.0000
7709	2101277.9761029	472377.8886600	0.0000	7751	2065238.2647373	474803.8885887	0.0000
7710	2101305.2301077	472377.7888733	0.0000	7752	2065577.9493219	474804.768350	0000
7711	2102599.9751115	472380.9538661	0.0000	7753	2065577.9912180	474779.7 8	0000
7712	2103472.8836312	472383.0876832	0.0000	7754	2066992.0274851	474783 06385	0000
7713	2103472.8591864	472393.0876534	0.0000	7755	2066991.9238880	474823. 044	0000
7714	2103972.8576925	472394.3098953	0.0000	7756	2068202.7567485	474826.56 12	0.0000
7715	2103972.8821374	472384.3099252	0.0000	7757	2068235.7566403	474826.6515	0.0000
7716	2105241.0671724	472387.4099923	0.0000	7758	2070928.0650333	474833.6248	0.0000
7717	2041797.7295987	474789.1036965	0.0000	7759	2073570.3721411	474840.4682657	0.0000
7718	2042783.2287583	474790.9020512	0.0000	7760	2073 .3722758	474840.5537339	0.0000
7719	2042783.2743786	474765.9020928	0.0000	7761	2073 .3322 3204	474847.3554245	0.0000
7720	2043106.1792161	474766.4913348	0.0000	776	2078368.88 3	474852.8961074	0.0000
7721	2043106.1335957	474791.4912932	0.0000	7763	2078368.92367	474837.8961577	0.0000
7723	2046686.0238937	474798.0239337	0.0000	7764	2078493.9232580	474838.2198986	0.0000
7724	2046686.0421419	474788.0239504	0.0000	7765	2078493.8844091	474853.2198483	0.0000
7725	2046808.1088147	474788.2466895	0.0000	7766	2078555.7780945	474854.1571299	0.0000
7726	2047064.3516 9	474788 3122	0.0000	7767	2078888.7780400	474854.2425976	0.0000
7727	2047097.3646338	474 4910089	0.0000	7768	2081513.5917773	474861.0406978	0.0000
7728	2047600.6696129	474 0161010	0.0000	7769	2084138.4096865	474867.8388087	0.0000
7729	2047600.6780587	474788 51046	0.0000	7770	2084171.4412565	474852.9243080	0.0000
7730	2047 4	4789.0 248	0.0000	7771	2085069.5816708	474855.2504344	0.0000
7731	2047 800.669 4	474 99.083 12	0.0000	7772	2085069.5430293	474870.1702800	0.0000
77	20 719.72841	474 0.7058609	0.0000	7773	2086793.3652035	474874.7149741	0.0000
33	205 1.9451721	474802.9205888	0.0000	7774	2088619.3354481	474879.4441205	0.0000
34	20523 9452247	474802.9484607	0.0000	7775	2088619.4260955	474844.4442379	0.0000
77	205500 002005	474805.1656025	0.0000	7776	2088817.7928002	474844.9579950	0.0000
773	2055885.7688601	474805.9137071	0.0000	7777	2089414.9797445	474877.2084869	0.0000
7737	2055885.7815985	474790.9137125	0.0000	7778	2089447.9261267	474890.8479002	0.0000
38	2057625.2804173	474792.3828955	0.0000	7779	2089715.1345808	474926.9739693	0.0000
7739	2057658.2680001	474807.4107622	0.0000	7780	2089902.7985178	474959.9527978	0.0000
7740	2058302.7679980	474807.9551078	0.0000	7781	2090156.3403252	475013.1328553	0.0000
7741	2058302.7764440	474797.9551114	0.0000	7782	2090121.1664027	475031.1338193	0.0000
7742	2058800.8123489	474799.0437488	0.0000	7783	2091102.8045921	475242.4461671	0.0000
7743	2058800.7806319	474809.0436985	0.0000	7784	2091109.1179218	475213.1179918	0.0000
7744	2060284.7484305	474813.7504251	0.0000	7785	2091304.6390906	475255.2068568	0.0000
7745	2062288.6777830	474820.1063228	0.0000	7786	2091298.3257609	475284.5350321	0.0000

Page 5 of 18

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
77	2 03899	475450.7550532	0.0000	7828	2054982.8215832	480122.4789475	0.0000
7788	2092070 29886	475389.4371530	0.0000	7829	2057613.1542679	480120.2062193	0.0000
7789	2 244637	475462.3627956	0.0000	7830	2057618.9320188	477496.7933016	0.0000
790	2092396.8978042	475521.0191462	0.0000	7831	2057651.9319186	477496.8751210	0.0000
7791	2094113.9369445	475890.6375819	0.0000	7832	2057646.1542385	480120.2559078	0.0000
7792	2094266.0437867	475920.1152819	0.0000	7833	2060273.1181480	480130.4280163	0.0000
7793	2094271.1434072	475890.5518946	0.0000	7834	2062900.1702853	480141.3405767	0.0000
7794	2094691.7866506	475938.7255357	0.0000	7835	2062910.0640906	477514.4408790	0.0000
7795	2094724.7771772	475940.4693292	0.0000	7836	2062943.0640748	477514.5072226	0.0000
7796	2095087.1541662	475940.3898285	0.0000	7837	2062933.1702113	480141.4223811	0.0000
7797	2095088.6181301	475970.3540874	0.0000	7838	2065560.6228811	480143.5460382	0.0000
7798	2096520.8822604	475609.9472509	0.0000	7839	2068188.6846971	480145.9718034	0.0000
7799	2096510.1385450	475587.3735366	0.0000	7840	2068195.6469718	477518.0797775	0.0000
7800	2096727.2584198	475475.1818918	0.0000	7841	2068232.1498663	476195.9653186	0.0000
7801	2096739.4555237	475497.0046015	0.0000	7842	2068228.6468874	477518.1553598	0.0000
7802	2097352.9299062	475068.8577903	0.0000	7843	2068225.1438979	478840.3494102	0.0000
7803	2097472.3812514	474961.8945255	0.0000	7844	2068221.6846229	480146.0435048	0.0000
7804	2097507.7498586	474928.9351400	0.0000	7845	2069575.8732136	480150.6766488	0.0000
7805	2099586.5516054	472991.4423669	0.0000	7846	2070902.1159966	480155.2141805	0.0000
7806	2099579.7335442	472984.1270376	0.0000	7847	2073532.6865268	480162.1725912	0.0000
7807	2099689.4634826	472881.8561198	0.0000	7848	2073550.4380137	477538.9136398	0.0000
7808	2099978.8113474	472651.7310979	0.0000	7849	2073583.4380072	477539.0395926	0.0000
7809	2100012.1299043	472535.0477800	0.0000	7850	2073565.6865355	480162.2962971	0.0000
7810	2100100.1777122	472586.7249532	0.0000	7851	2076195.8750867	480175.0408179	0.0000
7811	2100779.7537734	472315.9943206	0.0000	7852	2078826.0570202	480187.7853066	0.0000
7812	2101278.4726723	472257.8786777	0.0000	7853	2078840.8490854	477558.6649077	0.0000
7813	2101305.5234457	472257.7892322	0.0000	7854	2078873.8490913	477558.7566965	0.0000
7814	2102600.5182043	472260.9548351	0.0000	7855	2078859.0569627	480187.8883598	0.0000
7815	2105241.3900106	472267.4104230	0.0000	7856	2081489.4727855	480191.5940876	0.0000
7816	2041788.7729992	477483.1825276	0.0000	7857	2084120.3455437	480196.0193165	0.0000
7817	2041780.0895570	480109.7647847	0.0000	7858	2084129.1880268	477569.2542792	0.0000
7818	2044405.8218880	480113.6988513	0.0000	7859	2084162.1879448	477569.3341775	0.0000
7819	2047031.7718106	480117.8033452	0.0000	7860	2084153.3453839	480196.1223383	0.0000
7820	2047048.0018377	477491.5102736	0.0000	7861	2086776.3666269	480208.0860684	0.0000
7821	2047081.0023780	477491.5248143	0.0000	7862	2089399.3351299	480206.8438846	0.0000
7822	2047064.7721542	480117.8496972	0.0000	7863	2089407.0025586	477583.3768225	0.0000
7823	2049692.0951685	480121.1270947	0.0000	7864	2089440.0026257	477583.4020895	0.0000
7824	2052319.5183785	480124.7434124	0.0000	7865	2089432.3353607	480206.8131558	0.0000
7825	2052335.5369291	477488.2811855	0.0000	7866	2092050.1376630	480203.2018868	0.0000
7826	2052368.5369832	477488.2976984	0.0000	7867	2094667.5061527	480195.2259192	0.0000
7827	2052352.5184829	480124.7516503	0.0000	7868	2094682.3726265	477577.3939108	0.0000

Page 6 of 18

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-9116

COGO REPORT

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S014

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
7869	2094715.3731717	477577.3916102	0.0000	7910	2069615.0438643	469610.0735537	0.0000
7870	2094700.5067893	480195.2075233	0.0000	7911	2070936.5900248	469619.1259823	0.0000
7871	2097326.6465144	480200.2011309	0.0000	7912	2073563.7937510	469625.3380805	0.0000
7872	2099952.5035317	480205.9996992	0.0000	7913	2073567.1098880	472254.2616453	0.0000
7873	2099965.1508883	477582.6763899	0.0000	7914	2073600.1100741	472254.3883531	0.0000
7874	2099972.4976840	474964.7670002	0.0000	7915	2073596.7938992	469625.4347651	0.0000
7875	2099972.5890270	474931.7670834	0.0000	7916	2076227.9685764	469634.6186182	0.0000
7876	2100009.1384613	473631.1979615	0.0000	7917	2078859.1450249	469643.8024776	0.0000
7877	2100005.5889956	474931.8236318	0.0000	7918	2078857.7120316	472269.7956472	0.0000
7878	2101267.0872633	474934.6961841	0.0000	7919	2078890.7119757	472269.8930513	0.0000
7879	2102589.3545394	474937.7071133	0.0000	7920	2078892.1449665	469643.9184526	0.0000
7880	2105231.2225583	474952.6775960	0.0000	7921	2081520.9104650	469653.2197047	0.0000
7881	2041802.4169590	472197.6928077	0.0000	7922	2084149.2929286	469662.5196015	0.0000
7882	2041808.4650984	469560.3552203	0.0000	7923	2084143.8630743	472285.4926562	0.0000
7883	2044440.2230066	469567.7339836	0.0000	7924	2084176.8629489	472285.5873810	0.0000
7884	2047071.9793776	469575.7525912	0.0000	7925	2084182.2928064	469662.6128298	0.0000
7885	2047060.8560083	472209.4231923	0.0000	7926	2086808.8873093	469668.1629329	0.0000
7886	2047093.8562008	472209.4472982	0.0000	7927	2089435.4811636	469673.7130346	0.0000
7887	2047104.9794665	469575.8012405	0.0000	7928	2089425.1590525	472300.1492195	0.0000
7888	2049731.0961033	469575.5200039	0.0000	7929	2089458.1590707	472300.2094430	0.0000
7889	2052356.8831461	469574.8174283	0.0000	7930	2089468.4811497	469673.7814162	0.0000
7890	2052349.2668941	472205.4017017	0.0000	7931	2092090.8928630	469679.1079180	0.0000
7891	2052382.2669755	472205.4209299	0.0000	7932	2094713.7021559	469683.5917280	0.0000
7892	2052389.8831488	469574.8642410	0.0000	7933	2094705.4649639	472304.8025571	0.0000
7893	2055009.6675182	469583.0109850	0.0000	7934	2094697.5596741	474926.0332283	0.0000
7894	2057629.5823883	469590.6787399	0.0000	7935	2092072.7211373	474926.7079848	0.0000
7895	2057627.4115208	472215.5710701	0.0000	7936	2092072.5933374	474959.7080187	0.0000
7896	2057660.4114757	472215.6391880	0.0000	7937	2094697.4149119	474959.0332666	0.0000
7897	2057662.5823361	469590.7554277	0.0000	7938	2094730.4153835	474959.0459701	0.0000
7898	2060294.3157496	469595.2894724	0.0000	7939	2097353.4784853	474961.7579214	0.0000
7899	2062926.0770620	469599.8235651	0.0000	7940	2097353.6048560	474928.7580345	0.0000
7900	2062923.0580307	472227.1813120	0.0000	7941	2094730.5597853	474926.0461018	0.0000
7901	2062956.0580049	472227.2227314	0.0000	7942	2094738.4649881	472304.8458250	0.0000
7902	2062959.0770485	469599.8543189	0.0000	7943	2094746.7021432	469683.6476335	0.0000
7903	2065586.6713485	469600.2217603	0.0000	7944	2097366.8991440	469688.0459530	0.0000
7904	2068214.2656280	469600.5891877	0.0000	7945	2099983.7199297	469692.6668	0.0000
7905	2068208.4774715	472228.8880186	0.0000	7946	2099979.7330248	472314	0.0000
7906	2068238.5651154	473551.3734271	0.0000	7947	2100012.7329562	472	0.0000
7907	2068241.4773675	472228.9716036	0.0000	7948	2100014.7389529	4709	0.0000
7908	2068244.3895792	470906.5880780	0.0000	7949	2100016.7198541	469692.	0.0000
7909	2068247.2654543	469600.7044398	0.0000	7950	2101288.7552570	469696.25	0.0000

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
7951	2102613.0740894	469699.9204034	0.0000	8031	2053678.9750928	474904.0498817	0.0000
7952	2105245.2988588	469707.1983719	0.0000	8032	2053677.2633983	475512.5375826	0.0000
7953	2058513.5226953	474918.1331507	0.0000	8033	2052370.1044895	476829.2180352	0.0000
7954	2058513.7636738	474798.1333115	0.0000	8034	2053013.5793474	476830.1553739	0.0000
7955	2064253.2020695	474936.3377920	0.0000	8035	2053673.5541948	476831.1167479	0.0000
7956	2069598.1079307	474970.1808243	0.0000	8036	2053011.8682965	477489.3386653	0.0000
7957	2069598.6511837	474830.1817618	0.0000	8037	2053671.6995930	477490.4063307	0.0000
7958	2097468.5475330	474965.4726418	0.0000	8038	2053665.5212965	478815.2	0.0000
7959	1970978.6979166	361808.4967148	0.0000	8039	2053659.4199459	480123	0.0000
7960	1970978.6661996	361818.4966645	0.0000	8040	2052360.4776078	478814.7	0.0000
8000	2043105.8465598	474891.4909359	0.0000	8041	2054987.0650929	478815.76	0.0000
8001	2041793.2050039	476161.7450002	0.0000	8042	2056320.6434891	474921.2810	0.0000
8002	2043100.7367905	476163.8449885	0.0000	8043	2056317.1125467	476175.2184	0.0000
8003	2043768.2829776	474892.6997605	0.0000	8044	2056981.2066397	474921.8389563	0.0000
8004	2043762.7526858	476164.9082328	0.0000	8045	2056	476176.0615059	0.0000
8005	2043757.0078715	477486.4662153	0.0000	8046	2056	474909.5589662	0.0000
8006	2041784.4040038	478804.7236257	0.0000	80	2058960.1	476180.4949715	0.0000
8007	2044412.1639263	478808.8843520	0.0000	8048	2059620.9676	476182.2927073	0.0000
8008	2047072.8362829	478812.9372059	0.0000	8049	2060281.7637402	476184.0904430	0.0000
8009	2049698.9226816	478813.7657510	0.0000	80	2061618.0093600	477503.4431645	0.0000
8010	2047742.4707083	474914.0359074	0.0000	8	2061947.4919524	474915.8529632	0.0000
8011	2047737.7123	475679	0.0	8	2060945.9162775	475525.4667286	0.0000
8012	2047935.9550472	476	9739475	0.0	53	2060944.2083050	476186.2652073	0.0000
8013	2047931.7146065	4768	3607645	0.0	8054	2060940.7923600	477507.8621645	0.0000
8014	2047085.1750245	4768	20023	0.0000	8055	2061610.4371467	474917.9556381	0.0000
8015	2048	4899.	3605	0.0000	8056	2061608.6211850	475527.6232358	0.0000
8016	204	475	29.2	0.0000	8057	2061606.6528700	476188.4399715	0.0000
80	2	475	8.8914655	0.0000	8058	2061602.7162400	477510.0734430	0.0000
8018	204	475830.2036382		0.0000	8059	2062273.3823702	474920.0583130	0.0000
8019	2048	6491071	474900.0943382		0.0000	8060	2062272.4404213	475199.3622464	0.0000
80	204899	589620	475108.8399758		0.0000	8061	2062271.3260925	475529.7797429	0.0000
802	2049204.3588153	474900.2706147	0.0000	8062	2062269.0974350	476190.6147358	0.0000
8022	2049203.2689228	475108.9678744	0.0000	8063	2062604.8192989	474931.1095876	0.0000
8023	2073554.3205582	474899.6443108	0.0000	8064	2062603.8579606	475200.4359357	0.0000
8024	2051962.0370743	477488.5117473	0.0000	8065	2062602.6785463	475530.8579964	0.0000
8025	2051960.7179806	477713.5078806	0.0000	8066	2062917.5310852	475531.8825577	0.0000
8026	2052334.1699031	477713.2773484	0.0000	8067	2062915.0420870	476192.7353318	0.0000
8027	2052371.6719958	476170.1383732	0.0000	8068	2066573.5121411	474982.3473813	0.0000
8028	2053675.4087965	476171.8271652	0.0000	8069	2066572.9811864	475161.8802086	0.0000
8029	2054335.5271947	476172.6822479	0.0000	8070	2066897.6398081	475162.0407362	0.0000
8030	2054995.6455929	476173.5373305	0.0000	8071	2066890.6746260	477517.1921979	0.0000

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
8		94996	474983.4299677	0.0000	8113	2074885.4626376	478204.2202667	0.0000
8073	2066990	11353	475162.0868888	0.0000	8114	2075065.1987140	478115.6775269	0.0000
8074	2067	3232229	474944.8986220	0.0000	8115	2075543.3795092	478186.3152218	0.0000
8075	2067551.4108130		477517.6415989	0.0000	8116	2075580.5365267	478207.0071755	0.0000
8076	2067549.5576098		478178.7003868	0.0000	8117	2075185.5418068	475293.8185231	0.0000
8077	2068193.8954745		478179.1777752	0.0000	8118	2075187.8426615	474964.6578136	0.0000
8078	2068233.9013558		475534.8702886	0.0000	8119	2076208.4530409	478209.5258170	0.0000
8079	2068233.2666275		475774.4467904	0.0000	8120	2076204.2251939	478870.1973780	0.0000
8080	2069595.6572580		475541.1662549	0.0000	8121	2076929.2449279	474969.1679344	0.0000
8081	2069594.6947891		475765.4131336	0.0000	8122	2076961.2258694	475228.2863817	0.0000
8082	2069594.6304097		475780.4129954	0.0000	8123	2076955.7726940	474969.2366396	0.0000
8083	2070262.9215733		474951.9025822	0.0000	8124	2076974.9458261	475228.3208680	0.0000
8084	2070260.1964189		475544.2386984	0.0000	8125	2076873.8479160	477551.3223170	0.0000
8085	2070259.1654743		475768.3251871	0.0000	8126	2076869.7467183	478212.1783940	0.0000
8086	2070257.1572184		476204.8404191	0.0000	8127	2076865.6455205	478873.0344710	0.0000
8087	2070924.7359191		475547.3111433	0.0000	8128	2076857.5455202	480178.2469275	0.0000
8088	2070921.4938539		476207.7520415	0.0000	8129	2077541.5469065	476392.8087531	0.0000
8089	2071592.3564079		474955.3457336	0.0000	8130	2077536.8490696	477227.7955376	0.0000
8090	2071589.0381268		475550.3825449	0.0000	8131	2077535.0149440	477553.7903780	0.0000
8091	2072257.0645206		474957.0672852	0.0000	8132	2077519.2159556	480181.4530370	0.0000
8092	2072253.3403345		475553.4539466	0.0000	8133	2077824.7047516	475483.2339846	0.0000
8093	2072249.2181770		476213.5712708	0.0000	8134	2077822.0704747	475951.4465741	0.0000
8094	2072240.9738620		477533.8059190	0.0000	8135	2078257.2033854	475484.3211052	0.0000
8095	2072233.2644310		478854.5104595	0.0000	8136	2078254.7097623	475927.5340904	0.0000
8096	2072225.6513153		480158.7152090	0.0000	8137	2078263.8851428	476395.5051592	0.0000
8097	2072903.9559310		477536.3919595	0.0000	8138	2078263.7163582	476425.5046844	0.0000
8098	2072899.7956983		478196.5353446	0.0000	8139	2078263.2381353	476510.5033391	0.0000
8099	2072895.6354655		478856.6787298	0.0000	8140	2078261.2127206	476870.4976414	0.0000
8100	2073545.9722288		478198.8533111	0.0000	8141	2078259.1873058	477230.4919437	0.0000
8101	2073541.5064437		478858.7929871	0.0000	8142	2078850.0178017	475929.0304457	0.0000
8102	2073553.9696856		474962.6531168	0.0000	8143	2078849.8771479	475954.0300500	0.0000
8103	2073425.9012004		474962.0302143	0.0000	8144	2078847.3810479	476397.6832828	0.0000
8104	2073346.5197367		475013.0993374	0.0000	8145	2078847.2122633	476427.6828079	0.0000
8105	2073345.2612379		475179.0945667	0.0000	8146	2078846.7340404	476512.6814627	0.0000
8106	2073552.7587836		475180.1037981	0.0000	8147	2078844.7086257	476872.6757650	0.0000
8107	2073578.9722262		478198.9786832	0.0000	8148	2078842.6832109	477232.6700673	0.0000
8108	2073574.5064451		478858.9177729	0.0000	8149	2078887.3275137	475163.1212660	0.0000
8109	2074907.6689464		474988.9322654	0.0000	8150	2078885.0128116	475574.5330899	0.0000
8110	2074905.5426914		475293.1147225	0.0000	8151	2078881.2915715	476235.9409579	0.0000
8111	2074889.8094440		477543.9161280	0.0000	8152	2078879.0083758	476641.7528721	0.0000
8112	2074885.7885927		478154.7059598	0.0000	8153	2078877.5703314	476897.3488267	0.0000

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-9116

COGO REPORT

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S015

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

COORDINATE POINT LIST

SWO5144 (1) — Job Piece 29657(04)

PT NO	EASTING (Y)	NORTHING (X)	EL (Z)	PT NO	EASTING (Y)	NORTHING (X)	EL (Z)
8316	2043114.7841716	470210.7939778	0.000	8366	2055664.5880360	472211.7727127	0.000
8317	2043113.4408433	470874.0664555	0.000	8367	2056028.7917784	471144.4968763	0.000
8318	2043110.7541865	472200.6114112	0.000	8368	2056028.3945535	471441.4966106	0.000
8319	2043110.6953475	472233.6113585	0.000	8369	2056326.1297620	470891.7092375	0.000
8320	2043108.3990933	473521.4694555	0.000	8370	2056325.7905064	471145.3661085	0.000
8321	2043107.2215466	474181.8984778	0.000	8371	2056325.3932815	471442.3658429	0.000
8322	2043106.1792161	474766.4913348	0.000	8372	2056325.2461430	471552.3793562	0.000
8323	2044437.9216864	470877.4004110	0.000	8373	2056324.3625240	472213.0494751	0.000
8324	2044433.2711864	473523.9699110	0.000	8374	2056320.9142327	474791.2812261	0.000
8325	2044432.1110932	474184.1714555	0.000	8375	2056984.1370120	472214.3262376	0.000
8326	2045052.0289925	474223.4447870	0.000	8376	2056981.3473399	474791.8390288	0.000
8327	2045051.0245959	474795.0403613	0.000	8377	2058303.8844541	473537.7101689	0.000
8328	2045402.0284704	474224.0492996	0.000	8378	2058302.5143740	474807.9548936	0.000
8329	2045401.0240138	474795.6790458	0.000	8379	2058964.9496583	473539.1293378	0.000
8330	2045102.2870892	469569.7512038	0.000	8380	2058963.2597686	474809.5590364	0.000
8331	2045099.1793899	470879.1456833	0.000	8381	2059628.1037248	472219.9547634	0.000
8332	2045764.3511678	469571.7684240	0.000	8382	2059626.0148624	473540.5485066	0.000
8333	2045760.4370933	470880.8909555	0.000	8383	2059624.0042774	474811.6547313	0.000
8334	2046426.4152422	469573.7856441	0.000	8384	2060287.0800665	473541.9676755	0.000
8335	2046421.6947966	470882.6362277	0.000	8385	2060290.7123498	471560.7513883	0.000
8336	2047066.4525368	470884.3379513	0.000	8386	2060954.2119249	470901.3942566	0.000
8337	2047749.1335055	469575.7322567	0.000	8387	2060953.1136373	471562.1263224	0.000
8338	2047739.3595628	472208.9503920	0.000	8388	2060952.0153498	472222.8583884	0.000
8339	2048409.7877020	469575.6615057	0.000	8389	2060947.9324133	474679.2685061	0.000
8340	2048401.3631255	472208.4407840	0.000	8390	2060947.7053883	474815.8531372	0.000
8341	2051052.2396671	469575.1665087	0.000	8391	2061182.9311910	474680.0264435	0.000
8342	2051048.0785878	471216.4084658	0.000	8392	2061182.7041870	474816.5984870	0.000
8343	2051045.5686255	472206.4052840	0.000	8393	2061616.5002833	470902.6910878	0.000
8344	2051906.0906692	470553.2831059	0.000	8394	2061614.5295665	472224.3114256	0.000
8345	2051905.3235996	470818.2219955	0.000	8395	2061610.6623383	474817.9558493	0.000
8346	2052354.0505707	470553.1632452	0.000	8396	2062924.5770262	470905.2524413	0.000
8347	2052353.2835010	470818.1021348	0.000	8397	2062957.5770066	470905.2885190	0.000
8348	2052352.1331995	471215.4058356	0.000	8398	2062954.5390032	473549.1569445	0.000
8349	2052386.0989481	470881.8926148	0.000	8399	2062953.7795024	474210.1240514	0.000
8350	2052699.3060968	470882.6825594	0.000	8400	2063600.2353750	472227.4269687	0.000
8351	2052384.1829618	471543.6567711	0.000	8401	2063598.5421875	473549.4182344	0.000
8352	2052697.4769576	471544.3549641	0.000	8402	2063597.6955937	474210.4138672	0.000
8353	2052380.4019867	472867.0604577	0.000	8403	2063596.9222018	474814.2556541	0.000
8354	2053025.5286370	472206.6657376	0.000	8404	2063930.5740625	472227.5317031	0.000
8355	2053023.8246027	472868.1506781	0.000	8405	2063927.0892751	474815.3028508	0.000
8356	2053022.1205685	473529.6356188	0.000	8406	2064260.9127500	472227.6364375	0.000
8357	2053691.5253682	469578.9119581	0.000	8407	2064257.2562349	474816.3478896	0.000
8358	2053685.2902740	472207.9424751	0.000	8408	2065584.4832500	470905.8885[illegible]	0.000
8359	2053682.2041370	473530.5952375	0.000	8409	2066247.6949268	469600.31[illegible]	0.000
8360	2054342.2877055	473531.5548563	0.000	8410	2066247.1272813	469914.3705[illegible]	0.000
8361	2054339.6265203	474804.6078331	0.000	8411	2066576.3799219	470575.5513[illegible]	0.000
8362	2055002.3712740	473532.5144750	0.000	8412	2066575.7606875	470906.1149923[illegible]	0.000
8363	2055668.7712240	469584.9399964	0.000	8413	2066908.1095000	469914.4775859	0.000
8364	2055666.6927680	470890.1063563	0.000	8414	2066906.8275000	470575.6195078	0.000
8365	2055665.6404020	471550.9395344	0.000	8415	2066906.1865000	470906.1904688	0.000

Page 10 of 15

COORDINATE POINT LIST

SWO5144 (1) — Job Piece 29657(04)

PT NO	EASTING (Y)	NORTHING (X)	EL (Z)	PT NO	EASTING (Y)	NORTHING (X)	EL (Z)
8416	2066903.6225000	472228.4743125	0.000	8466	2072920.0710493	470929.2533289	0.000
8417	2066898.6687315	474783.1888453	0.000	8467	2073251.6014119	471591.5985592	0.000
8418	2067236.6123125	470906.2659453	0.000	8468	2073252.1965493	472252.7662038	0.000
8419	2067237.2750781	470575.6876699	0.000	8469	2073565.4414128	470931.5497868	0.000
8420	2067569.0917188	469914.5846523	0.000	8470	2073566.2756504	471592.9057090	0.000
8421	2067564.3000000	472228.6837812	0.000	8471	2073568.7783868	473576.9921944	0.000
8422	2067563.8278899	472456.6832925	0.000	8472	2073597.1893461	469938.9320213	0.000
8423	2067561.5618750	473551.0261406	0.000	8473	2073976.6870406	469940.2035360	0.000
8424	2067558.9241140	474824.8989988	0.000	8474	2073976.2916605	469626.7593642	0.000
8425	2068207.9753610	472456.8874671	0.000	8475	2074242.2125058	469627.6875[illegible]	0.000
8426	2068205.5652247	473551.2874305	0.000	8476	2074242.8721526	470272.4[illegible]	0.000
8427	2068241.8755665	472048.1564884	0.000	8477	2073597.6073329	470270.1[illegible]	0.000
8428	2068406.2357238	472048.9802269	0.000	8478	2073598.4415799	470931.6[illegible]	0.000
8429	2068405.7953894	472229.7519071	0.000	8479	2073598.8975775	471293.161[illegible]	0.000
8430	2068280.9768970	472229.1591766	0.000	8480	2073599.2758270	471593.0249[illegible]	0.000
8431	2068536.5015227	472436.7187571	0.000	8481	2073943.4396369	470932.7691[illegible]	0.000
8432	2068560.3686352	472602.0044520	0.000	8482	2073943.8956344	471294.2688287	0.000
8433	2068620.6343538	472684.2968768	0.000	8483	2074904.1311971	469629.9978957	0.000
8434	2068698.7946453	472768.6530788	0.000	8484	2074[illegible]558603	470935.8567768	0.000
8435	2069199.8309595	472705.5055388	0.000	8485	2074905.6[illegible]54	471597.0362901	0.000
8436	2069245.8108003	472233.7409215	0.000	8486	2074906.1934[illegible]	472258.2158036	0.000
8437	2068915.8921369	472232.1742237	0.000	8487	2073600.9443220[illegible]	472915.7523846	0.000
8438	2068917.6563012	471571.3388228	0.000	8[illegible]	2073601.1528839[illegible]	473081.0933924	0.000
8439	2068918.5383833	471240.9211224	0.000	8[illegible]	2073601.5252503[illegible]	473376.2931575	0.000
8440	2068919.4204678	470910.5025722	0.000	8[illegible]	2073[illegible]1.6142515[illegible]	473446.8503609	0.000
8441	2068921.1846296	470249.668[illegible]	0.000	8491	2073601.8791352	473656.8413840	0.000
8442	2069613.0234067	470254[illegible]1050	0.000	8492	2073602.1225913	473849.8453096	0.000
8443	2069609.9150684	471241[illegible]6510	0.000	8[illegible]	2073602.7469863	474344.8449158	0.000
8444	2069608.8789556	471574.[illegible]8330	0.000	8494	2073879.8516551	473081.8738282	0.000
8445	2069758.4[illegible]379	471[illegible]97.11[illegible]95	0.000	8495	2073880.2240215	473377.0735933	0.000
8446	2069759.[illegible]745	471[illegible]0.5946[illegible]0	0.000	8496	2073795.0243556	473376.8350100	0.000
8447	2070[illegible]2.45079[illegible]	4745[illegible]34735	0.000	8497	2073795.1133568	473447.3922133	0.000
8448	2070[illegible]0.0707915	474833[illegible]360190	0.000	8498	2073795.1701088	473492.3833678	0.000
8[illegible]	2070[illegible]0.1401892	4[illegible]3564.3099380	0.000	8499	2073795.3782405	473657.3832365	0.000
8[illegible]	2070933.[illegible]10416	4[illegible]581.9712189	0.000	8500	2073980.8456260	473082.1566400	0.000
8451	2070933.5[illegible]663	471252.0813884	0.000	8501	2073981.2179924	473377.3564051	0.000
8452	2[illegible]70934.45[illegible]917	470922.1911417	0.000	8502	2074323.1680387	473493.8619120	0.000
8453	2[illegible]70935.5383445	470262.4094013	0.000	8503	2074323.3761703	473658.8617808	0.000
8[illegible]	2072258.4419476	469622.2515389	0.000	8504	2074215.3773015	473658.5593532	0.000
8455	2072258.2005985	470926.8981578	0.000	8505	2074215.6205357	473851.3873867	0.000
8456	2072257.9561970	472248.0448154	0.000	8506	2074216.2449306	474346.3869929	0.000
8457	2072257.7093445	473570.6907190	0.000	8507	2074216.8702793	474842.1426546	0.000
8458	2072257.4729937	474837.0679406	0.000	8508	2074372.1001933	474686.8758677	0.000
8459	2072921.4939223	473573.8811095	0.000	8509	2074372.2178886	474836.8766374	0.000
8460	2072921.8817006	474295.4524063	0.000	8510	2074671.9399502	474482.5311759	0.000
8461	2072922.1736944	474838.7894730	0.000	8511	2074672.1008773	474687.6299439	0.000
8462	2073163.9137397	474296.6296073	0.000	8512	2074672.2185727	474837.6307136	0.000
8463	2073164.5984148	474839.4173376	0.000	8513	2074906.7122904	472919.4429151	0.000
8464	2072920.7830985	472251.1924077	0.000	8514	2074906.8419953	473084.7496930	0.000
8465	2072920.4270739	471590.2228683	0.000	8515	2074907.2311103	473580.6700268	0.000

Page 11 of 15

COORDINATE POINT LIST

SWO5144 (1) — Job Piece 29657(04)

PT NO	EASTING (Y)	NORTHING (X)	EL (Z)	PT NO	EASTING (Y)	NORTHING (X)	EL (Z)
[illegible]	2074908.2687500	474903.1242500	0.000	8566	2080196.9917500	470952.9061713	0.000
8517	2074907.2937451	473660.4969160	0.000	8567	2080195.6895000	472273.7725000	0.000
[illegible]	[illegible]8392047	474483.1243793	0.000	8568	2081519.0505000	470957.2103425	0.000
8519	2074906.2223068	474843.9332122	0.000	8569	2081515.3392500	473598.3737500	0.000
8520	2075[illegible].0498873	469632.3082570	0.000	8570	2081514.4253750	474258.7101250	0.000
8521	[illegible]9567.4852058	472260.1537054	0.000	8571	2082843.3516556	469657.8988436	0.000
8522	2076228.3702207	470940.1050535	0.000	8572	2082838.7650040	472281.6213002	0.000
8523	2076228.5735811	471601.0983303	0.000	8573	2082836.4576270	473601.8235250	0.000
8524	2076228.9803311	472923.1800803	0.000	8574	2082835.3039385	474261.9246375	0.000
8525	2076229.1837207	473584.2685535	0.000	8575	2082834.2508583	474864.4611205	0.000
8526	2076229.3074540	473986.4455435	0.000	8576	2083165.5235794	474262.7282656	0.000
8527	2075929.3085653	473985.6289076	0.000	8577	2083164.4155807	474865.3162261	0.000
8528	2075929.5734441	474846.5784465	0.000	8578	2083495.7432203	474263.5318938	0.000
8529	2076259.9955891	472923.2677398	0.000	8579	2083494.5802840	474866.1713316	0.000
8530	2076259.5707946	474847.4331186	0.000	8580	2084141.0760584	473605.2302145	0.000
8531	2076889.8876828	469636.9289809	0.000	8581	2084139.6825501	474265.0989954	0.000
8532	2076889.9485202	470281.3290826	0.000	8582	2084174.0759333	473605.3242692	0.000
8533	2076889.9797178	470611.7791863	0.000	8583	2084172.6824275	474265.1918689	0.000
8534	2076890.0109154	470942.2292901	0.000	8584	2084172.4620410	474369.5516362	0.000
8535	2076890.0165846	471002.2791846	0.000	8585	2084171.7296490	474716.3616273	0.000
8536	2076890.0395432	471245.4599084	0.000	8586	2084363.9285219	474717.0158279	0.000
8537	2076890.0733106	471603.1294977	0.000	8587	2084363.6404597	474853.4220917	0.000
8538	2076890.1357058	472264.0297054	0.000	8588	2084573.8103703	474266.4735122	0.000
8539	2076890.1646231	472925.0488102	0.000	8589	2084573.5899838	474370.8332795	0.000
8540	2077220.8150881	472264.9987545	0.000	8590	2084675.9937918	474266.7999983	0.000
8541	2077220.7567692	472925.9831752	0.000	8591	2084693.0761513	474435.3465530	0.000
8542	2077551.8067881	469639.2393437	0.000	8592	2084663.9487994	474439.7611846	0.000
8543	2077551.7301801	470283.5463884	0.000	8593	2084666.9064027	474468.5094468	0.000
8544	2077551.6908952	470613.9499576	0.000	8594	2084667.3063570	474499.4168591	0.000
8545	2077551.5730404	471605.1606651	0.000	8595	2084676.0621738	474854.2312440	0.000
8546	2077551.4944705	472265.9678036	0.000	8596	2074672.2230382	474843.3219892	0.000
8547	2077551.3489154	472926.9175401	0.000	8597	2084817.4771213	473607.3117609	0.000
8548	2077551.2033602	473587.8672768	0.000	8598	2084815.9330776	474267.2471182	0.000
8549	2077551.1305827	473918.3421451	0.000	8599	2084814.4847857	474475.9465469	0.000
8550	2077551.0578051	474248.8170134	0.000	8600	2084814.5588778	474854.5899416	0.000
8551	2077550.9252407	474850.7776442	0.000	8601	2085024.6320123	474267.9139318	0.000
8552	2078160.9792251	471006.4430542	0.000	8602	2085024.1437204	474476.6133606	0.000
8553	2078160.8464704	471249.7177592	0.000	8603	2085270.4624632	474477.4003733	0.000
8554	2078212.2131801	473589.6666384	0.000	8604	2085269.5421042	474870.7683695	0.000
8555	2078212.0531663	473920.1068225	0.000	8605	2085484.0472192	470969.0377607	0.000
8556	2078211.8931526	474250.5470067	0.000	8606	2085480.7126885	472289.2050216	0.000
8557	2078211.6016657	474852.4887540	0.000	8607	2085477.3507200	473609.3501666	0.000
8558	2078858.7935296	470287.9257167	0.000	8608	2085474.1381711	474871.2982602	0.000
8559	2078858.6132799	470618.2373712	0.000	8609	2086804.9994347	470972.2657215	0.000
8560	2078858.4001909	471008.7279128	0.000	8610	2086797.1254359	473613.4269730	0.000
8561	2078858.3813226	471043.3045059	0.000	8611	2088130.4342291	469670.9554163	0.000
8562	2078858.2674086	471252.0544748	0.000	8612	2088128.2086086	470314.9745554	0.000
8563	2078858.0725252	471609.1723360	0.000	8613	2088125.9259673	470975.4936107	0.000
8564	2078856.7230290	473591.4210848	0.000	8614	2088121.3606845	472296.5317214	0.000
8565	2078891.4329731	470948.6557183	0.000	8615	2088116.7819678	473617.6387365	0.000

Page 12 of 15

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-9116

COGO REPORT

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S016

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
8154	2078870.1278510	478220.1645822	0.0000	8195	2084362.5547645	474993.4197494	0.0000
8155	2078866.4066108	478881.5724689	0.0000	8196	2084362.0719128	475133.7117480	0.0000
8156	2079121.8890674	474974.8467428	0.0000	8197	2084577.5141214	474993.9764804	0.0000
8157	2079120.8268259	475163.6480208	0.0000	8198	2084576.9198435	475166.6432272	0.0000
8158	2079532.2233320	474975.9094824	0.0000	8199	2084829.3033681	474994.6285985	0.0000
8159	2079528.9945313	475575.9172500	0.0000	8200	2084828.7083850	475167.5002573	0.0000
8160	2079525.4356875	476237.2568750	0.0000	8201	2085465.2242980	477572.8229714	0.0000
8161	2079523.0604767	476678.6420833	0.0000	8202	2085463.0562235	478234.2588536	0.0000
8162	2079521.8768438	476898.5965000	0.0000	8203	2085461.9721862	478564.9767947	0.0000
8163	2079118.1078152	476642.2158784	0.0000	8204	2085456.6060840	480202.0665751	0.0000
8164	2079116.6697708	476897.8118330	0.0000	8205	2086782.6489469	478238.4134572	0.0000
8165	2079518.3180000	477559.9361250	0.0000	8206	2086781.5931224	478569.4422144	0.0000
8166	2079514.7879375	478221.2764063	0.0000	8207	2086780.5372979	478900.4709715	0.0000
8167	2080172.1289253	474992.5668473	0.0000	8208	2086778.4256490	479562.5284858	0.0000
8168	2080163.0494050	476679.8133131	0.0000	8209	2086817.4110857	479873.2687699	0.0000
8169	2080192.4795592	474992.6195542	0.0000	8210	2086816.3655241	480208.0671243	0.0000
8170	2080179.2870000	477561.1457500	0.0000	8211	2086917.4110744	479873.2214120	0.0000
8171	2080175.9481250	478222.4166875	0.0000	8212	2086916.3655129	480208.0197627	0.0000
8172	2080172.6092500	478883.6876250	0.0000	8213	2087165.6110466	479873.1038696	0.0000
8173	2080439.9476384	478222.8719988	0.0000	8214	2087164.5654851	480207.9022113	0.0000
8174	2080436.6089039	478884.1151241	0.0000	8215	2087438.2482055	479562.7356768	0.0000
8175	2080688.1879495	478506.3642388	0.0000	8216	2087437.2793401	479872.9752131	0.0000
8176	2080686.2785765	478884.5194185	0.0000	8217	2087436.2337787	480207.7735450	0.0000
8177	2080840.2560000	477562.3553750	0.0000	8218	2088112.0217625	474998.1306129	0.0000
8178	2080837.3881835	478164.7674037	0.0000	8219	2088111.5675768	475146.7447801	0.0000
8179	2080837.1083125	478223.5569687	0.0000	8220	2088108.1673995	476259.3171115	0.0000
8180	2081129.1108933	477562.8840021	0.0000	8221	2088104.1315480	477579.8884714	0.0000
8181	2081126.8693673	478033.7377870	0.0000	8222	2088102.1112860	478240.9066036	0.0000
8182	2081126.2433666	478165.2351518	0.0000	8223	2088100.0910240	478901.9247358	0.0000
8183	2081124.5173775	478507.0707945	0.0000	8224	2088098.0707620	479562.9428679	0.0000
8184	2081499.1191278	478034.4799349	0.0000	8225	2088096.1009285	480207.4610695	0.0000
8185	2081497.0030638	478507.6739668	0.0000	8226	2088319.9599332	475018.6692266	0.0000
8186	2081495.3120000	478885.8295000	0.0000	8227	2088319.5662222	475147.4954353	0.0000
8187	2082833.8977684	474984.4606085	0.0000	8228	2089410.8603311	476263.4116387	0.0000
8188	2082823.4565000	477566.4275000	0.0000	8229	2089405.0736456	478243.3685730	0.0000
8189	2083847.1572949	478570.1926239	0.0000	8230	2089403.1447327	478903.3603	0.0000
8190	2083846.1637030	478865.3509516	0.0000	8231	2089443.8603508	476263 198	0000
8191	2084125.8167623	478570.7285790	0.0000	8232	2089438.0737535	478 798776	0000
8192	2084124.8231704	478865.8869067	0.0000	8233	2089436.1448814	478901 76651	0000
8193	2084124.7390133	478890.8867650	0.0000	8234	2089434.2160092	479563	0.0000
8194	2084170.5730221	475133.0599299	0.0000	8235	2090082.9693820	477582.66 8	0.0000

Page 10 of 18

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
8236	2090080.8162865	478242.6057733	0.0000	8277	2098651.0220430	479560.0547255	0.0000
8237	2090742.4362640	477581.9093955	0.0000	8278	2098647.8250296	480203.1186332	0.0000
8238	2090740.0589480	478241.8117966	0.0000	8279	2099961.9691622	478242.6321822	0.0000
8239	2090737.6816320	478901.7141978	0.0000	8280	2099958.7874361	478902.5879754	0.0000
8240	2090735.3043160	479561.6165989	0.0000	8281	2098671.3469421	474930.2720390	0.0000
8241	2090732.9864420	480205.0189023	0.0000	8282	2098673.7798775	474006.2064688	0.0000
8242	2091740.1837626	475502.4004532	0.0000	8283	2099077.6031604	473629.8335440	0.0000
8243	2091737.0599185	476262.0104711	0.0000	8284	2099333.8213336	473391.0	0.0000
8244	2092068.4287603	475932.1541716	0.0000	8285	2099333.7054253	473634 43763	0.0000
8245	2092067.0170138	476261.8028955	0.0000	8286	2099976.1385113	473631.1 083	0.0000
8246	2092055.7185138	478900.0498955	0.0000	8287	2041806.9814427	470207.31 71	0.0000
8247	2092728.4049766	475931.7646912	0.0000	8288	2041806.6223870	470363.8836	0.0000
8248	2092726.8731355	476261.3401716	0.0000	8289	2041806.3398023	470487.10675	0.0000
8249	2074372.2223362	474842.5450065	0.0000	8290	2041805.4599485	470870.7740333	0.0000
8250	2093386.7292570	476260.8774478	0.0000	8291	2041 3572695	472230.6927537	0.0000
8251	2093388.7526655	475857.2796430	0.0000	8292	1800 59707	473519.0001407	0.0000
8252	2093380.1215140	477578.8863955	0.0000	82	2041798.83 58	474179.6538073	0.0000
8253	2094041.2692874	477248.7017043	0.0000	8294	2041798.16876	74546.3079550	0.0000
8254	2094039.4972570	477578.1306978	0.0000	8295	42078.6684344	74546.7410133	0.0000
8255	2094689.9411612	476259.9635709	0.0000	96	2078.2291212	74789.6155565	0.0000
8256	2094684.2647546	477248.0363248	0.0000	8	2041 50.8384075	70488.1006813	0.0000
8257	2096019.4701700	477578	0.0000	8	2042161.2108339	470325.7011084	0.0000
8258	2096015.9120040	478 5754265	0.0000	99	2042454.0296215	469562.1652150	0.0000
8259	2096014.1329200	4785 0109388	0.0000	8300	2042452.6328358	470209.0323639	0.0000
8260	2096012.3538360	47889 64510	0.0000	8301	2042445.9630466	473520.2192278	0.0000
8261	2096 580	555.3 755	0.0000	8302	2042444.7767733	474180.7619889	0.0000
8262	2096 05.326 9	97.68 96	0.0000	8303	2042782.9951174	474181.3422356	0.0000
8263	2096 69.36700	479 5.4258383	0.0000	8304	2042780.7179185	474295.5935270	0.0000
8264	2096 5.9865596	480198.9448852	0.0000	8305	2042805.6621069	474377.2353810	0.0000
8265	2097 5910080	478239.2006030	0.0000	8306	2042829.2357694	474421.8220581	0.0000
8266	2097335 28400	478568.7840025	0.0000	8307	2042866.2800961	474490.8052851	0.0000
8267	2097333.3146720	478898.3674020	0.0000	8308	2042899.1156119	474567.3600734	0.0000
8268	2097329.9383360	479557.5342010	0.0000	8309	2042931.4268031	474617.0576435	0.0000
8269	2097990.4801895	479558.7944632	0.0000	8310	2042963.6646027	474663.2278599	0.0000
8270	2097987.2357717	480201.6598820	0.0000	8311	2042978.3298470	474748.7127750	0.0000
8271	2097346.8151720	476262.6459020	0.0000	8312	2042962.3938048	474766.2289529	0.0000
8272	2098671.2380892	474963.2719357	0.0000	8313	2042746.4832230	474616.7721125	0.0000
8273	2098666.0813360	476264.0677010	0.0000	8314	2042746.2144912	474790.8345070	0.0000
8274	2098660.8591720	477581.3634020	0.0000	8315	2043116.0940825	469564.0214712	0.0000
8275	2098657.5801290	478240.9271765	0.0000	8316	2043114.7841716	470210.7939778	0.0000
8276	2098654.3010860	478900.4909510	0.0000	8317	2043113.4408433	470874.0664555	0.0000

Page 11 of 18

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
8	2043 41865	472200.6114112	0.0000	8359	2053682.2041370	473530.5952375	0.0000
8319	2043110 53475	472233.6113585	0.0000	8360	2054342.2877055	473531.5548563	0.0000
8320	2043 990933	473521.4694555	0.0000	8361	2054339.6265203	474804.6078331	0.0000
8321	2043107.2215466	474181.8984778	0.0000	8362	2055002.3712740	473532.5144750	0.0000
8322	2043106.1792161	474766.4913348	0.0000	8363	2055668.7712240	469584.9399964	0.0000
8323	2044437.9216864	470877.4004110	0.0000	8364	2055666.6927680	470890.1063563	0.0000
8324	2044433.2711864	473523.9699110	0.0000	8365	2055665.6404020	471550.9395344	0.0000
8325	2044432.1110932	474184.1714555	0.0000	8366	2055664.5880360	472211.7727127	0.0000
8326	2045052.0289925	474223.4447870	0.0000	8367	2056028.7917784	471144.4968763	0.0000
8327	2045051.0245959	474795.0403613	0.0000	8368	2056028.3945535	471441.4966106	0.0000
8328	2045402.0284704	474224.0492996	0.0000	8369	2056326.1297620	470891.7092375	0.0000
8329	2045401.0240138	474795.6790458	0.0000	8370	2056325.7905064	471145.3661085	0.0000
8330	2045102.2870892	469569.7512038	0.0000	8371	2056325.3932815	471442.3658429	0.0000
8331	2045099.1793899	470879.1456833	0.0000	8372	2056325.2461430	471552.3793562	0.0000
8332	2045764.3511678	469571.7684240	0.0000	8373	2056324.3625240	472213.0494751	0.0000
8333	2045760.4370933	470880.8909555	0.0000	8374	2056320.9142327	474791.2812261	0.0000
8334	2046426.4152422	469573.7856441	0.0000	8375	2056984.1370120	472214.3262376	0.0000
8335	2046421.6947966	470882.6362277	0.0000	8376	2056981.3473399	474791.8390288	0.0000
8336	2047066.4525368	470884.3379513	0.0000	8377	2058303.8844541	473537.7101689	0.0000
8337	2047749.1335055	469575.7322567	0.0000	8378	2058302.5143740	474807.9548936	0.0000
8338	2047739.3595628	472208.9503920	0.0000	8379	2058964.9496583	473539.1293378	0.0000
8339	2048409.7877020	469575.6615057	0.0000	8380	2058963.2597686	474809.5590364	0.0000
8340	2048401.3631255	472208.4407840	0.0000	8381	2059628.1037248	472219.9547634	0.0000
8341	2051052.2396671	469575.1665087	0.0000	8382	2059626.0148624	473540.5485066	0.0000
8342	2051048.0785878	471216.4084658	0.0000	8383	2059624.0042774	474811.6547313	0.0000
8343	2051045.5686255	472206.4052840	0.0000	8384	2060287.0800665	473541.9676755	0.0000
8344	2051906.0906692	470553.2831059	0.0000	8385	2060290.7123498	471560.7513883	0.0000
8345	2051905.3235996	470818.2219955	0.0000	8386	2060954.2119249	470901.3942566	0.0000
8346	2052354.0505707	470553.1632452	0.0000	8387	2060953.1136373	471562.1263224	0.0000
8347	2052353.2835010	470818.1021348	0.0000	8388	2060952.0153498	472222.8583884	0.0000
8348	2052352.1331995	471215.4058356	0.0000	8389	2060947.9324133	474679.2685061	0.0000
8349	2052386.0989481	470881.8926148	0.0000	8390	2060947.7053883	474815.8531372	0.0000
8350	2052699.3060968	470882.6825594	0.0000	8391	2061182.9311910	474680.0264435	0.0000
8351	2052384.1829618	471543.6567711	0.0000	8392	2061182.7041870	474816.5984870	0.0000
8352	2052697.4769576	471544.3549641	0.0000	8393	2061616.5002833	470902.6910878	0.0000
8353	2052380.4019867	472867.0604577	0.0000	8394	2061614.5295665	472224.3114256	0.0000
8354	2053025.5286370	472206.6657376	0.0000	8395	2061610.6623383	474817.9558493	0.0000
8355	2053023.8246027	472868.1506781	0.0000	8396	2062924.5770262	470905.2524413	0.0000
8356	2053022.1205685	473529.6356188	0.0000	8397	2062957.5770066	470905.2885190	0.0000
8357	2053691.5253682	469578.9119581	0.0000	8398	2062954.5390032	473549.1569445	0.0000
8358	2053685.2902740	472207.9424751	0.0000	8399	2062953.7795024	474210.1240514	0.0000

Page 12 of 18

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-9116

COGO REPORT

SWO 5144(1) PROJECT NO. 29657(04) SHEET NO. S017

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
8646	2097780.3864596	474226.8757054	0.0000	9002	2047048.1700000	480134.3290000	0.0000
8647	2098019.2453015	472310.5772573	0.0000	9003	2049692.0090000	480137.6270000	0.0000
8648	2098017.5422886	472969.4366931	0.0000	9004	2052335.9180000	480141.2660000	0.0000
8649	2098676.5067758	472970.4893788	0.0000	9005	2054982.7680000	480138.9790000	0.0000
8650	2098674.7723505	473629.2502525	0.0000	9006	2057629.6180000	480136.6920000	0.0000
8651	2098674.2128319	473841.7638480	0.0000	9007	2060273.0820000	480146.9280000	0.0000
8652	2098901.8730590	473629.5790904	0.0000	9008	2062916.6080000	480157.9090000	0.0000
8653	2099334.0259211	472968.8741587	0.0000	9009	2065560.5690000	480160.0460000	0.0000
8654	2099333.9008667	473226.9188769	0.0000	9010	2068205.1410000	480162.4870000	0.0000
8655	2099595.6923533	472969.2530472	0.0000	9011	2070902.0350000	480171.7140000	0.0000
8656	2099980.3344860	471918.5496598	0.0000	9012	2073549.0750000	480178.7160000	0.0000
8657	2099889.2477569	471954.7209084	0.0000	9013	2076195.7695000	480191.5405000	0.0000
8658	2099708.1932451	471971.9244155	0.0000	9014	2078842.4640000	480204.3650000	0.0000
8659	2099674.6723099	471956.2844985	0.0000	9015	2081489.3990000	480208.0940000	0.0000
8660	2099676.0633181	471865.7451833	0.0000	9016	2084136.7900000	480212.5470000	0.0000
8661	2099496.9368057	471044.4317979	0.0000	9017	2086776.3140000	480224.5860000	0.0000
8662	2099317.9691112	471050.1805307	0.0000	9018	2089415.7870000	480223.3360000	0.0000
8663	2099013.7341887	470860.1437552	0.0000	9019	2092050.0670000	480219.7020000	0.0000
8664	2098998.7147202	470843.0297707	0.0000	9020	2094683.9130000	480211.6760000	0.0000
8665	2099002.5786365	470824.8253138	0.0000	9021	2097326.5620000	480216.7010000	0.0000
8666	2098972.2460746	470788.8319729	0.0000	9022	2099968.9240000	480222.5360000	0.0000
8667	2098968.0230144	470760.6162563	0.0000	9023	2041772.2730000	477483.1550000	0.0000
8668	2098961.6438840	470347.0454509	0.0000	9024	2044418.5861621	477487.5699538	0.0000
8669	2098981.9448401	470347.6514877	0.0000	9025	2047064.5020000	477491.5350000	0.0000
8670	2098983.5735265	470322.3739031	0.0000	9026	2049705.8363632	477489.9045020	0.0000
8671	2098986.5931028	470100.0044037	0.0000	9027	2052352.0370000	477488.2710000	0.0000
8672	2098974.6951341	469849.9573137	0.0000	9028	2054991.3621859	477492.5416614	0.0000
8673	2083768.3250000	474986.8807154	0.0000	9029	2057635.4320000	477496.8200000	0.0000
8674	2083768.2861511	475001.8806651	0.0000	9030	2060278.8684803	477505.6508859	0.0000
8675	2078666.0185479	471251.4103431	0.0000	9031	2062926.5640000	477514.4960000	0.0000
8676	2054337.5253474	475513.2863739	0.0000	9032	2065569.2022522	477516.2933958	0.0000
8677	2054997.7872965	475514.0351652	0.0000	9033	2068212.1470000	477518.0910000	0.0000
8678	2085487.3400738	469665.3704488	0.0000	9034	2070915.0097236	477528.6338379	0.0000
8679	2085880.1962009	474213.3319009	0.0000	9035	2073566.9380000	477538.9780000	0.0000
8680	2086128.3461649	474213.1983607	0.0000	9036	2076212.6808879	477548.8542560	0.0000
8681	2086099.8074765	473973.1437752	0.0000	9037	2078857.3490000	477558.7265	0.0000
8682	2085879.8575083	473973.2621398	0.0000	9038	2081501.2250000	477563.[illegible]	[illegible]
8683	2074672.2694955	474902.5310466	0.0000	9039	2084145.6880000	477[illegible]	[illegible]
8837	2058302.7679980	474807.9551078	0.0000	9040	2086784.7605959	477[illegible]	[illegible]
9000	2041763.5350000	480126.2400000	0.0000	9041	2089423.5025000	477583.[illegible]	0.0000
9001	2044405.7416904	480130.1987497	0.0000	9042	2092061.3700276	477580.39[illegible]	0.0000

Page 16 of 18

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
9043	2094698.8730000	477577.3750000	0.0000	9084	2076228.7769414	472262.0916071	0.0000
9044	2097340.0673440	477580.0338040	0.0000	9085	2078874.2120000	472269.8440000	0.0000
9045	2099981.6510000	477582.6930000	0.0000	9086	2081517.1670000	472277.7010000	0.0000
9046	2041781.1370000	474840.2820000	0.0000	9087	2084160.3630083	472285.5416005	0.0000
9047	2044430.9510000	474844.3730000	0.0000	9088	2086801.0623695	472292.8684428	0.0000
9048	2047080.9330000	474848.9500000	0.0000	9089	2089441.6590000	472300.1950000	0.0000
9049	2049719.6199369	474850.5669968	0.0000	9090	2092081.8083921	472302.5059969	0.0000
9050	2052358.3070000	474851.9630000	0.0000	9091	2094721.9650000	472304.81[illegible]	0.0000
9051	2054999.9290000	474854.5330000	0.0000	9092	2097360.2494024	472305.[illegible]0097	0.0000
9052	2057641.7270000	474856.9790000	0.0000	9093	2099996.2330000	472314.[illegible]	0.0000
9053	2060284.6590000	474862.5300000	0.0000	9094	2102600.2260000	472320.55[illegible]	0.0000
9054	2062936.5200000	474871.0830000	0.0000	9095	2105257.7990000	472327.0330	0.0000
9055	2065577.8360000	474872.3890000	0.0000	9096	2041792.0030000	469543.8090	0.0000
9056	2068219.1530000	474873.6950000	0.0000	9097	2044440.2520000	469551.2340000	0.0000
9057	2070927.9779842	474886.8702453	0.0000	9098	2047[illegible].5490000	469559.3030000	0.0000
9058	2073586.9470000	474899.8030000	0.0000	9099	2[illegible]73[illegible]20000	469559.0200000	0.0000
9059	2076229.5905000	474906.4455000	0.0000	9[illegible]	2052373.43[illegible]00	469558.3130000	0.0000
9060	2078872.2340000	474913.0880000	0.0000	9101	2055009.6980[illegible]	469566.5110000	0.0000
9061	2081513.5115000	474919.0465000	0.0000	9102	[illegible]57646.0960000	469574.2270000	0.0000
9062	2084154.7890000	474925.0050000	0.0000	9103	2[illegible]294.3460000	469578.7895000	0.0000
9063	2086793.1885024	474933.9855032	0.0000	9[illegible]	2065[illegible]42.5960000	469583.3520000	0.0000
9064	2089431.2180[illegible]	474943.[illegible]	0.0000	9[illegible]	2065586.6990000	469583.7217500	0.0000
9065	2092072.6640000	474[illegible]080000	0.0000	9106	2068230.8020000	469584.0915000	0.0000
9066	2094714.0100000	474[illegible]290000	0.0000	9107	2070936.6170000	469602.6260000	0.0000
9067	2097353.5630000	474[illegible]380000	0.0000	9108	2073580.2730000	469608.8770000	0.0000
9068	2099[illegible]0000	474948.2[illegible]0000	0.0000	9109	2076227.9635000	469618.1185000	0.0000
9069	2101[illegible]89.286[illegible]0	47[illegible]54.20[illegible]000	0.0000	9110	2078875.6540000	469627.3600000	0.0000
9070	2[illegible]47.65900	474[illegible]2710000	0.0000	9111	2081520.9340000	469636.7196847	0.0000
9071	2045[illegible]5.917000	472197.6560000	0.0000	9112	2084165.8270000	469646.0780000	0.0000
9072	2044[illegible]5913728	472203.5668224	0.0000	9113	2086808.9365000	469651.6630000	0.0000
9073	2047077[illegible]560000	472209.4600000	0.0000	9114	2089452.0460000	469657.2480000	0.0000
9074	2049725.3702509	472207.4215680	0.0000	9115	2092090.9500000	469662.6080000	0.0000
9075	[illegible]052365.7670000	472205.3890000	0.0000	9116	2094730.2540000	469667.1200000	0.0000
9076	2055004.8135481	472210.4959503	0.0000	9117	2097366.9410000	469671.5460000	0.0000
9077	2057643.9115000	472215.6030000	0.0000	9118	2100000.2450000	469676.1960000	0.0000
9078	2060289.5011330	472221.4053512	0.0000	9119	2102613.1549825	469683.4205640	0.0000
9079	2062939.5580000	472227.2175000	0.0000	9120	2105261.8240000	469690.7440000	0.0000
9080	2065582.2675000	472228.0553749	0.0000	9121	2068236.6265000	466939.2897500	0.0000
9081	2068224.9775000	472228.8932500	0.0000	9122	2069575.8023962	480167.1765031	0.0000
9082	2070932.3023942	472241.7496308	0.0000	9123	2068208.6440000	478840.2890000	0.0000
9083	2073583.6100000	472254.3400000	0.0000	9124	2069581.4758319	478845.3152751	0.0000

Page 17 of 18

SWO5390(1) COORDINATE POINT LIST Job Piece 31222(04)

PT NO	NORTHING	EASTING	EL (Z)	PT NO	NORTHING	EASTING	EL (Z)
9[illegible]	[illegible]92664	477523.4543601	0.0000				
9126	2068215.[illegible]00000	476195.8930000	0.0000				
9127	2[illegible]212615	476201.9287996	0.0000				
9[illegible]28	2[illegible]398.4932539	474880.4038669	0.0000				
9[illegible]9	2068222.0652500	473551.2941250	0.0000				
9130	2069602.6499916	473557.9296256	0.0000				
9131	2069606.8067300	472235.4551971	0.0000				
9132	2068227.8897500	470906.4923750	0.0000				
9133	2069610.9511866	470914.5127694	0.0000				
9134	2069615.0956325	469593.5737411	0.0000				
9135	2101267.0169942	474951.1960669	0.0000				
9136	2099992.6385000	473631.1585000	0.0000				
9137	2101272.6256855	473634.2197319	0.0000				
9138	2101278.2343767	472317.2433969	0.0000				
9139	2099998.2390000	470995.1135000	0.0000				
9140	2101283.5279329	470998.5011229	0.0000				
9141	2101288.8214891	469679.7588489	0.0000				

Page 18 of 18

Preliminary Plans

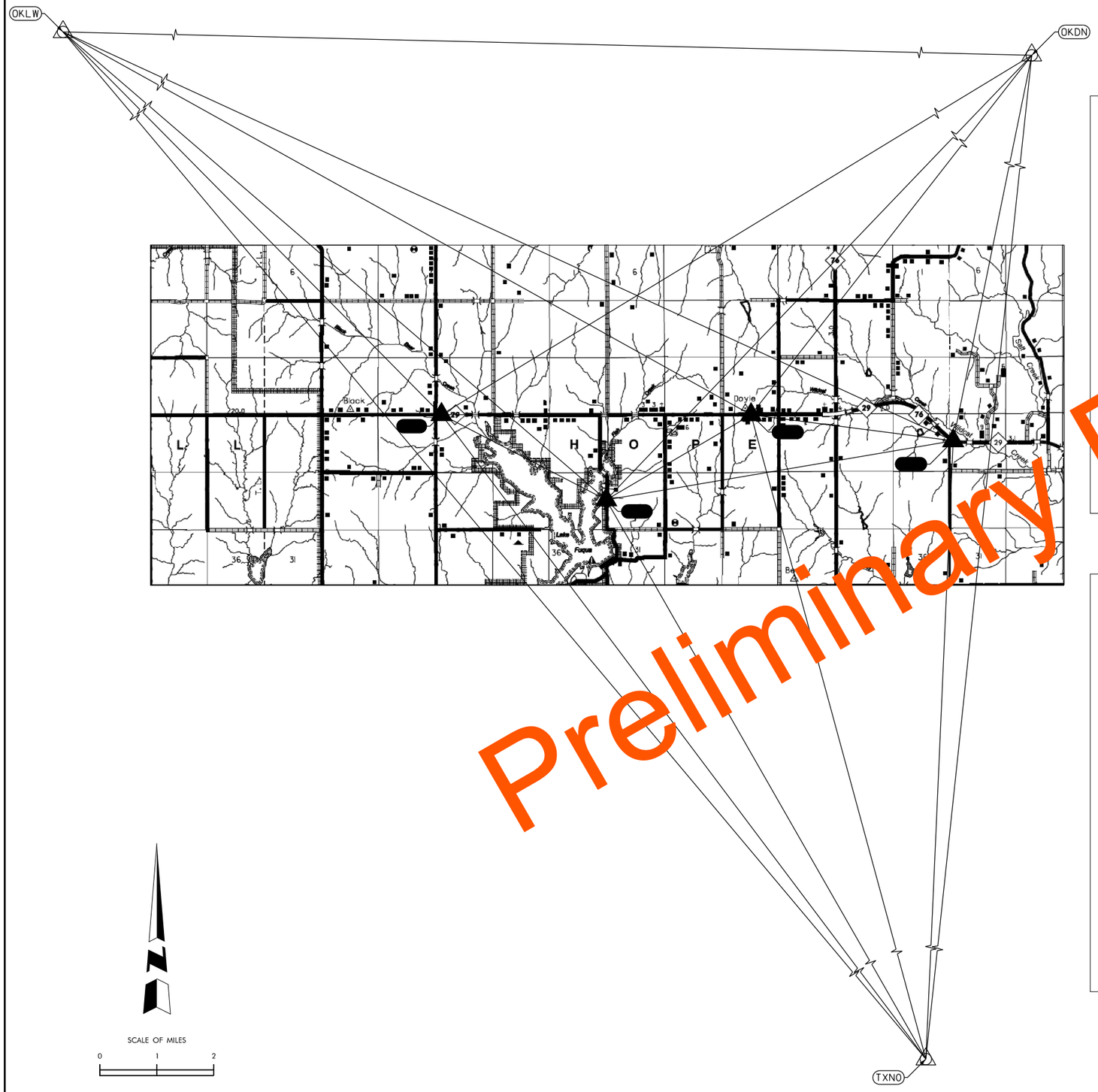
PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-9116

COGO REPORT

SWO 5144(I) PROJECT NO. 29657(04) SHEET NO. S018



Preliminary Plans

7401
NGS OPUS SOLUTION REPORT

All computed coordinate accuracies are listed as peak-to-peak values.
For additional information: http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy

USER: taylor.denniston@srbok.com DATE: October 27, 2015
RINEX FILE: log0257r.15o TIME: 17:02:17 UTC

SOFTWARE: page5 1209.04 master50.pl 022814 START: 2015/09/14 17:47:00
EPHEMERIS: igs18621.eph [precise] STOP: 2015/09/14 22:13:00
NAV FILE: brdc2570.15n OBS USED: 9543 / 10228 : 93%
ANT NAME: TRM41019 NONE # FIXED AMB: 45 / 48 : 94%
ARP HEIGHT: 2.00 OVERALL RMS: 0.017(m)

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2015.7037)

X:	-705669.627(m)	0.021(m)	-705670.439(m)	0.021(m)	
Y:	-5206014.019(m)	0.029(m)	-5206012.612(m)	0.029(m)	
Z:	3605073.267(m)	0.022(m)	3605073.117(m)	0.022(m)	
LAT:	34 38 16.58743	0.005(m)	34 38 16.60713	0.005(m)	
E LON:	262 16 50.39799	0.018(m)	262 16 50.35888	0.018(m)	
W LON:	97 43 9.60211	0.018(m)	97 43 9.64112	0.018(m)	
EL HGT:	318.196(m)	0.038(m)	317.053(m)	0.038(m)	
ORTHO HGT:	344.020(m)	0.065(m)	[NAVD88 (Computed using GEOID12B)]		

UTM COORDINATES STATE PLANE COORDINATES
UTM (Zone 14) SPC (3502 OK S)
Northing (Y) [meters] 3533538.985 144747.311
Easting (X) [meters] 617378.801 625732.166
Convergence [degrees] 0.72799932 0.15931075
Point Scale 0.99976982 0.99993638
Combined Factor 0.99971989 0.99988644

US NATIONAL GRID DESIGNATOR: 14SPD1737833638(NAD 83)

BASE STATIONS USED
PID DESIGNATION LATITUDE LONGITUDE DISTANCE(m)
DE8099 OKLW LAWTON CORS ARP N343421.89 W0982435.689 6372
DG9791 OKDN DUNCAN CORS ARP N342845.50 W0975759.560 [illegible]
DL3178 TXNO NOCONA CORS ARP N334632.344 W0974333.670 95855.1

NEAREST NGS PUBLISHED CONTROL POINT
EL0994 [illegible] N343816.596 W097[illegible]51.706

STATE PLANE COORDINATES - U.S. Survey Foot
SPC (3502 [illegible]
Northing (Y) [feet] [illegible]4891.885
Easting (X) [feet] [illegible]3222.940
Convergence [degrees] [illegible]0.15931075
Point Scale 0.99993638
Combined Factor 0.99988644

7402
NGS OPUS SOLUTION REPORT

All computed coordinate accuracies are listed as peak-to-peak values.
For additional information: http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy

USER: taylor.denniston@srbok.com DATE: October 27, 2015
RINEX FILE: log0257r.15o TIME: 17:06:54 UTC

SOFTWARE: page5 1209.04 master51.pl 022814 START: 2015/09/14 17:10:00
EPHEMERIS: igs18621.eph [precise] STOP: 2015/09/14 22:31:00
NAV FILE: brdc2570.15n OBS USED: 11406 / 12236 : 93%
ANT NAME: TPSGR3 NONE # FIXED AMB: 65 / 66 : 98%
ARP HEIGHT: 1.76 OVERALL RMS: 0.015(m)

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2015.7037)

X:	-697006.267(m)	0.022(m)	-697007.079(m)	0.022(m)	
Y:	-5207226.186(m)	0.043(m)	-5207224.778(m)	0.043(m)	
Z:	3605063.253(m)	0.040(m)	3605063.103(m)	0.040(m)	
LAT:	34 38 15.46381	0.007(m)	34 38 15.51356	0.007(m)	
E LON:	262 22 33.84130	0.016(m)	262 22 33.80237	0.016(m)	
W LON:	97 37 26.15870	0.016(m)	97 37 26.19763	0.016(m)	
EL HGT:	349.361(m)	0.060(m)	348.219(m)	0.060(m)	
ORTHO HGT:	375.095(m)	0.102(m)	[NAVD88 (Computed using GEOID12B)]		

UTM COORDINATES STATE PLANE COORDINATES
UTM (Zone 14) SPC (3502 OK S)
Northing (Y) [meters] 3531720.549 144742.267
Easting (X) [meters] 626123.785 634478.853
Convergence [degrees] 0.78223815 0.21346192
Point Scale 0.99979007 0.99993638
Combined Factor 0.99974124 0.99988155

US NATIONAL GRID DESIGNATOR: 14SPD2612333729(NAD 83)

BASE STATIONS USED
PID DESIGNATION LATITUDE LONGITUDE DISTANCE(m)
DG9791 OKDN DUNCAN CORS ARP N342845.501 W0975759.560 31272.7
DL3178 TXNO NOCONA CORS ARP N334632.344 W0974333.670 93379.1

NEAREST NGS PUBLISHED CONTROL POINT
EL0990 DOYLE N343816.596 W097[illegible]26.364 34.5

STATE PLANE COORDINATES - U.S. Survey Foot
SPC (3502 OK S)
Northing (Y) [feet] 474374.598
Easting (X) [feet] 2081619.370
Convergence [degrees] 0.21346192
Point Scale 0.99993638
Combined Factor 0.99988155

7403
NGS OPUS SOLUTION REPORT

All computed coordinate accuracies are listed as peak-to-peak values.
For additional information: http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy

USER: taylor.denniston@srbok.com DATE: October 27, 2015
RINEX FILE: log0257q.15o TIME: 17:17:48 UTC

SOFTWARE: page5 1209.04 master52.pl 022814 START: 2015/09/14 16:31:00
EPHEMERIS: igs18621.eph [precise] STOP: 2015/09/14 22:38:00
NAV FILE: brdc2570.15n OBS USED: 13919 / 13803 : 94%
ANT NAME: TPSGR3 NONE # FIXED AMB: 54 / 60 : 90%
ARP HEIGHT: 2.17 OVERALL RMS: 0.013(m)

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2015.7036)

X:	-691400.370(m)	0.012(m)	-691401.182(m)	0.012(m)	
Y:	-5208304.912(m)	0.016(m)	-5208303.544(m)	0.016(m)	
Z:	3604406.387(m)	0.021(m)	3604406.237(m)	0.021(m)	
LAT:	34 37 50.79872	0.009(m)	34 37 50.81848	0.009(m)	
E LON:	262 26 17.90453	0.010(m)	262 26 17.86566	0.010(m)	
W LON:	97 33 42.09547	0.010(m)	97 33 42.13434	0.010(m)	
EL HGT:	295.338(m)	0.025(m)	294.193(m)	0.025(m)	
ORTHO HGT:	320.967(m)	0.045(m)	[NAVD88 (Computed using GEOID12B)]		

UTM COORDINATES STATE PLANE COORDINATES
UTM (Zone 14) SPC (3502 OK S)
Northing (Y) [meters] 3533039.445 144004.162
Easting (X) [meters] 631633.845 640168.438
Convergence [degrees] 0.81746723 0.24579026
Point Scale 0.99981424 0.99993627
Combined Factor 0.99976789 0.99988991

US NATIONAL GRID DESIGNATOR: 14SPD3183933039(NAD 83)

BASE STATIONS USED
PID DESIGNATION LATITUDE LONGITUDE DISTANCE(m)
DE8099 OKLW LAWTON CORS ARP N343421.987 W0982435.689 78074.4
DG9791 OKDN DUNCAN CORS ARP N342845.501 W0975759.560 40781.6
DL3178 TXNO NOCONA CORS ARP N334632.344 W0974333.670 96060.5

NEAREST NGS PUBLISHED CONTROL POINT
EL0990 DOYLE N343816.596 W0973726.364 5761.5

STATE PLANE COORDINATES - U.S. Survey Foot
SPC (3502 OK S)
Northing (Y) [feet] 472453.855
Easting (X) [feet] 2100351.567
Convergence [degrees] 0.24579026
Point Scale 0.99993627
Combined Factor 0.99988991

7404
NGS OPUS SOLUTION REPORT

All computed coordinate accuracies are listed as peak-to-peak values.
For additional information: http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy

USER: taylor.denniston@srbok.com DATE: October 27, 2015
RINEX FILE: log0257r.15o TIME: 16:58:00 UTC

SOFTWARE: page5 1209.04 master93.pl 022814 START: 2015/09/14 17:26:00
EPHEMERIS: igs18621.eph [precise] STOP: 2015/09/14 20:22:00
NAV FILE: brdc2570.15n OBS USED: 5700 / 5893 : 97%
ANT NAME: TPSGR3 NONE # FIXED AMB: 28 / 29 : 97%
ARP HEIGHT: 1.66 OVERALL RMS: 0.013(m)

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2015.7035)

X:	-701246.935(m)	0.011(m)	-701247.746(m)	0.011(m)	
Y:	-5207907.302(m)	0.027(m)	-5207905.894(m)	0.027(m)	
Z:	3603074.935(m)	0.023(m)	3603074.785(m)	0.023(m)	
LAT:	34 36 57.90474	0.006(m)	34 36 57.92447	0.006(m)	
E LON:	262 19 52.87731	0.009(m)	262 19 52.83939	0.009(m)	
W LON:	97 40 7.12269	0.009(m)	97 40 7.16191	0.009(m)	
EL HGT:	312.732(m)	0.030(m)	311.587(m)	0.030(m)	
ORTHO HGT:	338.495(m)	0.052(m)	[NAVD88 (Computed using GEOID12B)]		

UTM COORDINATES STATE PLANE COORDINATES
UTM (Zone 14) SPC (3502 OK S)
Northing (Y) [meters] 3531275.326 142336.995
Easting (X) [meters] 622056.945 630387.371
Convergence [degrees] 0.75904254 0.18808247
Point Scale 0.99973363 0.99993810
Combined Factor 0.99973455 0.99988701

US NATIONAL GRID DESIGNATOR: 14SPD2205631275(NAD 83)

BASE STATIONS USED
PID DESIGNATION LATITUDE LONGITUDE DISTANCE(m)
DE8099 OKLW LAWTON CORS ARP N343421.987 W0982435.689 68173.6
DG9791 OKDN DUNCAN CORS ARP N342845.501 W0975759.560 31272.7
DL3178 TXNO NOCONA CORS ARP N334632.344 W0974333.670 93379.1

NEAREST NGS PUBLISHED CONTROL POINT
EL1051 FUQUA N343657.905 W0974007.123 0.0

STATE PLANE COORDINATES - U.S. Survey Foot
SPC (3502 OK S)
Northing (Y) [feet] 466983.859
Easting (X) [feet] 2068195.900
Convergence [degrees] 0.18808247
Point Scale 0.99993610
Combined Factor 0.99988701

SDS 19 OF ~~42~~ 48

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone:(405) 840-7094
FAX:(405) 840-9116

HORIZONTAL CONTROL

SWO 5144(I) PROJECT NO. 29657(04) SHEET NO. S019

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

STATE OF OKLAHOMA
DEPARTMENT OF HIGHWAYS
SURVEY DIVISION
POSITION AND DESCRIPTION OF SURVEY MONUMENTS

S.D. FORM NO. 11
REVISED 3/10/75

COUNTY STEPHENS | STATION NUMBER S-69-768 | SWO 5144 | DATE 10/14/16

TYPE OF MONUMENT 5/8" IRON PIN WITH ALUMINUM CAP STAMPED "7400" MONUMENT SET FOR HORIZ. AND VERT. CONTROL

METHOD ESTABLISHED: TRILATERATION X, TRIANGULATION ___, TRAVERSE ___, OTHER (SPECIFY)

HEIGHT OF INSTRUMENT ABOVE MONUMENT: ___ FEET, TYPE OF WITNESS POST NONE

WRITTEN DESCRIPTION OF LOCATION: THE MONUMENT IS LOCATED 8' WEST OF NS-294 ROAD AT STATE HIGHWAY 29 ℄ STATION 603+99.26 OFFSET 42.03' Lt SAME BEING 70' WEST OF THE WEST EDGE NS-294 ROAD AND 26.0' NORTH OF THE NORTH EDGE OF STATE HIGHWAY 29.

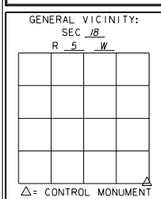
ESTABLISHED BY: SMITH ROBERTS BALDISCHWILER LLC TAYLOR DENNISTON PLS 1787

COORDINATE SYSTEM: ☐ USC&GS, ☐ OHD, X OTHER (SPECIFY) NAD 83 (1993)

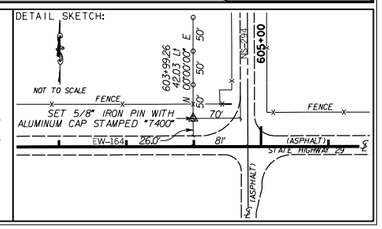
GRID DATA:	COORDINATES (FEET)	GRID BEARING	DISTANCE	POINTS OBSERVED
SOUTH ZONE		N 00°00' E	50.00'	SET 1/2" IRON PIN
ACCURACY:	X 2041699.8240	N 00°00' E	100.00'	SET 1/2" IRON PIN
2nd ORDER	Y 474880.9590	N 00°00' E	150.00'	SET 1/2" IRON PIN

GEODETIC DATA	POSITION		ELEVATION
ANGLE OF VARIANCE (Θ) 0°08'17.27568"	LATITUDE 34°38'16.76834"	NORTH	1236.797 FEET
	LONGITUDE 97°45'23.92341"	WEST	SOURCE NAVD 88
			ACCURACY: 2nd ORDER

GENERAL VICINITY:
SEC 18
R 5 W
T 2 N



DETAIL SKETCH:



STATE OF OKLAHOMA
DEPARTMENT OF HIGHWAYS
SURVEY DIVISION
POSITION AND DESCRIPTION OF SURVEY MONUMENTS

S.D. FORM NO. 11
REVISED 3/10/75

COUNTY STEPHENS | STATION NUMBER S-69-769 | SWO 5144 | DATE 10/14/16

TYPE OF MONUMENT 5/8" IRON PIN WITH ALUMINUM CAP STAMPED "7401" MONUMENT SET FOR HORIZ. AND VERT. CONTROL

METHOD ESTABLISHED: TRILATERATION X, TRIANGULATION ___, TRAVERSE ___, OTHER (SPECIFY)

HEIGHT OF INSTRUMENT ABOVE MONUMENT: ___ FEET, TYPE OF WITNESS POST NONE

WRITTEN DESCRIPTION OF LOCATION: THE MONUMENT IS LOCATED 565' EAST OF NS-296 ROAD AT STATE HIGHWAY 29 ℄ STATION 716+22.36 OFFSET 28.40' Lt SAME BEING 18.5' EAST OF A VENT PIPE WITH A SUNOCO GAS MARKER SIGN AND 26.8' NORTH OF THE NORTH EDGE OF STATE HIGHWAY 29.

ESTABLISHED BY: SMITH ROBERTS BALDISCHWILER LLC TAYLOR DENNISTON PLS 1787

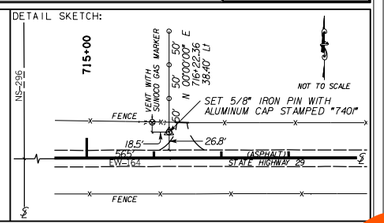
COORDINATE SYSTEM: ☐ USC&GS, ☐ OHD, X OTHER (SPECIFY) NAD 83 (1993)

GRID DATA:	COORDINATES (FEET)	GRID BEARING	DISTANCE	POINTS OBSERVED
SOUTH ZONE		N 00°00' E	50.00'	SET 1/2" IRON PIN
ACCURACY:	X 2052922.9520	N 00°00' E	100.00'	SET 1/2" IRON PIN
2nd ORDER	Y 474891.8070	N 00°00' E	150.00'	SET 1/2" IRON PIN

GEODETIC DATA	POSITION		ELEVATION
ANGLE OF VARIANCE (Θ) 0°09'33.51872"	LATITUDE 34°38'16.58748"	NORTH	1229.206 FEET
	LONGITUDE 97°43'09.60206"	WEST	SOURCE NAVD 88
			ACCURACY: 2nd ORDER

GENERAL VICINITY:
SEC 15
R 5 W
T 2 N

DETAIL SKETCH:



STATE OF OKLAHOMA
DEPARTMENT OF HIGHWAYS
SURVEY DIVISION
POSITION AND DESCRIPTION OF SURVEY MONUMENTS

S.D. FORM NO. 11
REVISED 3/10/75

COUNTY STEPHENS | STATION NUMBER S-69-770 | SWO 5144 | DATE 10/14/16

TYPE OF MONUMENT 5/8" IRON PIN WITH ALUMINUM CAP STAMPED "7402" MONUMENT SET FOR HORIZ. AND VERT. CONTROL

METHOD ESTABLISHED: TRILATERATION X, TRIANGULATION ___, TRAVERSE ___, OTHER (SPECIFY)

HEIGHT OF INSTRUMENT ABOVE MONUMENT: ___ FEET, TYPE OF WITNESS POST NONE

WRITTEN DESCRIPTION OF LOCATION: THE MONUMENT IS LOCATED 25.35' WEST OF NS-302 ROAD AT STATE HIGHWAY 29 ℄ STATION 1003+18.7 OFFSET 46.7' Rt SAME BEING 72' EAST OF A WOOD UTILITY POLE AND 30.2' SOUTH OF THE SOUTH EDGE OF STATE HIGHWAY 29.

ESTABLISHED BY: SMITH ROBERTS BALDISCHWILER LLC TAYLOR DENNISTON PLS 1787

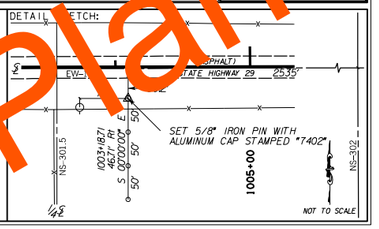
COORDINATE SYSTEM: ☐ USC&GS, ☐ OHD, X OTHER (SPECIFY) NAD 83 (1993)

GRID DATA:	COORDINATES (FEET)	GRID BEARING	DISTANCE	POINTS OBSERVED
SOUTH ZONE		S 00°00' E	50.00'	SET 1/2" IRON PIN
ACCURACY:	X 2081619.3680	S 00°00' E	100.00'	SET 1/2" IRON PIN
2nd ORDER	Y 474874.6010	S 00°00' E	150.00'	SET 1/2" IRON PIN

GEODETIC DATA	POSITION		ELEVATION
ANGLE OF VARIANCE (Θ) 0°12'48.46289"	LATITUDE 34°38'15.49386"	NORTH	123[illegible] FEET
	LONGITUDE 97°37'26.15873"	WEST	SOURCE NAVD 88
			ACCURACY: 2nd ORDER

GENERAL VICINITY:
SEC 21
R 4 W
T 2 N

DETAIL SKETCH:



STATE OF OKLAHOMA
DEPARTMENT OF HIGHWAYS
SURVEY DIVISION
POSITION AND DESCRIPTION OF SURVEY MONUMENTS

S.D. FORM NO. 11
REVISED 3/10/75

COUNTY GARVIN | STATION NUMBER G-25-709 | SWO 5144 | DATE 10/14/16

TYPE OF MONUMENT 5/8" IRON PIN WITH ALUMINUM CAP STAMPED "7403" MONUMENT SET FOR HORIZ. AND VERT. CONTROL

METHOD ESTABLISHED: TRILATERATION X, TRIANGULATION ___, TRAVERSE ___, OTHER (SPECIFY)

HEIGHT OF INSTRUMENT ABOVE MONUMENT: ___ FEET, TYPE OF WITNESS POST NONE

WRITTEN DESCRIPTION OF LOCATION: THE MONUMENT IS LOCATED 438' EAST OF NS-305 ROAD AS MEASURED ALONG THE CENTERLINE OF STATE HIGHWAY 29 AT ℄ STATION 1203+94.3 OFFSET 63.4' Rt SAME BEING 17.5' EAST OF AN ASPHALT DRIVE AND 50' SOUTH OF THE SOUTH EDGE OF STATE HIGHWAY 29.

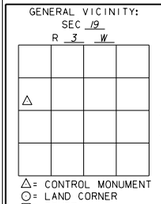
ESTABLISHED BY: SMITH ROBERTS BALDISCHWILER LLC TAYLOR DENNISTON PLS 1787

COORDINATE SYSTEM: ☐ USC&GS, ☐ OHD, X OTHER (SPECIFY) NAD 83 (1993)

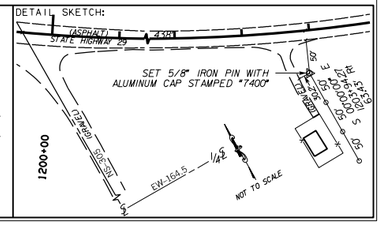
GRID DATA:	COORDINATES (FEET)	GRID BEARING	DISTANCE	POINTS OBSERVED
SOUTH ZONE		S 00°00' E	50.00'	SET 1/2" IRON PIN
ACCURACY:	X 2100351.5630	S 00°00' E	100.00'	SET 1/2" IRON PIN
2nd ORDER	Y 472453.6560	S 00°00' E	150.00'	SET 1/2" IRON PIN

GEODETIC DATA	POSITION		ELEVATION
ANGLE OF VARIANCE (Θ) 0°14'55.64491"	LATITUDE 34°37'50.79872"	NORTH	1053.927 FEET
	LONGITUDE 97°33'42.09550"	WEST	SOURCE NAVD 88
			ACCURACY: 2nd ORDER

GENERAL VICINITY:
SEC 19
R 3 W
T 2 N



DETAIL SKETCH:



STATE OF OKLAHOMA
DEPARTMENT OF HIGHWAYS
SURVEY DIVISION
POSITION AND DESCRIPTION OF SURVEY MONUMENTS

S.D. FORM NO. 11
REVISED 3/10/75

COUNTY STEPHENS | STATION NUMBER [illegible] | SWO 5144 | DATE 10/14/16

TYPE OF MONUMENT 5/8" IRON PIN WITH ALUMINUM CAP STAMPED "7404" MONUMENT SET FOR HORIZ. AND VERT. CONTROL

METHOD ESTABLISHED: TRILATERATION X, TRIANGULATION ___, TRAVERSE ___, OTHER (SPECIFY)

HEIGHT OF INSTRUMENT ABOVE MONUMENT: ___ FEET, TYPE OF WITNESS POST NONE

WRITTEN DESCRIPTION OF LOCATION: THE MONUMENT IS LOCATED 44.6' NORTH OF THE EW-165.5 [illegible] 40.6' EAST NS-299 ROAD AT STATE HIGHWAY 29 ℄ STATION 868+74.85 OFFSET 7902.66' Rt 29 ℄ STATION 868+74.85 OFFSET [illegible] Rt SAME BEING SAME BEING 10' NORTH OF THE NORTH GATE POST FOR A GATE LYING EAST OF THE NS-299 ROAD AND 20.4' WEST OF THE WEST EDGE NS-299 ROAD.

ESTABLISHED BY: SMITH ROBERTS BALDISCHWILER LLC TAYLOR DENNISTON PLS 1787

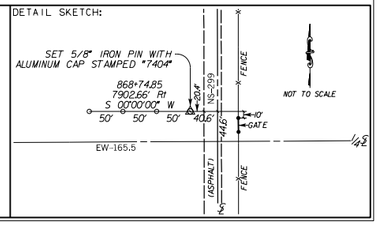
COORDINATE SYSTEM: ☐ USC&GS, ☐ OHD, X OTHER (SPECIFY) NAD 83 (1993)

GRID DATA:	COORDINATES (FEET)	GRID BEARING	DISTANCE	POINTS OBSERVED
SOUTH ZONE		S 90°00' W	50.00'	SET 1/2" IRON PIN
ACCURACY:	X 2068195.8991	S 90°00' W	100.00'	SET 1/2" IRON PIN
2nd ORDER	Y 466983.8671	S 90°00' W	150.00'	SET 1/2" IRON PIN

GEODETIC DATA	POSITION		ELEVATION
ANGLE OF VARIANCE (Θ) 0°11'17.09689"	LATITUDE 34°36'57.90481"	NORTH	1109.227 FEET
	LONGITUDE 97°40'07.12298"	WEST	SOURCE NAVD 88
			ACCURACY: 2nd ORDER

GENERAL VICINITY:
SEC 25
R 5 W
T 2 N

DETAIL SKETCH:



Preliminary Plans

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-9116

S.D. FORM No. 11

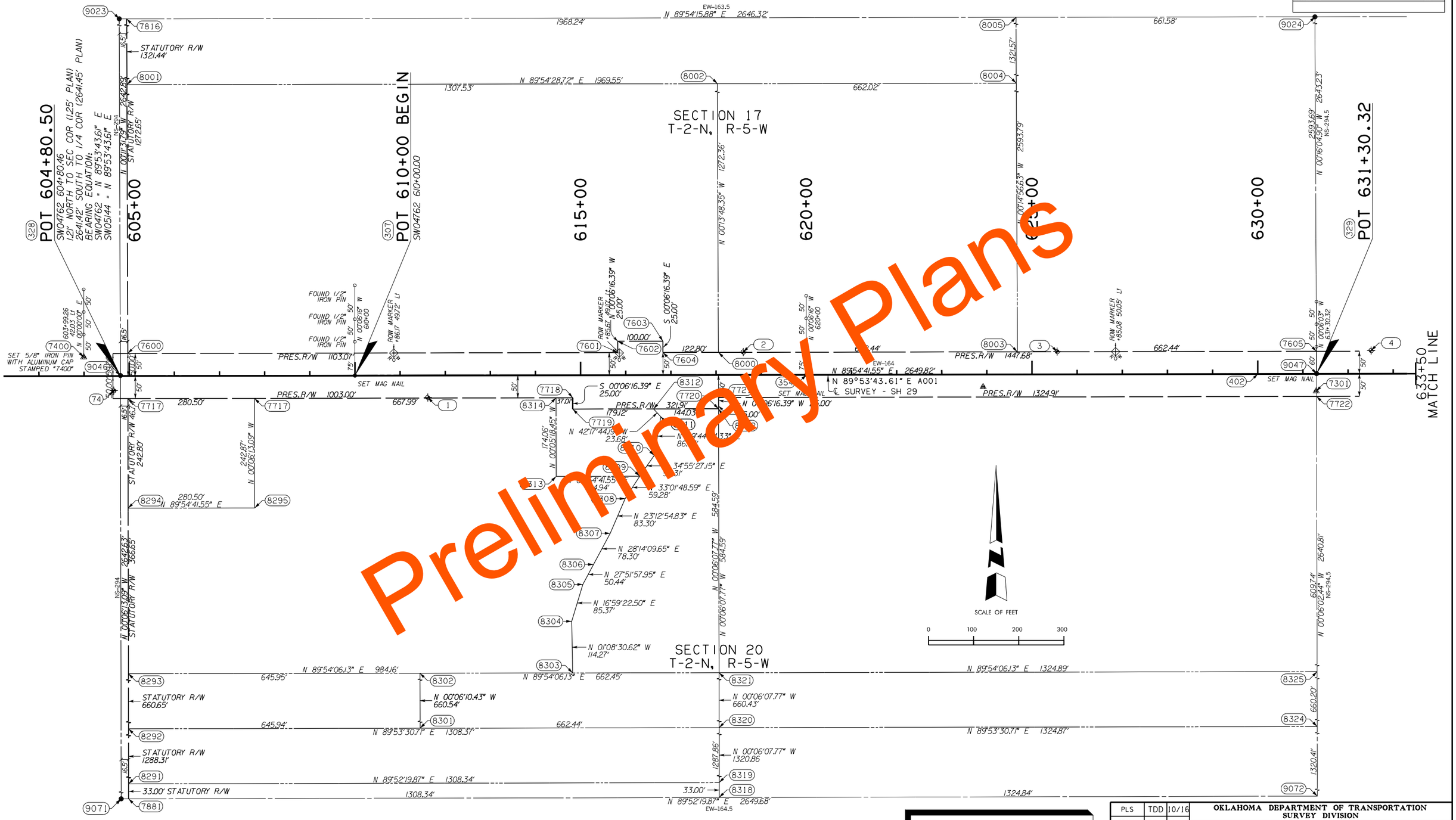
SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S020

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE



NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-5916

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S021

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

Preliminary Plans

SECTION 17
T-2-N, R-5-W

SECTION 20
T-2-N, R-5-W

MATCH LINE 629+00

630+00

635+00

640+00

645+00

650+00

655+00

660+00 MATCH LINE

EW-163.5
N 89°54'50.90" E 2645.92'
2629.42'

9024

NS-294.5
N 00°16'04.90" W 2643.23'
2593.69'

329 POT 631+30.32

N 00°08'03" W 631.32'

7605 9047 402 SET MAG NAIL 7301 7722

4

619.99'

8327

5

350.00'

SET MAG NAIL PRES.R/W 2377.25'

355

EW-164
N 89°54'03.74" E 26[illegible]

N 89°53'49" E A001
℄ SURVEY - SH 29

PRES.R/W 2254.99'

8329

50' 50' S 00°06'16" E 640.25'

6

1285.00'

356 SET MAG NAIL

N 00°06'02.44" W 650.75'

50' 75'

7723 7 S 00°06'16.39" E 10.00'

50' 75'

PRES.R/W 256.16'

7606 7724 107.40' 7725

308 PI 655+07.40
SAP No 920 A&B 655+07.4
Δ-00°03'22.18 Rt
Δ-00°04'00.00 Rt (PLAN)
BEARING EQUATION:
SAP No 920 A&B = N 89°56' E
SW05144 = N 89°57'05.79" E

N 00°02'54" W 650.40'

50' 50'

7607 7726 N 89°57'05.79" E 270.91' SET MAG NAIL

7820 7281 9025

STATUTORY R/W 2593.10'
N 00°21'22.39" W 2642.54'

ROW MARKER
+82.33 505.1' Lt

16.5' 16.5'

7608 7727

330 POT 657+80.30
SAP No 920 A&B 657+95
0.47' NORTH TO SEC COR (ON LINE PLAN)
2639.02' SOUTH TO 1/4 COR

S 00°04'40" W 650.30'

16.5' 16.5' 50'

STATUTORY R/W 2579.04'
NS-294.5
N 00°04'39.23" E 2639.49'

16.5' 16.5'

9073 7885 7886

N 00°06'02.44" W 57.60'

8326 N 89°54'03.74" E 350.00' 8328

8325

COMPUTED ONLY
9072

2625.27'
N 89°52'19.87" E 2641.77'
EW-164.5

SCALE OF FEET
0 100 200 300

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone (405) 840-7094
Oklahoma City, OK 73104 FAX (405) 840-5916

SURVEY DATA SHEET

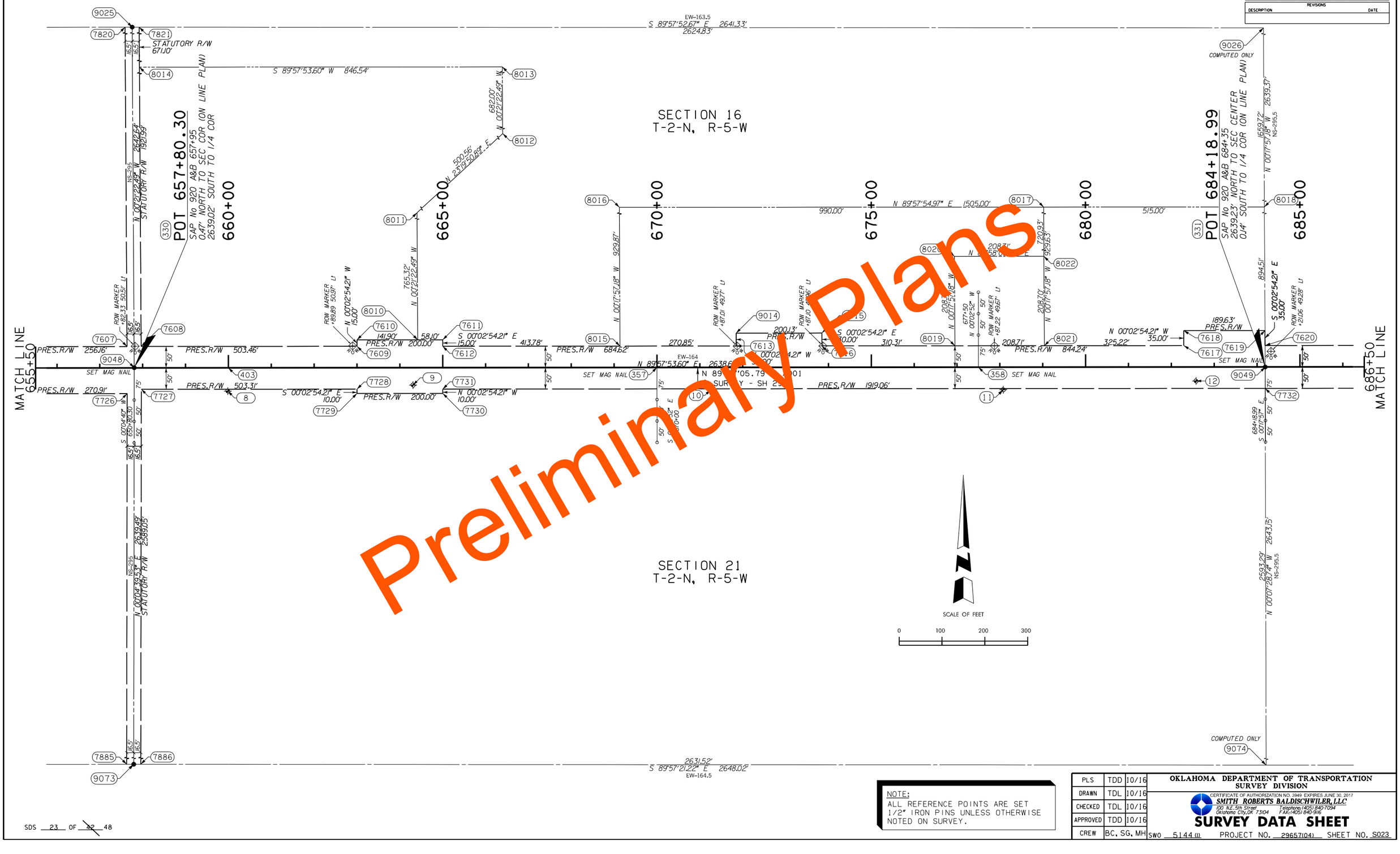
SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S022

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE



Preliminary Plans

SCALE OF FEET

0 100 200 300

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144(I) PROJECT NO. 29657(04) SHEET NO. S023

Preliminary Plans

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

COMPUTED ONLY
9026

EW-163.5
S 89°57'52.67" E 2646.20'
2629.70'

SECTION 16
T-2-N, R-5-W

POT 684+18.99
SAP No 920 A&B 684+35
2639.23' NORTH TO SEC CENTER
0.14' SOUTH TO I/4 COR (ON LINE PLAN)
331
N 0017'51.84" W 2639.37'
NS-295.5
2654.23'

685+00
690+00
695+00
700+00
710+00

STATUTORY R/W 2585.37'
NS-295.5
N 0008'10.56" W 2636.32'

POT 710+57.68
SAP No 920 A&B 710+75
2635.34' NORTH TO I/4 COR
0.97' SOUTH TO SEC COR (ON LINE PLAN)
332

8018
7825
7826
9027

S 0002'54" E
3500'
RON MARKER
+21.06 49.28' Lt

50' 50'
N 0002'54" E
690+00
RON MARKER
+86.50 49.30 Lt

50' 50'
N 0002'54" W
690+00

SET MAG NAIL
SET MAG NAIL
SET MAG NAIL
16.5' 16.5'
N 0008'10.56" W
710+57.68

7618
7617
7619
7620
7621
7622
9049
9050
7732
7734
7733

MATCH LINE
682+00

C SURVEY - SH 29
N 89°57'05.79" E A001

PRES.R/W 2622.3'
N 89°58'.88" E 2638.2'
PRES.R/W 262

359 SET MAG NAIL
360 SET MAG NAIL
404

12
13
4
15
16
17
18

MATCH LINE
713+00

684+18.99
S 0017'51.84" E
50' 50'

N 0017'28.74" W 2643.15'
NS-295.5
2593.29'

STATUTORY R/W 2592.53'
NS-295.5
N 0008'41.41" W 2646.58'

SECTION 21
T-2-N, R-5-W

SCALE OF FEET
0 100 200 300

COMPUTED ONLY
9074

2623.90'
S 89°57'21.22" E 2640.40'
EW-164.5

9075
7890
7891
16.5' 16.5'

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3849 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone: (405) 840-7094
Oklahoma City, OK 73104 FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S024

Preliminary Plans

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

SECTION 15
T-2-N, R-5-W

SECTION 22
T-2-N, R-5-W

MATCH LINE 708+50

739+50 MATCH LINE

710+00 715+00 720+00 725+00 730+00 735+00

POT 710+57.68
SAP No 920 A&B 710+75
2635.34' NORTH TO 1/4 COR
0.59' SOUTH TO SEC COR (ON LINE PLAN)

POT 736+99.30
2637.39' NORTH TO SEC CENTER
0.63' SOUTH TO 1/4 COR

EW-163.5
N 89°54'26.25" E 2639.33'
1979.50'

643.33' | 659.19' N 00°08'55.40" W | 659.98'

N 89°54'59.54" E 1303.45'

643.48'

N 89°55'32.82" E 1303.74'

660.12' | N 89°55'32.82" E 1320.24' | 660.12'

N 89°56'06.08" E 1320.52'

660.26'

1304.29'

1320.79'

1964.68'

660.39'

N 89°56'39.33" E 1320.62'

EW-164

PRES.R/W 2625.08'

SURVEY - S...29
N 89°57'05.79" E A001

COMPUTED ONLY

SET MAG NAIL

SET 5/8" IRON PIN WITH ALUMINUM CAP STAMPED "7401"

STATUTORY R/W 659.08'

STATUTORY R/W 1257.19'

STATUTORY R/W 66.64'

N 00°08'10.58" W 2636.32' NS-296

N 00°08'10.58" W 1935.90' NS-296

N 00°08'44.44" W 2646.58' NS-296

N 00°09'40.23" W 659.29'

N 00°09'40.23" W 1267.78' 659.29

N 00°09'40.23" W 608.49'

N 00°07'11.71" W 1273.06'

N 00°11'09.83" W 2638.02' NS-296.5

N 00°11'09.83" W 659.51'

N 00°06'21.05" W 2644.04' NS-296.5

N 00°06'21.05" W 1322.02'

N 00°08'51.35" W 1322.91'

N 00°08'01.28" W 1322.66'

N 89°54'10.50" E 643.42'

N 89°55'00.14" E 1320.17'

660.08'

N 89°53'20.85" E 2639.05'

1319.53'

643.26' | 659.76'

COMPUTED ONLY

SCALE OF FEET
0 100 200 300

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone (405) 840-7094
FAX (405) 840-5916

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S025

Preliminary Plans

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

SECTION 15
T-2-N, R-5-W

SECTION 22
T-2-N, R-5-W

MATCH LINE 734+50

MATCH LINE 765+50

POT 736+99.30
2637.39' NORTH TO SEC CENTER
0.83' SOUTH TO 1/4 COR

POT 763+41.10
SAP No 920 A&B 736+56
2639.43' NORTH TO 1/4 COR
0.42' SOUTH TO SEC COR (ON LINE PLAN)

740+00 745+00 750+00 755+00 760+00 765+00

EW-163.5
N 89°54'26.25" E 2644.07'

N 89°55'37.60" E 1984.21'

1321.47' 662.74'

N 00°11'09.82" W 2638.02' 1319.01'

N 00°06'20.82" W 1268.38'

N 00°09'40.82" W 1253.94'

N 00°03'43.24" W 1257.42'

N 00°08'11.86" W 2639.85'

NS-296.5

NS-297

PRES. R/W 885.92'

PRES. R/W 885.75'

N 00°02'54.21" W 15.00'

S 00°02'54.21" E 15.00'

N 00°02'54" W 1348.00'

434.97' 435.13' 660.43' 643.86' 643.93'

N 89°56'49.02" E 2639.80'

EW-164

C SURVEY - SH 29
N 89°57' 79" E A001

SET MAG NAIL

SET 60d NAIL

SET RR DATE NAIL

SCALE OF FEET
0 100 200 300

N 00°06'20.82" W 2644.04'
259.61'

N 00°04'35.87" W 2578.23'

N 00°03'43.24" W 2577.51'

STATUTORY R/W 257.42'
N 00°02'50.59" W 2641.38'
2576.81'

1319.55' 659.78' 643.28'

N 89°53'20.85" E 2639.10'
EW-164.5

COMPUTED ONLY

PLS	TDD	10/16	OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	TDL	10/16	SURVEY DIVISION
CHECKED	TDL	10/16	CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
APPROVED	TDD	10/16	SMITH ROBERTS BALDISCHWILER, LLC
CREW	BC, SG, MH		100 N.E. 5th Street, Oklahoma City, OK 73104 Telephone (405) 840-7094 FAX (405) 840-9116

SURVEY DATA SHEET

SWO 5144(1) PROJECT NO. 29657(04) SHEET NO. S026

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

SDS 26 OF ~~42~~ 48

Preliminary Plans

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

MATCH LINE 761+50

MATCH LINE 792+50

765+00 770+00 775+00 780+00 785+00 790+00

SECTION 14
T-2-N, R-5-W

SECTION 23
T-2-N, R-5-W

POT 763+41.10
SAP No 920 A&B 736+56
2639.43' NORTH TO 1/4 COR
0.42' SOUTH TO SEC COR (ON LINE PLAN)

PI 772+13.02
SAP No 920 A&B 772+13.1
Δ=00°08'00.00" Lt
BEARING EQUATION:
SAP No 920 A&B = N 89°48' E
SW05\44 = N 89°49'05.79" E

POT 789+84.04
SAP No 920 A&B 790+00
2641.91' NORTH TO SEC CENTER
1.22' SOUTH TO 1/4 COR (ON LINE PLAN)

EW-163.5
N 89°48'30.94" E 2643.45'

EW-164
N 89°52'46.78" E 2645.60'

EW-164.5
1967.70'
N 89°52'27.62" E 2645.60'

N 89°57'05.79" E
℄ SURVEY - SH 29 A001

N 89°49'05.79" E
℄ SURVEY - SH 29 A001

N 89°50'38.85" E 1321.60'

N 89°52'37.19" E 1322.13'

N 89°52'37.19" E 661.07'

627.58' 644.50' 210.99' 177.51' 177.38' 660.75' 660.75' 660.80' 660.80' 661.07' 661.07' 661.40'

PRES.R/W 644.50' 272.01' 272.15' 1321.47' 1484.09' 1483.98'

SET 60d NAIL
SET RR DATE NAIL
SET MAG NAIL

N 00°02'54.21" W 10.00'
S 00°10'54.21" E 10.00'
S 00°02'54.21" E 10.00'
N 00°10'54.21" W 10.00'

N 00°07'51.86" W 1270.94'
N 00°07'41.87" W 1321.15'
N 00°07'31.86" W 2643.13'
N 00°07'31.86" W 1321.56'
N 00°07'31.86" W 1270.34'
N 00°03'42.48" W 1270.25'
N 00°04'34.37" W 1270.43'
N 00°05'26.26" W 1271.11'
N 00°05'26.26" W 1271.18'
N 00°05'26.26" W 1320.80'
N 00°06'18.26" W 2641.13'
N 00°06'18.26" W 1320.56'
N 00°02'50.59" W 2641.38'
N 00°02'50.59" W 2591.77'

NS-297 ST.AUTOHR R/W
NS-297.5

ROW MARKER 82.32' 50.70' Rt
ROW MARKER +83.91' 5.26' Rt

COMPUTED ONLY

SCALE OF FEET
0 100 200 300

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3849 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone: (405) 840-7094
Oklahoma City, OK 73104 FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S027

SECTION 14
T-2-N, R-5-W

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

Preliminary Plans

COMPUTED ONLY (9030)

EW-163.5
N 89°48'30.94" E 2647.71'

661.93' | 661.93' | 1307.36'

(8054) (8058) (7835) (7836) (9031)

132.60' | 132.64' N 00°10'14.38" W | 1321.71' STATUTORY R/W

(8053) N 89°48'42.85" E 662.45' (8057) 662.45' (8062) N 89°48'42.85" E 1324.90' 645.95' (8067)

2592.02' N 00°08'53.13" W 660.80' | 660.82' | 660.84' | STATUTORY R/W 660.86'

(8052) N 89°48'48.80" E 662.71' (8056) (8061) 331.35' (8065) N 89°48'48.80" E 646.21' 314.85' (8066)

335 POT 789+84.04
SAP No 920 A&B 790+00
2641.9' NORTH TO SEC CENTER
1.22' SOUTH TO 1/4 COR (ON LINE PLAN)

NS-297.5 N 00°07'31.86" W 2643.13' | 259.19'

790+00 | 795+00 | 800+00 | 805+00

335 POT 810+00.00
BEARING EQUATION: SAP No 920 A&B = N 89°48' E
FAP No F-146(6) = S 89°59' E
W05144 = N 89°49'05.79" E

815+00

336 POT 816+35.91
FAP No F-146(6) 816+48
2642.35' NORTH TO 1/4 COR
1.08' SOUTH TO SEC COR (ON LINE PLAN)

609.62' | 609.67' N 00°10'14.38" W 1270.49' | 1270.56' N 00°12'56.96" W 660.84' | 330.42' | 330.42' | 599.78' | 599.78' | 330.42' | 330.42' | 660.84' | 1320.56' N 00°12'56.96" W 2643.43' | STATUTORY R/W 599.78' N 00°12'56.96" W 2643.43'

NS-298

SET MAG NAIL
SET MAG NAIL
SET MAG NAIL

789+84.04 N 00°07'32" W 40' 40'

(8051) (31) RIGHT OF WAY MARKER +73.55 46.18' LT (8055) (8059) N 00°10'54.21" W 10.00' (7634) 316.49' (8063) PRES.R/W 619.38' 314.97' (7636) (7365)

662.95' | 662.95' PRES.R/W 2003.82' | 662.95' | 331.42' N 89°48'51.77" E (8064) | 269.33' N 00°12'16.24" W 599.78' | 269.33' | 279.37' | 14.98'

MATCH LINE 787+50

(7632) (30) SET MAG NAIL (9053) (405) (7633) (7365)

SET MAG (369) N 89°48'54.74" E EW-164 (370) (7745) S 00°10'54.21" E 10.00'

662.96' | 427.96' | 678.02' | 631.38'

(7744) (8390) 235.00' (8392) (8395) (32) (7746) (33) (9054) (7747) (7748)

RIGHT OF WAY MARKER +83.91 51.26' RT | 136.58' | 50' S 00°10'54" E 800.00' | RIGHT OF WAY MARKER +77.87 61.16' RT | 50' S 00°10'54" E 810.00'

N 00°05'42.84" W 136.57' (8389) (8391) N 89°48'54.74" E 235.00'

NS-297.5 N 00°06'18.16" W 2641.13' | 2592.35' | 2593.00' N 00°05'42.84" W 2456.41' | N 00°05'07.55" W 2593.65' | STATUTORY R/W 2584.93' | NS-298 N 00°03'51.01" W 2643.87'

SECTION 23
T-2-N, R-5-W

N

SCALE OF FEET
0 100 200 300

COMPUTED ONLY (9078)

662.52' | 662.52' | 1308.53'

(8388) (8394) N 89°52'27.62" E 2650.06' EW-164.5 (7900) (7901) (9079)

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
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Telephone: (405) 840-7094
FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144(I) PROJECT NO. 29657(04) SHEET NO. S028

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

Preliminary Plans

MATCH LINE 814+00

815+00

820+00

825+00

830+00

835+00

840+00

845+00 MATCH LINE

EW-163.5
N 89°57'39.71" E 2642.64'
2626.14'

9031 7835 7836

9032 COMPUTED ONLY

SECTION 13
T-2-N, R-5-W

336 POT 816+35.91
FAP No F-146(6) 816+48
2642.35' NORTH TO 1/4 COR
11.08' SOUTH TO SEC COR (ON LINE PLAN)

310 PI 829+52.78
FAP No F-146(6) 829+52.9
Δ=00°02'00.00" Rt
BEARING EQUATION:
FAP No F-146(6) = S 89°57' E
SW05144 = N 89°05'05.79" E

337 POT 842+77.22
FAP No F-146(6) 842+95
2636.54' NORTH TO SEC CENTER
7.38' SOUTH TO 1/4 COR (1.5' PLAN)

NS-298
N 00°12'56.26" W 2643.43'
STATUTORY R/W 2582.31'

N 00°11'13.56" W 2643.92'
NS-298.5
2556.54'

7636 7365 7955 7638 7639 7640

9054 9055

371 SET MAG NAIL
N 89°49'05.79" E A001
℄ SURVEY - SH 29
PRES.R/W 1300.42'

SET MAG NAIL 310
N 89°58'18.01" E
EW-164

129.46'
N 00°08'54.21" W 20.00'

1194.95

SET MAG NAIL 372
℄ SURVEY - SH 29
N 89°51'05.79" E A001
PRES.R/W 984.68'

S 00°11'13.56" E 20.00'
N 00°08'54.21" W 842+17.22
SET MAG NAIL
S 00°08'54.21" E 15.00'

ROW MARKER +74.46 57.73' LT
ROW MARKER +27.15 58.00' LT
ROW MARKER +77.01 56.56' LT
ROW MARKER +76.35 76.8' LT
ROW MARKER +26.41 64.71' RT
ROW MARKER +73.15 79.22' RT
ROW MARKER +71.53 104.01' RT

50' N 00°10'54" W 820+00
50' N 00°11'20" W 829+52.78
50' S 00°08'54" E 840+00
50' N 00°08'54" W 842+17.22

34 35 36 37

7747 7748 7750 7751 7752 7753

8403 8405 8407

643.84' 330.17' 326.46'

603.84'

8399 8402

N 89°58'27.16" E
643.92'

660.00'

8398

N 89°58'36.31" E
644.00'

2386.83'

N 00°04'24.18" W

1321.99'

N 00°03'51.40" W 2643.87'
STATUTORY R/W 660.97'

N 00°03'51.40" W 1321.94'
STATUTORY R/W 602.09'

N 00°04'37.72" W 2587.53'

N 00°04'51.35" W 2588.71'

N 00°05'45.67" W 2644.34'
2551.72'
NS-298.5

9079 7900 7901

8400 8404 8406

644.18' 330.34' 330.34' 1321.35'

N 89°58'54.60" E 2642.71'
EW-164.5

9080 COMPUTED ONLY

S 00°05'45.67" E 25.00'

SCALE OF FEET
0 100 200 300

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone (405) 840-7094
Oklahoma City, OK 73104 FAX (405) 840-9116

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S029

Preliminary Plans

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

MATCH LINE 840+50

COMPUTED ONLY (9032)

NS-298.5 N 00°11'13.56" W 2643.92' 2556.54'

(337) POT 842+77.22
FAP No F-146(6) 842+95
2636.54' NORTH TO SEC CENTER
7.38' SOUTH TO 1/4 COR (1.5' PLAN)

845+00 | 850+00 | 855+00 | 860+00 | 865+00 | 870+00

SECTION 13
T-2-N, R-5-W

EW-163.5
N 89°57'39.71" E 2642.95'
1321.47' | 660.74' | 644.24'

(8071) (8075) (7840) (7842) (9033)

N 00°10'10.01" W 2355.16'
N 00°09'38.24" W 2572.75'
N 00°08'06.47" W 2561.49' 2644.42'
STATUTORY R/W NS-299

(338) POT 869+18.54
FAP No F-146(6) 869+37
2631.49' NORTH TO 1/4 COR
12.91' SOUTH TO SEC COR (10.7' PLAN)

(8069) (8070) (9073)
324.66' N 89°58'18.01" E 418.00' 93.34'
N 00°10'10.01" W 179.53'
N 00°10'10.01" W 178.66'
ROW MARKER +7960 96.56' LT

(8068) 418.00'

(7639) S 00°11'13.56" E 20.00'
(7640) PRES.R/W 464.00'
(7642) N 00°08'54.21" W 40.00'
(7641) 532.00'
(7643) S 00°08'54.21" E 40.00'
(7644) 567.01'
(8072) (8074) N 00°08'54.21" W 10.00'
(7646) (7645) 643.84'
(7647) (7648) (406)
SET MAG NAIL WITH TAG "SAB CA3949" 870+00 N 00°00'00" E

(9055) SET MAG NAIL (373) SET MAG NAIL (374) SET MAG NAIL (42) (9056)

80' | 75' | 100' | 105' | 60' | 70'

PRES.R/W 339.69'
(7752) S 00°05'45.67" E 25.00' (7753) (38)
PRES.R/W 1414.04' 1320.68' (39)
EW-164
N 00°08'54.21" W 2644.34' 2555.12'
N 00°05'45.67" W 2644.34' 2555.12'
ROW MARKER +7355 7922' RT
ROW MARKER +7175 10401' RT
(8417) (7755) (7754) (41)
568.68'
PRES.R/W 1210.84' (8424)
643.83'
(7756) (7836)
S 00°09'54" E 862.60'
1275.28'
STATUTORY R/W 1275.28'

(8423) N 89°58'36.31" E 644.00' (8426) (7906) (9129)
N 00°07'07.10" W 1094.35'
1094.40' N 00°07'34" W NS-299
STATUTORY R/W

(8422) N 89°58'54.62" E 644.15' (8425)
228.00' STATUTORY R/W 228.00'
(8421) 644.18' (7905) (7907) (9081)

COMPUTED ONLY (9080)

1321.36' | 660.68'

(8416) N 89°58'54.60" E 2642.71'
EW-164.5

SECTION 24
T-2-N, R-5-W

SCALE OF FEET
0 100 200 300

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3849 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone: (405) 840-7094
Oklahoma City, OK 73104 FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S030

Preliminary Plans

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS

DESCRIPTION	DATE

POT 869+18.54
FAP No F-146(6) 869+37
263.49' NORTH TO I/4 COR
12.91' SOUTH TO SEC COR (10.7' PLAN)

MATCH LINE 867+50

870+00 | 875+00 | 880+00 | 885+00 | 890+00 | 895+00

POT 882+97.87
131.76' NORTH TO LOT CORNER
9.78' SOUTH TO LOT CORNER

POT END 896+27.37
FAP No F-146(6) 896+57
26.35.04' NORTH TO SEC CENTER
6.76' SOUTH TO I/4 COR (1.8' PLAN)

SECTION 18
T-2-N, R-4-W

LOT 3

LOT 4

LOT 1

LOT 2

SECTION 19
T-2-N, R-4-W

STATUTORY R/W

239.58' STATUTORY R/W

PRES.R/W 1000.50'

PRES.R/W 362.20'

PRES.R/W 1362.90'

PRES.R/W 1329.42'

SET MAG NAIL WITH TAG "SRB CA3949"

COMPUTED ONLY

N 89°44'56.00" E 1377.18'

N 89°44'56.05" E 1361.38'

N 89°44'06.36" E 1361.77'

N 89°44'56.00" E 1328.69'

N 89°44'56.05" E 664.48'

N 89°44'06.36" E 664.55'

N 00°08'54.21" W 20.00'

N 44°57'07.7" E

N 89°43'16.77" E 460.00'

N 89°43'40.51" E 2707.36'

N 89°51' E A001

SURVEY H 29

SCALE OF FEET
0 100 200 300

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDD	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
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FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144(1) PROJECT NO. 29657(04) SHEET NO. S031

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9000)

NW CORNER – ODOT Sta. No. S-69-605 (REVISED) – FOUND 3/8" IRON PIN AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9001)

N 1/4 CORNER – ODOT Sta. No. S-69-613 (REVISED) – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326 CAP" AND REFERENCE 1, 2 AND SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9002)

NE CORNER – ODOT Sta. No. S-69-614 (REVISED) – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AND REFERENCE 1 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

Preliminary Plans

(9023)

W 1/4 CORNER – ODOT Sta. No. S-69-606 (REVISED) – FOUND RAILROAD SPIKE AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9024)

C 1/4 CORNER – ODOT Sta. No. S-69-612 (REVISED) FOUND 1/2" IRON PIN AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9025)

E 1/4 CORNER – ODOT Sta. No. S-69-615 (REVISED) – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING FILED ON JANUARY 25, 2013.

SCALE OF FEET

0 500 1000 1500

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9046)

SW CORNER – ODOT Sta. No. S-69-607 (REVISED) – FOUND CST/BERGER MASONRY NAIL AND REFERENCES 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9047)

S 1/4 CORNER – ODOT Sta. No. S-69-611 (REVISED) – FOUND MAG NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9048)

SE CORNER – ODOT Sta. No. S-69-616 (REVISED) – FOUND PARKER-KALON MASONRY NAIL AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
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FAX: (405) 840-5916

SURVEY DATA SHEET

SWO 5144(1) PROJECT NO. 29657(04) SHEET NO. S032

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9046)

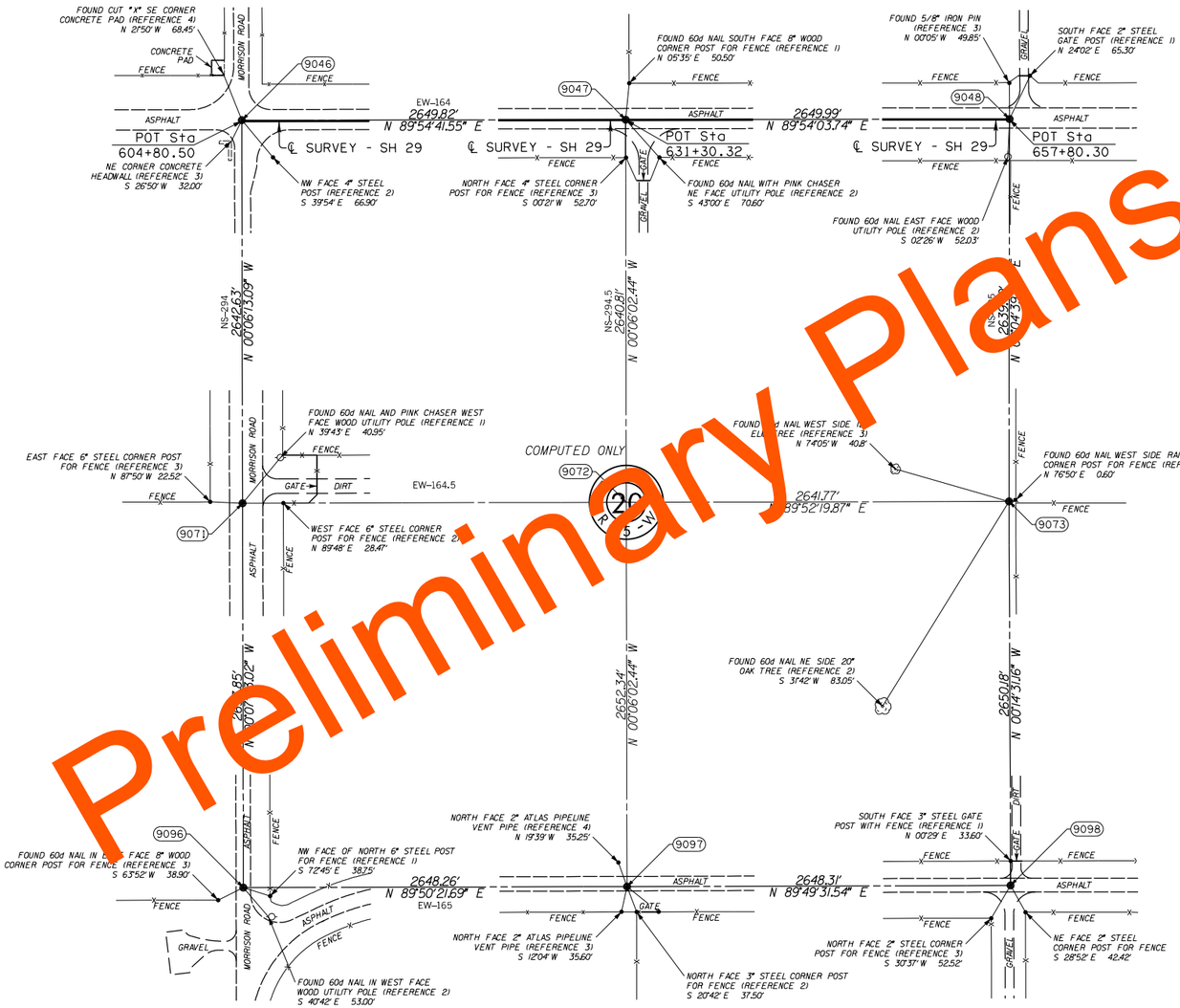
NW CORNER – ODOT Sta. No. S–69–607 (REVISED) – FOUND CST/BERGER MASONRY NAIL AND REFERENCES 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9047)

N 1/4 CORNER – ODOT Sta. No. S–69–611 (REVISED) – FOUND MAG NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9048)

NE CORNER – ODOT Sta. No. S–69–616 (REVISED) – FOUND PARKER–KALON MASONRY NAIL AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.



Preliminary Plans

(9071)

W 1/4 CORNER – ODOT Sta. No. S–69–608 (REVISED) – FOUND 60d NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9073)

W 1/4 CORNER – ODOT Sta. No. S–69–617 (REVISED) – FOUND ORIGINAL 8"x4" SANDSTONE MONUMENT AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013. NO EVIDENCE FOUND FOR 3/8" IRON PIN ON EAST EDGE OF MONUMENT AS CALLED FOR IN OCCR.

(9096)

SW CORNER – ODOT Sta. No. S–69–609 (REVISED) – FOUND PARKER–KALON MASONRY NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9097)

S 1/4 CORNER – ODOT Sta. No. S–69–610 (REVISED) – FOUND 1/2" IRON PIN WITHOUT CAP AND REFERENCES 1, 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9098)

SE CORNER – ODOT Sta. No. S–69–618 (REVISED) – FOUND 1/2" IRON PIN AND REFERENCES 1 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
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Oklahoma City, OK 73104 FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S033

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9002)

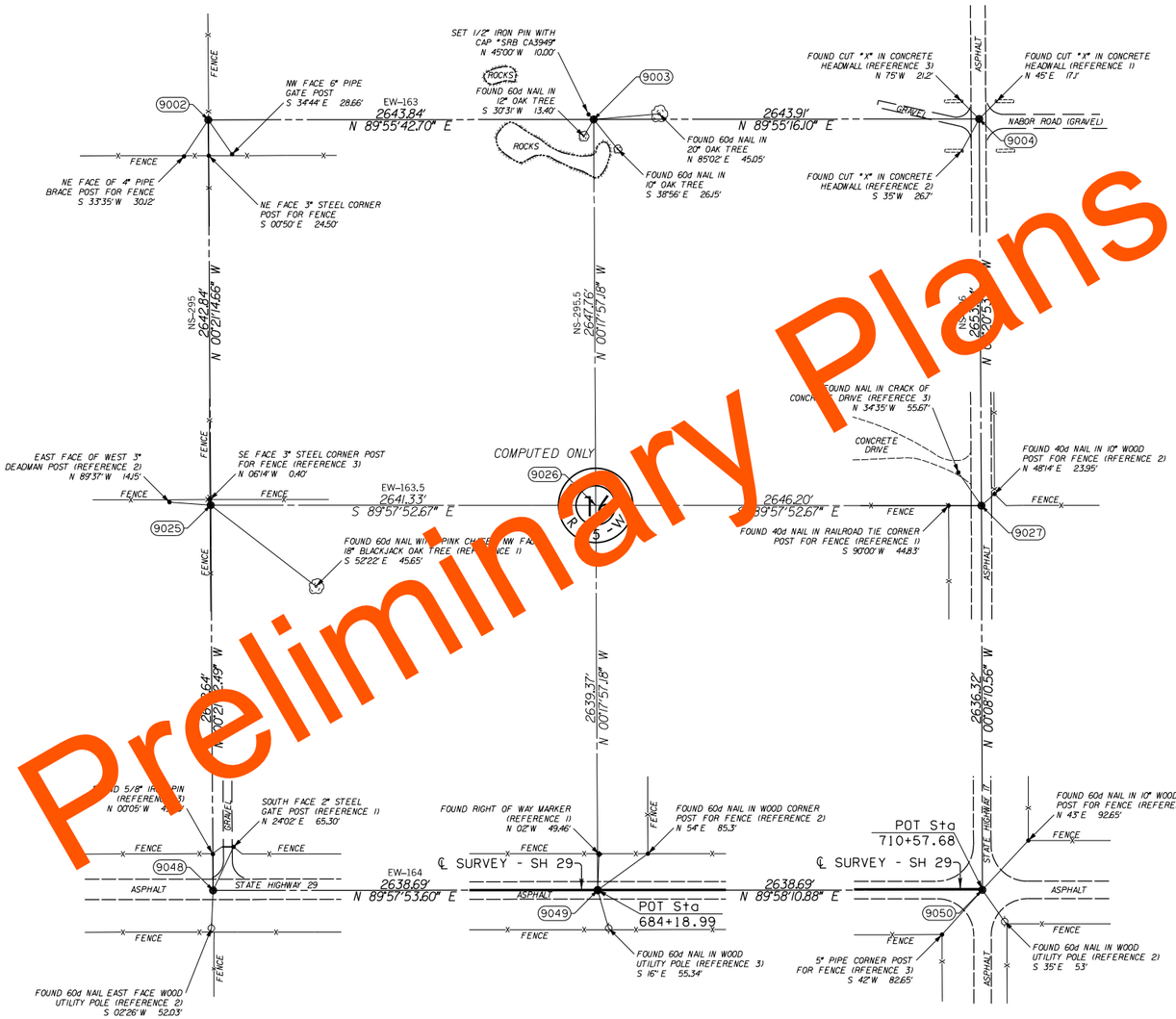
NW CORNER – ODOT Sta. No. S-69-614 (REVISED) – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AND REFERENCE 1 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9003)

N 1/4 CORNER – ODOT Sta. No. S-69-728 – FOUND ORIGINAL 12"x4" SANDSTONE MONUMENT AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES OF 1899.

(9004)

NE CORNER – ODOT Sta. No. S-69-729 – FOUND 1/2" IRON PIN AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES PREPARED ON FEBRUARY 23, 2004 (FILED ON DATE NOT LEGIBLE).



NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9025)

W 1/4 CORNER – ODOT Sta. No. S-69-615 (REVISED) – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING FILED ON JANUARY 25, 2013.

(9027)

E 1/4 CORNER – ODOT Sta. No. S-69-738 – FOUND 40d NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013.

(9048)

SW CORNER – ODOT Sta. No. S-69-616 (REVISED) – FOUND PARKER-KALON MASONRY NAIL AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9049)

S 1/4 CORNER – ODOT Sta. No. S-69-743 – FOUND MAG NAIL AND TAG "MJLA LS 1326" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON FEBRUARY 25, 2013.

(9050)

SE CORNER – ODOT Sta. No. S-69-744 – FOUND RAILROAD SPIKE AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone: (405) 840-7094
Oklahoma City, OK 73104 FAX: (405) 840-9416

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S034

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9048)

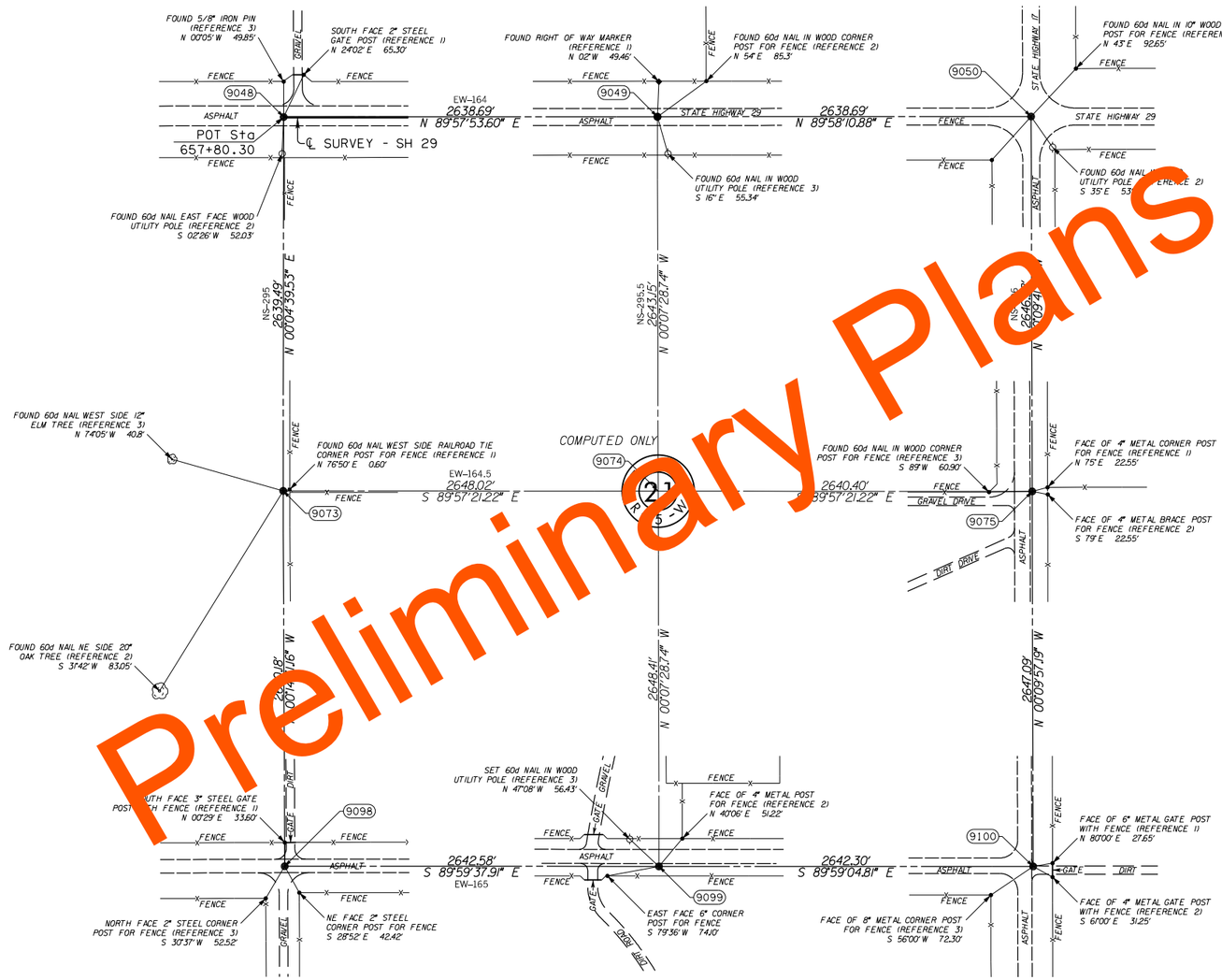
NW CORNER – ODOT Sta. No. S-69-616 (REVISED) – FOUND PARKER-KALON MASONRY NAIL AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9049)

N 1/4 CORNER – ODOT Sta. No. S-69-743 – FOUND MAG NAIL AND TAG "MJLA LS 1326" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON FEBRUARY 25, 2013.

(9050)

NE CORNER – ODOT Sta. No. S-69-744 – FOUND RAILROAD SPIKE AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.



Preliminary Plans

(9073)

W 1/4 CORNER – ODOT Sta. No. S-69-617 (REVISED) – FOUND ORIGINAL 8"x4" SANDSTONE MONUMENT AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013. NO EVIDENCE FOUND FOR 3/8" IRON PIN ON EAST EDGE OF MONUMENT AS CALLED FOR IN OCCR.

(9075)

E 1/4 CORNER – ODOT Sta. No. S-69-753 – FOUND 1/2" IRON PIN WITH CAP "LS 1071" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON NOVEMBER 15, 1999.

SCALE OF FEET

0 500 1000 1500

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9098)

SW CORNER – ODOT Sta. No. S-69-618 (REVISED) – FOUND 1/2" IRON PIN AND REFERENCES 1 AND 3 AS SHOWN ON OCCR PREPARED BY DARREN M. SMITH FOR COBB ENGINEERING COMPANY FILED ON JANUARY 25, 2013.

(9099)

S 1/4 CORNER – ODOT Sta. No. S-69-758 – FOUND 1/2" IRON PIN WHICH AGREES WITH REFERENCES 2 AND 3 ON OCCR PREPARED BY ALBERT C. McDONALD FOR McDONALD SURVEYING & MAPPING, P. C., FILED ON SEPTEMBER 3, 2009.

(9100)

SE CORNER – ODOT Sta. No. S-69-759 – FOUND 1/2"IRON PIN WITH RED CAP AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICES FILED ON NOVEMBER 15, 1999.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
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FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144(I) PROJECT NO. 29657(04) SHEET NO. S035

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9004)

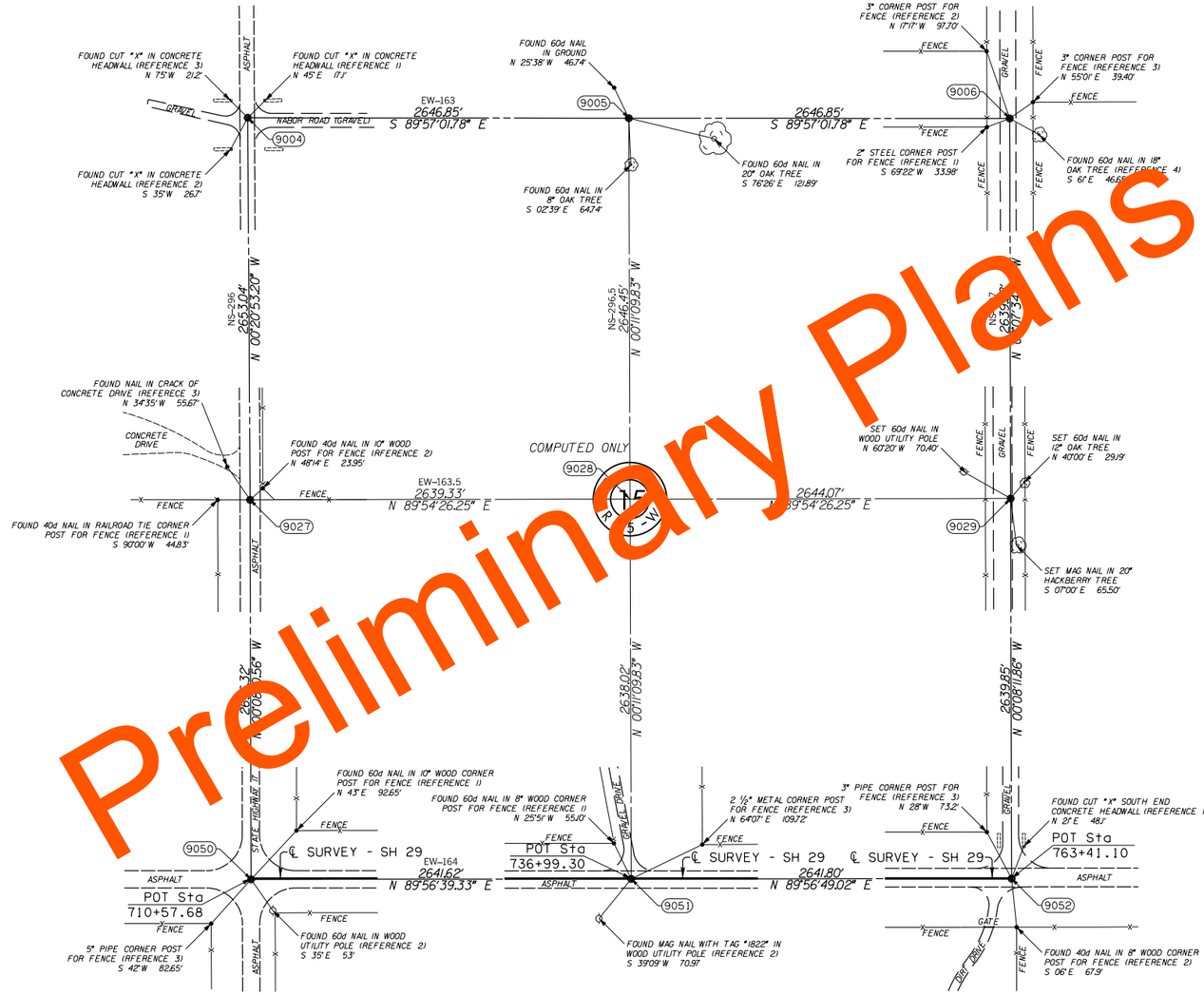
NW CORNER – ODOT Sta. No. S-69-729 – FOUND 1/2" IRON PIN AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES PREPARED ON FEBRUARY 23, 2004 (FILED ON DATE NOT LEGIBLE).

(9005)

N 1/4 CORNER – ODOT Sta. No. S-69-730 – FOUND 60d NAIL AT EQUIDISTANT AND ON LINE BETWEEN THE NW AND NE CORNERS OF SECTION 15 AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES OF 1899.

(9006)

NE CORNER – ODOT Sta. No. S-69-731 – FOUND 5/8" IRON PIN AND REFERENCES 1, 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013. THIS OCCR FURTHER AGREES WITH REFERENCES 1 AND 2 AS SHOWN ON OCCR PREPARED T. WAYNE FISCH FOR TOPOGRAPHIC LAND SURVEYORS FILED ON MARCH 23, 1995 (NOTED AS REFERENCES 2 AND 3 HEREON).



Preliminary Plans

(9027)

W 1/4 CORNER – ODOT Sta. No. S-69-738 – FOUND 40d NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013.

(9029)

E 1/4 CORNER – ODOT Sta. No. S-69-739 – FOUND 1/2" IRON PIN BEING AT EQUIDISTANT AND ON LINE MORE OR LESS BETWEEN THE NE AND SE CORNERS OF SECTION 15 AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES FOR THE 1899 SURVEY.

SCALE OF FEET

0 500 1000 1500

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9050)

SW CORNER – ODOT Sta. No. S-69-744 – FOUND RAILROAD SPIKE AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

(9051)

S 1/4 CORNER – ODOT Sta. No. S-69-745 – FOUND MAG NAIL AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013.

(9052)

SE CORNER – ODOT Sta. No. S-69-746 – FOUND MAG NAIL WHICH AGREES WITH REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. L. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
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Oklahoma City, OK 73104 FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S036

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9050)

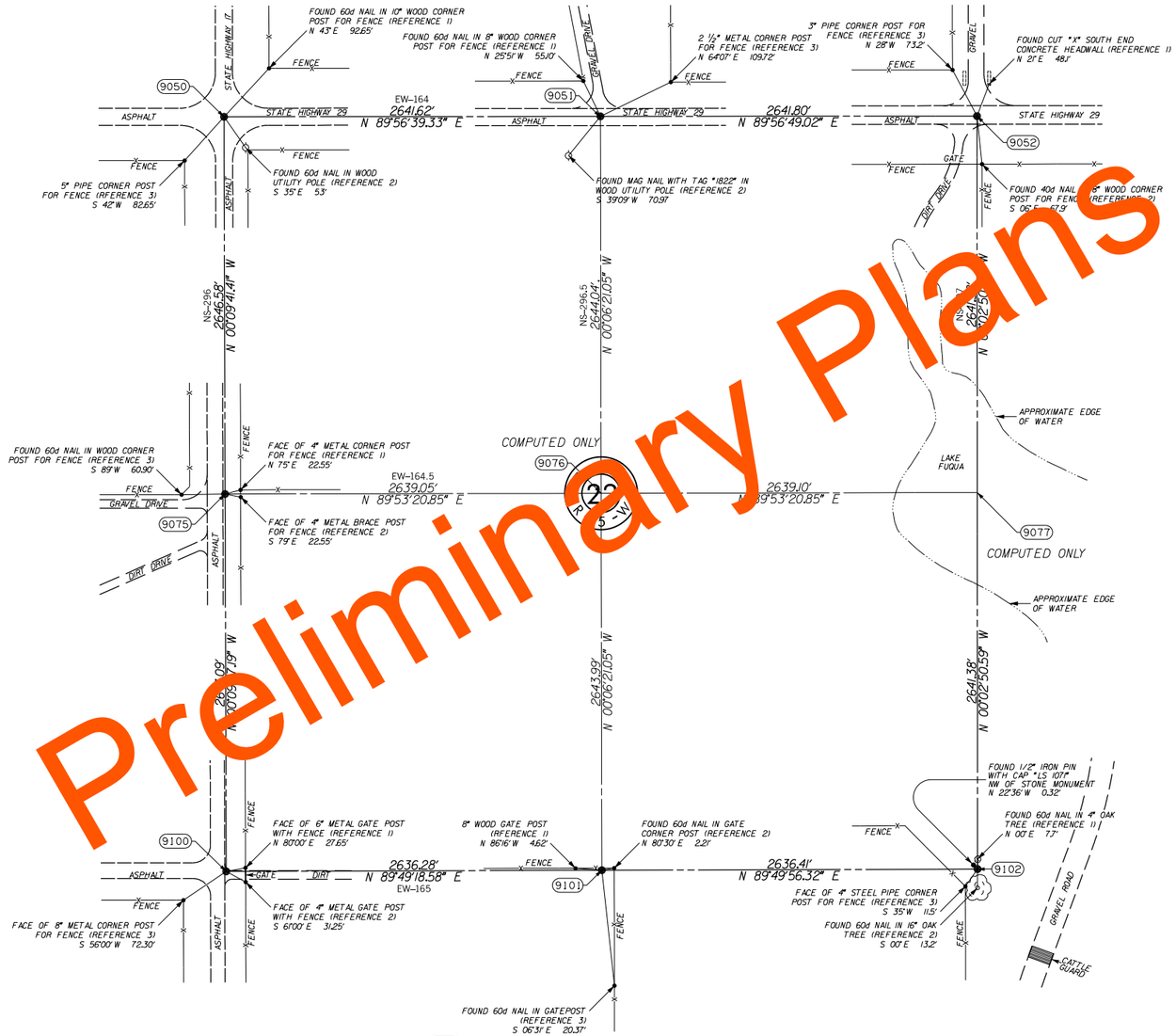
NW CORNER – ODOT Sta. No. S-69-744 – FOUND RAILROAD SPIKE AND REFERENCE 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

(9051)

N 1/4 CORNER – ODOT Sta. No. S-69-745 – FOUND MAG NAIL AND REFERENCES 1, 2 AND 3 AS SHOWNON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013.

(9052)

NE CORNER – ODOT Sta. No. S-69-746 – FOUND MAG NAIL WHICH AGREES WITH REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. L. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.



Preliminary Plans

(9075)

W 1/4 CORNER – ODOT Sta. No. S-69-753 – FOUND 1/2" IRON PIN WITH CAP "LS 1071" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON NOVEMBER 15, 1999.

(9077)

E 1/4 CORNER – ODOT Sta. No. S-69-754 – FOUND AND SET NOTHING POINT FALLS IN LAKE FUQUA. THE CALCULATED VALUE SHOWN HEREON FOR THIS POINT IS AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 22.

SCALE OF FEET

0 500 1000 1500

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9100)

SW CORNER – ODOT Sta. No. S-69-759 – FOUND 1/2"IRON PIN WITH RED CAP AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICES FILED ON NOVEMBER 15, 1999.

(9101)

S 1/4 CORNER – ODOT Sta. No. S-69-760 – FOUND 1/2" IRON PIN WITH CAP "CARROLL LS 1071" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013.

(9102)

SE CORNER – ODOT Sta. No. S-69-761 – FOUND ORIGINAL 10"x8" SANDSTONE MONUMENT WITH 2 NOTCHES ON SOUTH AND EAST SIDES AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON NOVEMBER 15, 1999.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-5916

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S037

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9006)

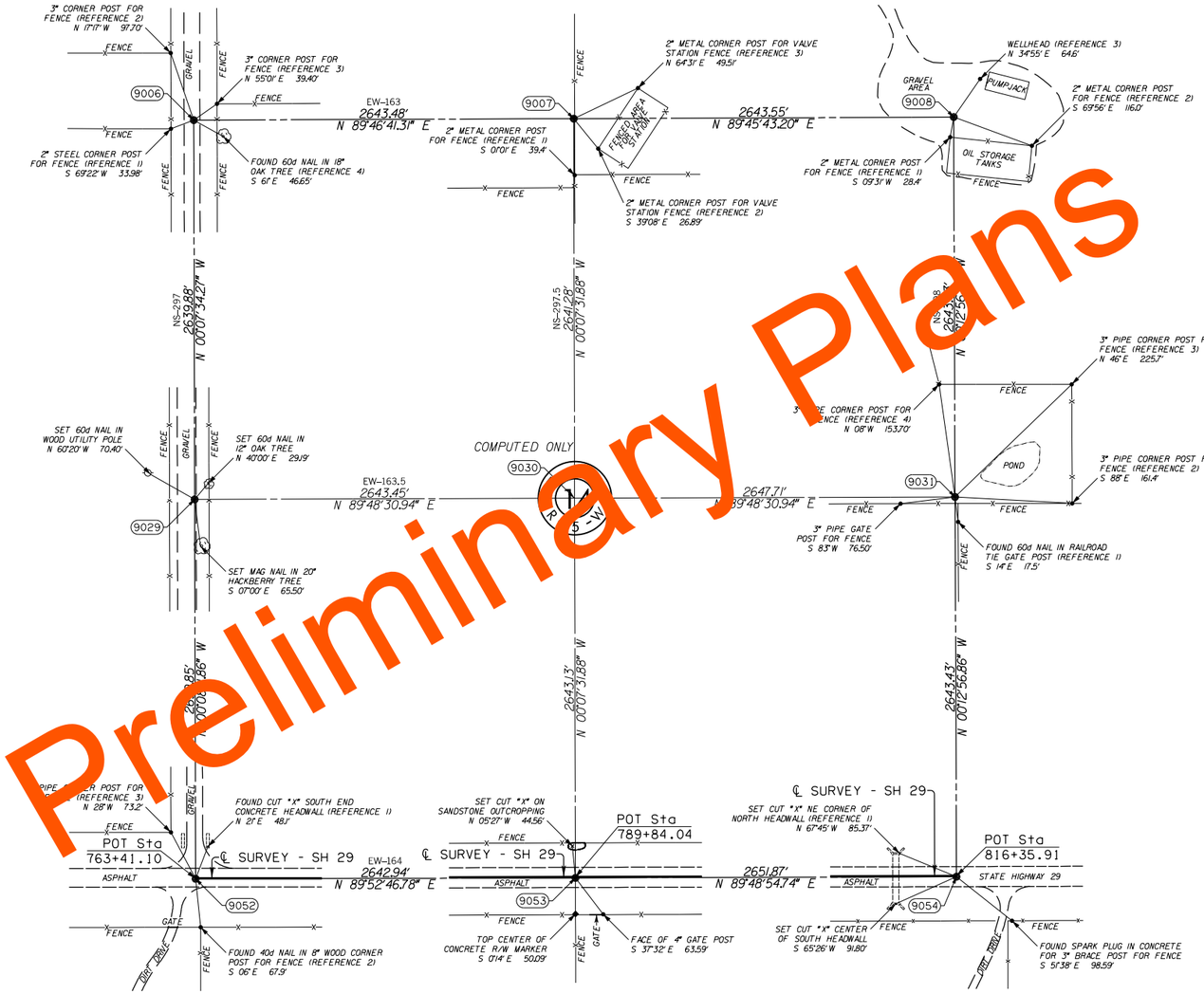
NW CORNER – ODOT Sta. No. S-69-731 – FOUND 5/8" IRON PIN AND REFERENCES 1, 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013. THIS OCCR FURTHER AGREES WITH REFERENCES 1 AND 2 AS SHOWN ON OCCR PREPARED T. WAYNE FISCH FOR TOPOGRAPHIC LAND SURVEYORS FILED ON MARCH 23, 1995 (NOTED AS REFERENCES 2 AND 3 HEREON).

(9007)

N 1/4 CORNER – ODOT Sta. No. S-69-732 – FOUND 5/8" IRON PIN WITH ALUMINUM CAP STAMPED "LS 1822" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE FOR UELS LLC FILED ON NOVEMBER 18, 2013. THIS POINT FURTHER AGREES WITH REFERENCE 1 OF OCCR PREPARED BY ALBERT C. McDONALD SURVEYING & MAPPING, PC FILED ON MAY 11, 2005 NOTED AS REFERENCE 3 HEREON.

(9008)

NE CORNER – ODOT Sta. No. S-69-733 – FOUND 1/2" IRON PIN WITH CAP "M&M" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ALBERT C. McDONALD FOR McDONALD LAND SURVEYING & MAPPING PC FILED ON MAY 11, 2005. THIS CORNER FURTHER AGREES WITH REFERENCE 1 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005 (NOTED AS REFERENCE 1 HEREON).



Preliminary Plans

(9029)

W 1/4 CORNER – ODOT Sta. No. S-69-739 – FOUND 1/2" IRON PIN BEING AT EQUIDISTANT AND ON LINE MORE OR LESS BETWEEN THE NE AND SE CORNERS OF SECTION 15 AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES FOR THE 1899 SURVEY.

(9031)

E 1/4 CORNER – ODOT Sta. No. S-69-740 – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AND REFERENCES 1, 2, 3 AND 5 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005.

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9052)

SW CORNER – ODOT Sta. No. S-69-746 – FOUND MAG NAIL WHICH AGREES WITH REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. L. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

(9053)

S 1/4 CORNER – ODOT Sta. No. S-69-747 – FOUND MAG NAIL AT EQUIDISTANT AND ON LINE MORE OR LESS BETWEEN THE NW AND NE CORNERS OF SECTION 14 AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES FOR THE 1899 SURVEY WHICH FURTHER AGREES WITH "SAP 920 A&B HIGHWAY PLANS" AS SUPPLIED BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION.

(9054)

SE CORNER – ODOT Sta. No. S-69-748 – FOUND CST/BERGER MASONRY NAIL WHICH APPEARS TO AGREE WITH REFERENCE 1 MORE OR LESS AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE PREPARED FOR UELS LLC FILED ON NOVEMBER 18, 2013.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone: (405) 840-7094
Oklahoma City, OK 73104 FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S038

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9052)

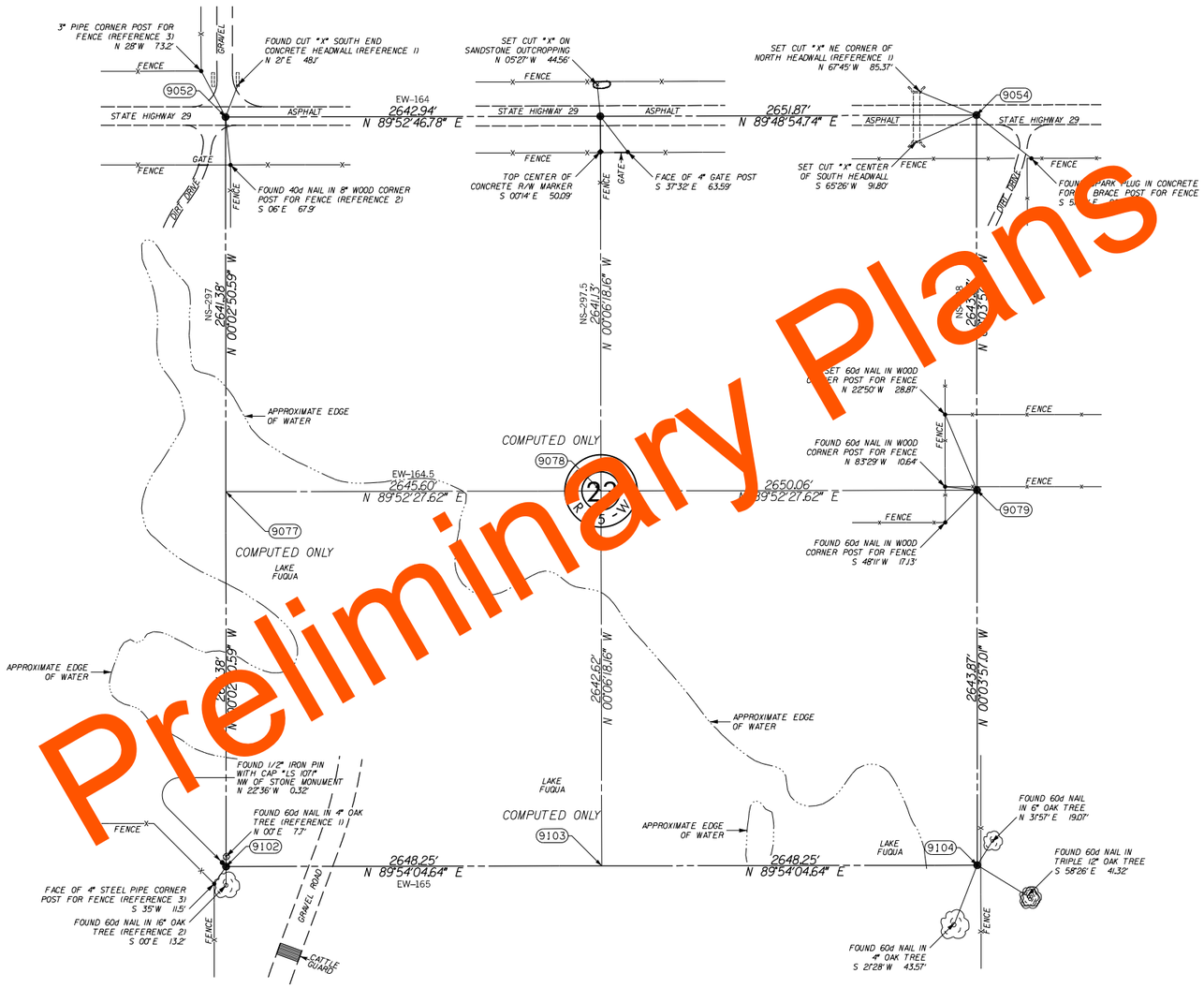
NW CORNER – ODOT Sta. No. S-69-746 – FOUND MAG NAIL WHICH AGREES WITH REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. L. LEWIS & ASSOCIATES, INC. FILED ON NOVEMBER 12, 1997.

(9053)

N 1/4 CORNER – ODOT Sta. No. S-69-747 – FOUND MAG NAIL AT EQUIDISTANT AND ON LINE MORE OR LESS BETWEEN THE NW AND NE CORNERS OF SECTION 14 AS CALLED FOR IN THE ORIGINAL GOVERNMENT SURVEY NOTES FOR THE 1899 SURVEY WHICH FURTHER AGREES WITH "SAP 920 A&B HIGHWAY PLANS" AS SUPPLIED BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION.

(9054)

NE CORNER – ODOT Sta. No. S-69-748 – FOUND CST/BERGER MASONRY NAIL WHICH APPEARS TO AGREE WITH REFERENCE 1 MORE OR LESS AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE PREPARED FOR UELS LLC FILED ON NOVEMBER 18, 2013.



Preliminary Plans

(9077)

W 1/4 CORNER – ODOT Sta. No. S-69-754 – FOUND AND SET NOTHING POINT FALLS IN LAKE FUQUA. THE CALCULATED VALUE SHOWN HEREON FOR THIS POINT IS AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 22.

(9079)

E 1/4 CORNER – ODOT Sta. No. S-69-755 – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 23 AS CALLED FOR IN THE ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY.

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9102)

SW CORNER – ODOT Sta. No. S-69-761 – FOUND ORIGINAL 10"x8" SANDSTONE MONUMENT WITH 2 NOTCHES ON SOUTH AND EAST SIDES AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON NOVEMBER 15, 1999.

(9103)

S 1/4 CORNER – ODOT Sta. No. S-69-762 – FOUND AND SET NOTHING POINT FALLS IN LAKE FUQUA. THE CALCULATED VALUE SHOWN HEREON FOR THIS POINT IS AT EQUIDISTANT AND ON LINE BETWEEN THE SW AND SE CORNERS OF SECTION 23.

(9104)

SE CORNER – ODOT Sta. No. S-69-763 – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" WHICH AGREES WITH ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY MORE OR LESS.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
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SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S039

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9008)

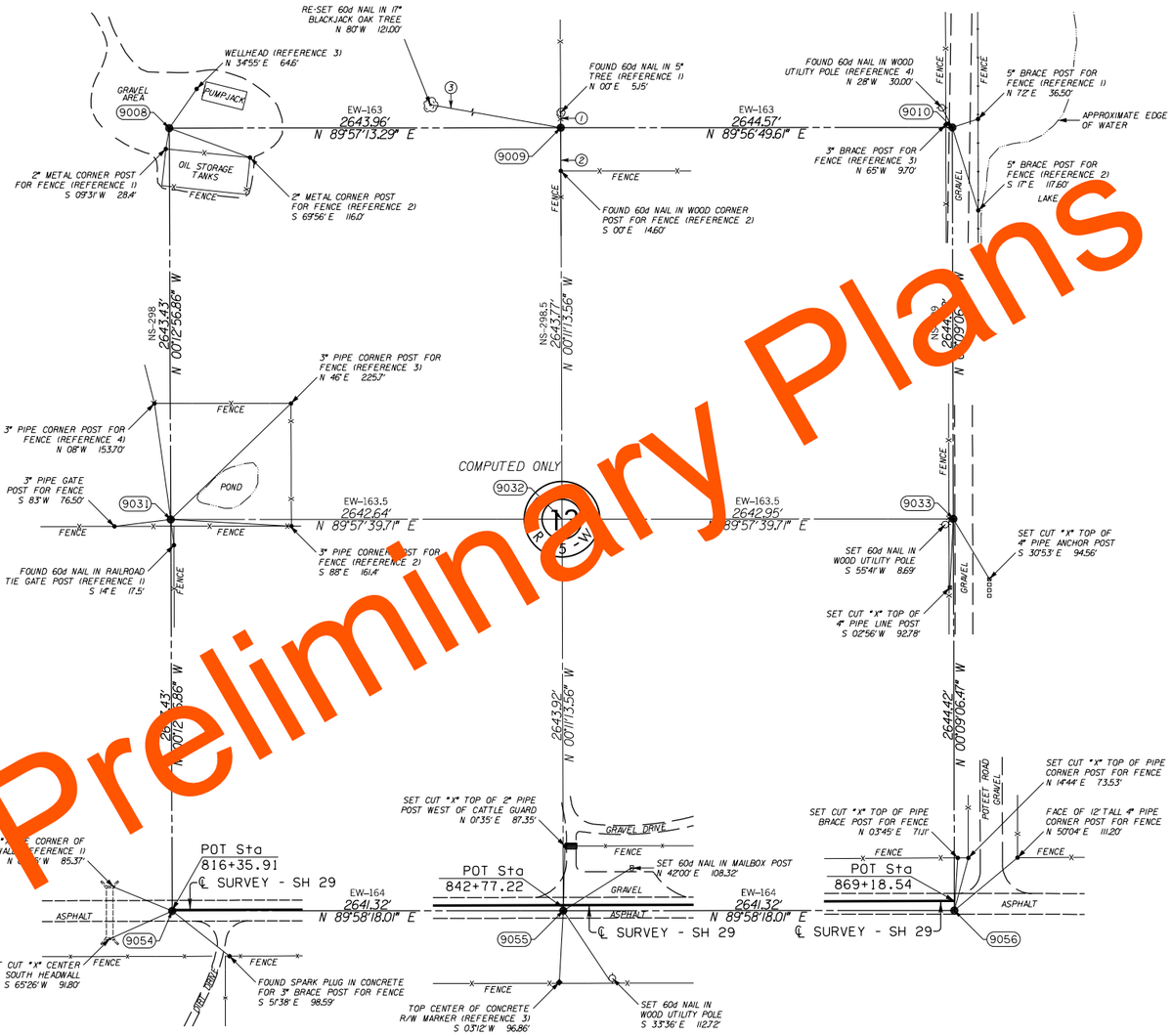
NW CORNER – ODOT Sta. No. S-69-733 – FOUND 1/2" IRON PIN WITH CAP "M&M" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY ALBERT C. McDONALD FOR McDONALD LAND SURVEYING & MAPPING PC FILED ON MAY 11, 2005. THIS CORNER FURTHER AGREES WITH REFERENCE 1 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005 (NOTED AS REFERENCE 1 HEREON).

(9009)

N 1/4 CORNER – ODOT Sta. No. S-69-734 – FOUND 1/2" IRON PIN WHICH AGREES WITH REFERENCES 1 AND 2 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005.

(9010)

NE CORNER – ODOT Sta. No. S-69-735 – FOUND 1/2" IRON PIN AND REFERENCES 1, 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON JANUARY 21, 1990.



Preliminary Plans

(9031)

W 1/4 CORNER – ODOT Sta. No. S-69-740 – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AND REFERENCES 1, 2, 3 AND 5 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005.

(9033)

E 1/4 CORNER – ODOT Sta. No. S-69-741 – FOUND 3/8" IRON PIN AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 13 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON JANUARY 31, 2005.

SCALE OF FEET

0 500 1000 1500

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9054)

SW CORNER – ODOT Sta. No. S-69-748 – FOUND CST/BERGER MASONRY NAIL WHICH APPEARS TO AGREE WITH REFERENCE 1 MORE OR LESS AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE PREPARED FOR UELS LLC FILED ON NOVEMBER 18, 2013.

(9055)

S 1/4 CORNER – ODOT Sta. No. S-69-749 – SET MAG NAIL WITH TAG "SRB CA3949" AT EQUIDISTANT AND ON LINE BETWEEN THE SW AND SE CORNERS OF SECTION 13 WHICH AGREES WITH THE DESCRIPTION OF CORNER EVIDENCE SET AND REFERENCE 3 AS SHOWN OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005.

(9056)

SE CORNER – ODOT Sta. No. S-69-750 – FOUND RAILROAD SPIKE AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 21, 1998.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone: (405) 840-7094
Oklahoma City, OK 73104 FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S040

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9054)

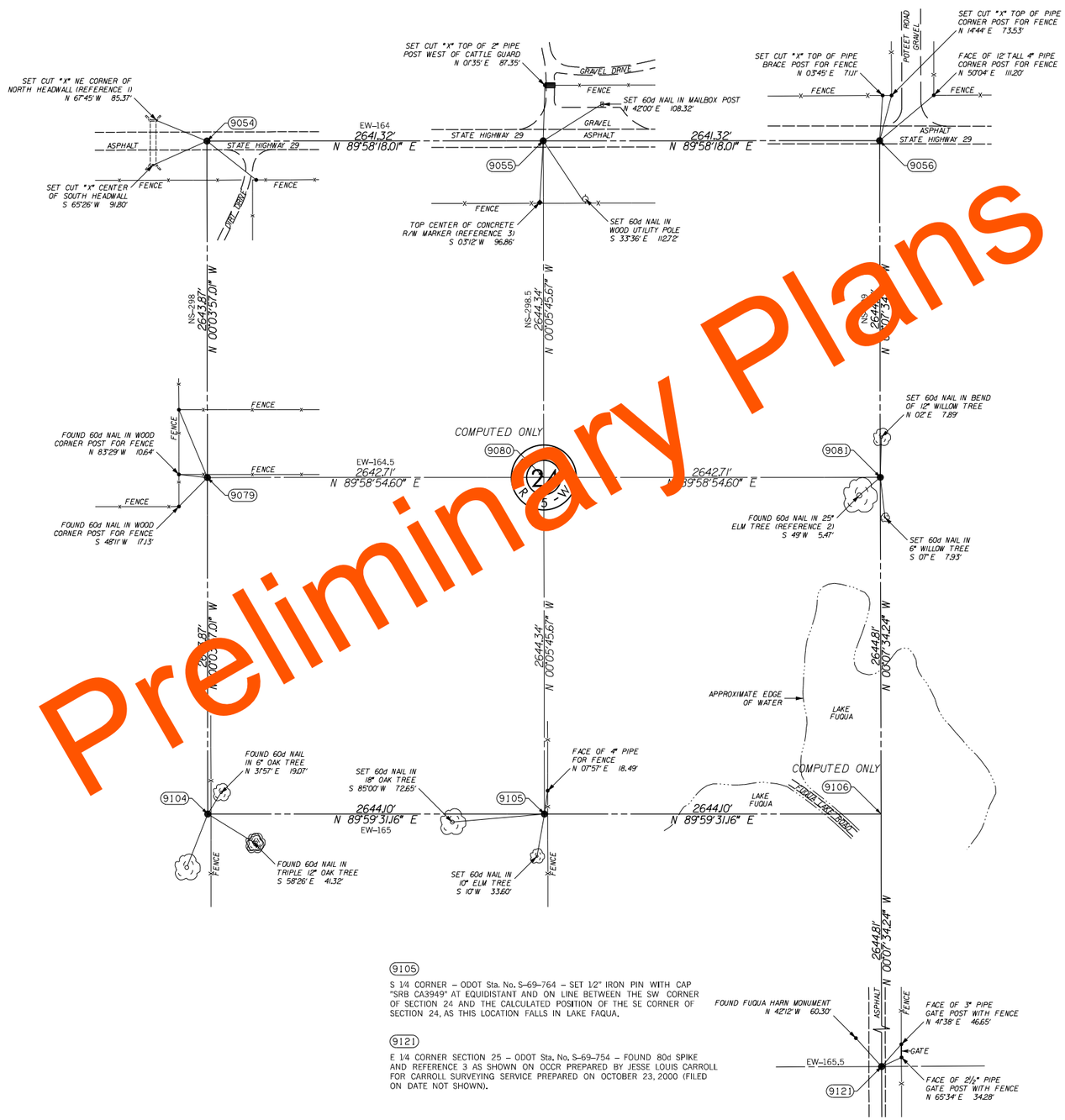
NW CORNER – ODOT Sta. No. S-69-748 – FOUND CST/BERGER MASONRY NAIL WHICH APPEARS TO AGREE WITH REFERENCE 1 MORE OR LESS AS SHOWN ON OCCR PREPARED BY ROBERT JUSTIN PEARCE PREPARED FOR UELS LLC FILED ON NOVEMBER 18, 2013.

(9055)

N 1/4 CORNER – ODOT Sta. No. S-69-749 – SET MAG NAIL WITH TAG "SRB CA3949" AT EQUIDISTANT AND ON LINE BETWEEN THE SW AND SE CORNERS OF SECTION 13 WHICH AGREES WITH THE DESCRIPTION OF CORNER EVIDENCE SET AND REFERENCE 3 AS SHOWN OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 31, 2005.

(9056)

NE CORNER – ODOT Sta. No. S-69-750 – FOUND RAILROAD SPIKE AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 21, 1998.



Preliminary Plans

SCALE OF FEET

0 500 1000 1500

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9079)

W 1/4 CORNER – ODOT Sta. No. S-69-755 – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 23 AS CALLED FOR IN THE ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY.

(9081)

E 1/4 CORNER – ODOT Sta. No. S-69-756 – SET 1/2" IRON PIN AND CAP "SRB CA3949" AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 24 AS CALLED FOR IN THE ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY WHICH AGREES WITH REFERENCE 2 AS SHOWN ON OCCR PREPARED BY JESSE L. CARROLL FOR CARROLL SURVEYING SERVICE, LLC FILED ON FEBRUARY 23, 2004.

(9104)

SW CORNER – ODOT Sta. No. S-69-763 – FOUND 1/2" IRON PIN WITH CAP "MJLA LS 1326" WHICH AGREES WITH ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY MORE OR LESS.

(9105)

S 1/4 CORNER – ODOT Sta. No. S-69-764 – SET 1/2" IRON PIN WITH CAP "SRB CA3949" AT EQUIDISTANT AND ON LINE BETWEEN THE SW CORNER OF SECTION 24 AND THE CALCULATED POSITION OF THE SE CORNER OF SECTION 24, AS THIS LOCATION FALLS IN LAKE FAQUA.

(9121)

E 1/4 CORNER SECTION 25 – ODOT Sta. No. S-69-754 – FOUND 80d SPIKE AND REFERENCE 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE PREPARED ON OCTOBER 23, 2000 (FILED ON DATE NOT SHOWN).

(9106)

SE CORNER – ODOT Sta. No. S-69-765 – FOUND AND SET NOTHING POINT FALLS IN LAKE FUQUA, THE CALCULATED VALUE SHOWN HEREON FOR THIS POINT IS AT EQUIDISTANT AND ON LINE BETWEEN THE EAST 1/4 QUARTER CORNER OF SECTION 24 AND THE EAST 1/4 QUARTER CORNER OF SECTION 25.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-5916

SURVEY DATA SHEET

SWO 5144(1) PROJECT NO. 29657(04) SHEET NO. S041

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9010)

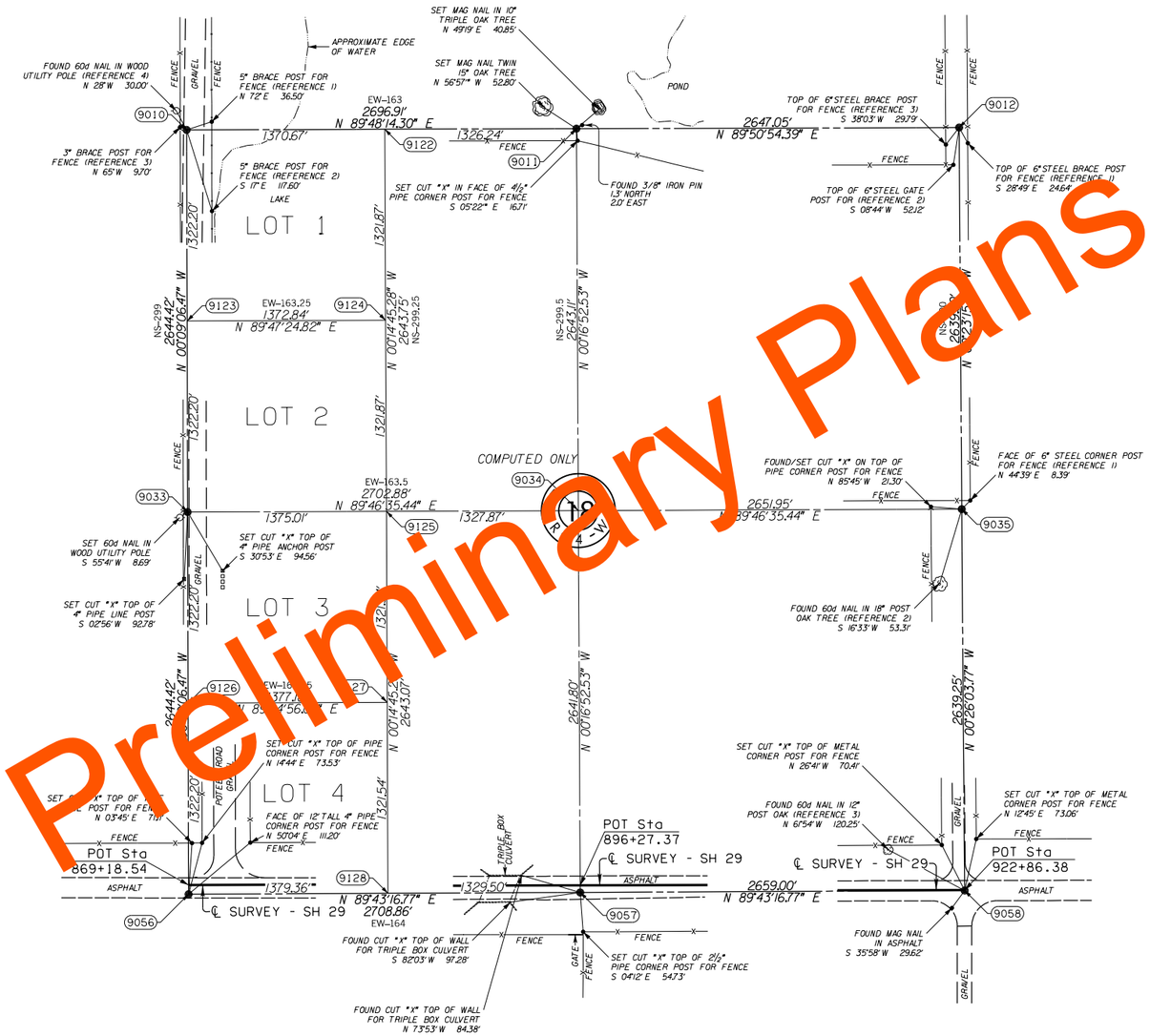
NW CORNER – ODOT Sta. No. S-69-735 – FOUND 1/2" IRON PIN AND REFERENCES 1, 2, 3 AND 4 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON JANUARY 21, 1990.

(9011)

N 1/4 CORNER – ODOT Sta. No. S-69-736 – FOUND ORIGINAL 12"x6" SANDSTONE MONUMENT AS CALLED FOR IN THE GOVERNMENT SURVEY NOTES OF 1899.

(9012)

NE CORNER – ODOT Sta. No. S-69-737 – FOUND 1/2" IRON PIN WITH CAP "KING CAP" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY MONTE DUANE KING FOR KING LAND SURVEYING FILED ON JANUARY 20, 1999.



Preliminary Plans

(9033)

W 1/4 CORNER – ODOT Sta. No. S-69-741 – FOUND 3/8" IRON PIN AT EQUIDISTANT AND ON LINE BETWEEN THE NE AND SE CORNERS OF SECTION 13 AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES, INC. FILED ON JANUARY 31, 2005.

(9035)

E 1/4 CORNER – ODOT Sta. No. S-69-742 – FOUND 1/2" IRON PIN WITH CAP "KING CAP" AND REFERENCES 1, 2 AND 3 AS SHOWN ON OCCR PREPARED BY MONTE DUANE KING FOR KING LAND SURVEYING FILED ON JANUARY 20, 1999.

SCALE OF FEET

0 500 1000 1500

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9056)

SW CORNER – ODOT Sta. No. S-69-750 – FOUND RAILROAD SPIKE AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 21, 1998.

(9057)

S 1/4 CORNER – ODOT Sta. No. S-69-751 – SET MAG WITH TAG "SRB CA3949" BY SINGLE PROPORTIONATE METHOD BETWEEN THE SW AND SE CORNERS OF SECTION 18 WITH THE RECORD DISTANCES BEING APPLIED. NO EVIDENCE OF PREVIOUS CORNER OR REFERENCES WERE FOUND AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON MAY 24, 1994.

(9058)

SE CORNER – ODOT Sta. No. S-69-752 – FOUND CST/BERGER MASONRY NAIL WHICH AGREES WITH REFERENCE 1 AS SHOWN ON OCCR PREPARED BY MONTE DUANE KING FOR KING LAND SURVEYING FILED ON JANUARY 20, 1999.

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street Telephone: (405) 840-7094
Oklahoma City, OK 73104 FAX: (405) 840-5916

SURVEY DATA SHEET

SWO 5144 (1) PROJECT NO. 29657(04) SHEET NO. S042

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

REVISIONS	
DESCRIPTION	DATE

NOTE:
ALL REFERENCE POINTS ARE SET 1/2" IRON PINS UNLESS OTHERWISE NOTED ON SURVEY.

(9056)

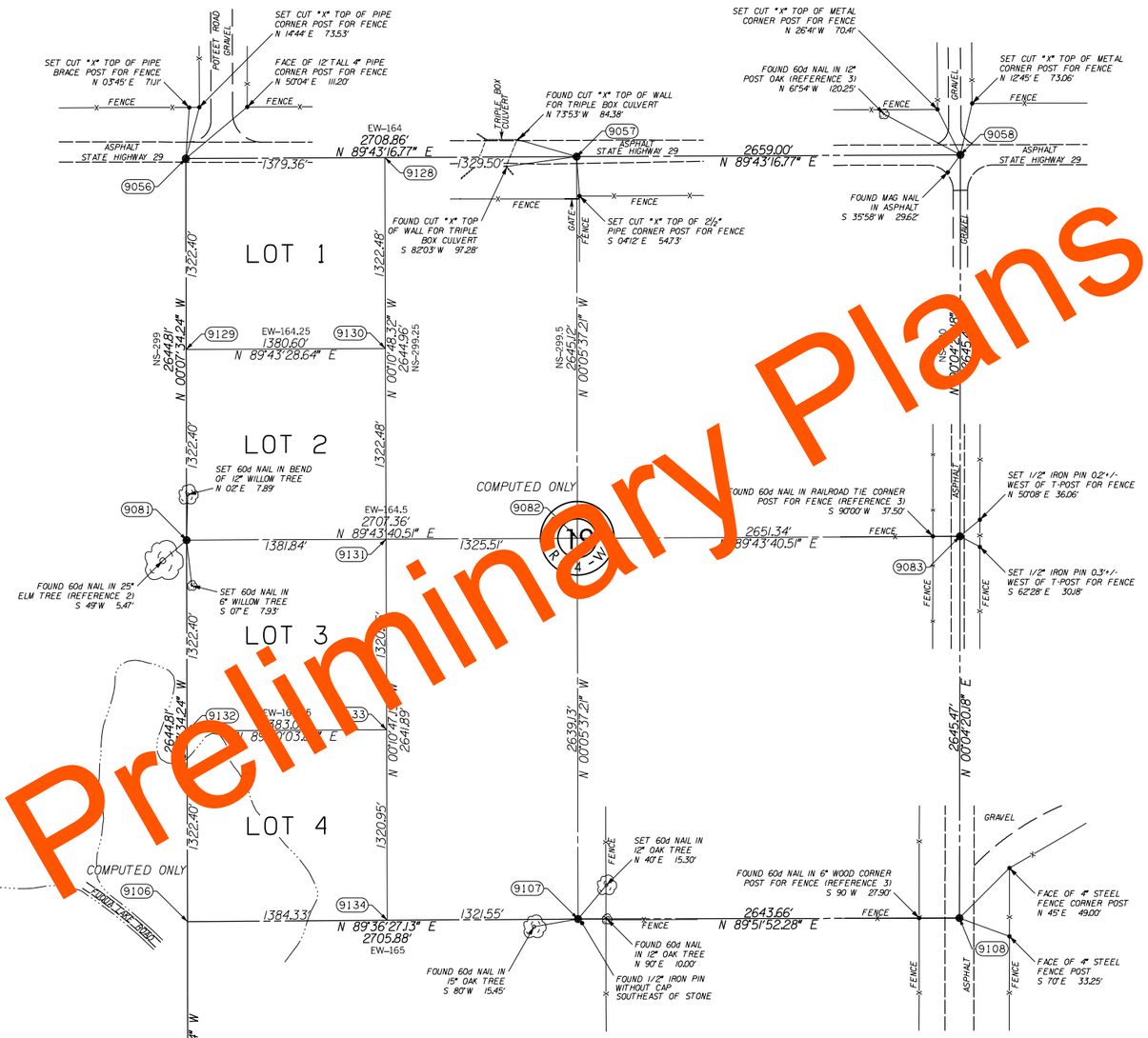
NW CORNER – ODOT Sta. No. S-69-750 – FOUND RAILROAD SPIKE AS SHOWN ON OCCR PREPARED BY BUDDY R. HOKIT FOR M. J. LEWIS & ASSOCIATES FILED ON JANUARY 21, 1998.

(9057)

N 1/4 CORNER – ODOT Sta. No. S-69-751 – SET MAG WITH TAG "SRB CA3949" BY SINGLE PROPORTIONATE METHOD BETWEEN THE NW AND NE CORNERS OF SECTION 19 WITH THE RECORD DISTANCES BEING APPLIED. NO EVIDENCE OF PREVIOUS CORNER OR REFERENCES WERE FOUND AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON MAY 24, 1994.

(9058)

NE CORNER – ODOT Sta. No. S-69-752 – FOUND CST/BERGER MASONRY NAIL WHICH AGREES WITH REFERENCE 1 AS SHOWN ON OCCR PREPARED BY MONTE DUANE KING FOR KING LAND SURVEYING FILED ON JANUARY 20, 1999.



(9081)

W 1/4 CORNER – ODOT Sta. No. S-69-756 – SET 1/2" IRON PIN AND CAP "SRB CA3949" AT EQUIDISTANT AND ON LINE BETWEEN THE SW AND NW CORNERS OF SECTION 19 AS CALLED FOR IN THE ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY WHICH AGREES WITH REFERENCE 2 AS SHOWN ON OCCR PREPARED BY JESSE L. CARROLL FOR CARROLL SURVEYING SERVICE, LLC FILED ON FEBRUARY 23, 2004.

(9083)

E 1/4 CORNER – ODOT Sta. No. S-69-757 – FOUND 3/8" IRON PIN AND REFERENCE 3 AS SHOWN ON OCCR PREPARED BY JESSE L. CARROLL FOR CARROLL LAND SURVEYING SERVICE, LLC FILED ON FEBRUARY 23, 2004.

(9106)

SW CORNER – ODOT Sta. No. S-69-765 – FOUND AND SET NOTHING POINT FALLS IN LAKE FUQUA. THE CALCULATED VALUE SHOWN HEREON FOR THIS POINT IS AT EQUIDISTANT AND ON LINE BETWEEN THE WEST 1/4 QUARTER CORNER OF SECTION 30 AND THE WEST 1/4 QUARTER CORNER OF SECTION 19.

SCALE OF FEET

0 500 1000 1500

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

(9121)

W 1/4 CORNER SECTION 30 – ODOT Sta. No. S-69-754 – FOUND 80d SPIKE AND REFERENCE 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE PREPARED ON OCTOBER 23, 2000 (FILED ON DATE NOT SHOWN).

(9107)

S 1/4 CORNER – ODOT Sta. No. S-69-766 – FOUND ORIGINAL 10"x5" SANDSTONE MONUMENT WITH "1/4" MARKED ON NORTH FACE AS CALLED FOR IN THE ORIGINAL GOVERNMENT NOTES FOR THE 1899 SURVEY AND AS SHOWN ON OCCR PREPARED BY JESSE L. CARROLL FOR CARROLL SURVEYING SERVICE, LLC FILED ON FEBRUARY 23, 2004 (ALSO FOUND 1/2" IRON PIN WITHOUT CAP SOUTHEAST OF STONE MONUMENT).

(9108)

SE CORNER – ODOT Sta. No. S-69-767 – FOUND 3/8" IRON PIN AND REFERENCE 3 AS SHOWN ON OCCR PREPARED BY JESSE LOUIS CARROLL FOR CARROLL SURVEYING SERVICE FILED ON MAY 24, 1994.

Preliminary Plans

PLS	TDD	10/16
DRAWN	TDL	10/16
CHECKED	TDL	10/16
APPROVED	TDD	10/16
CREW	BC, SG, MH	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

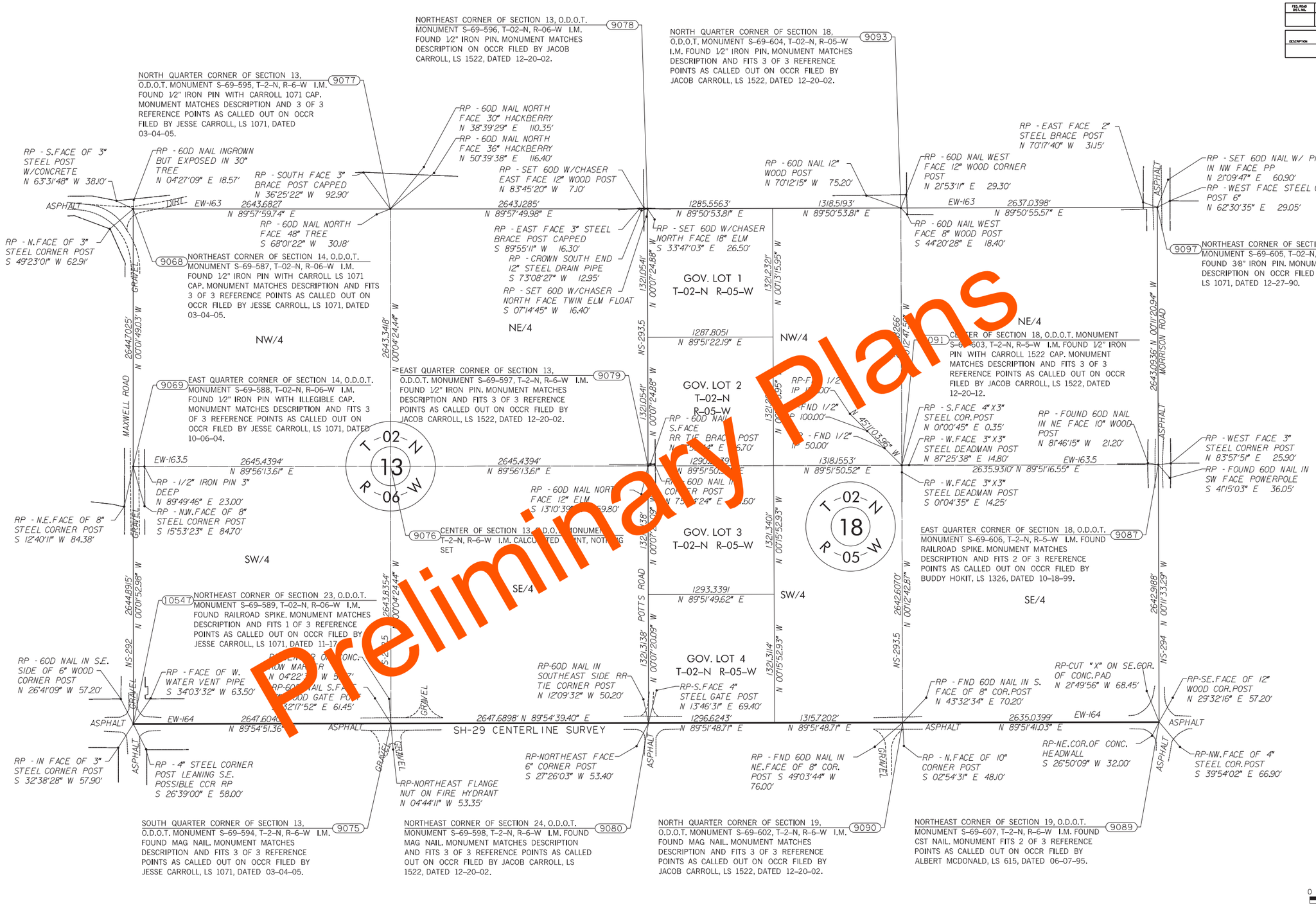
CERTIFICATE OF AUTHORIZATION NO. 3949 EXPIRES JUNE 30, 2017
SMITH ROBERTS BALDISCHWILER, LLC
100 N.E. 5th Street, Oklahoma City, OK 73104
Telephone: (405) 840-7094
FAX: (405) 840-9116

SURVEY DATA SHEET

SWO 5144(I) PROJECT NO. 29657(04) SHEET NO. S043

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

REVISIONS	
DESCRIPTION	DATE

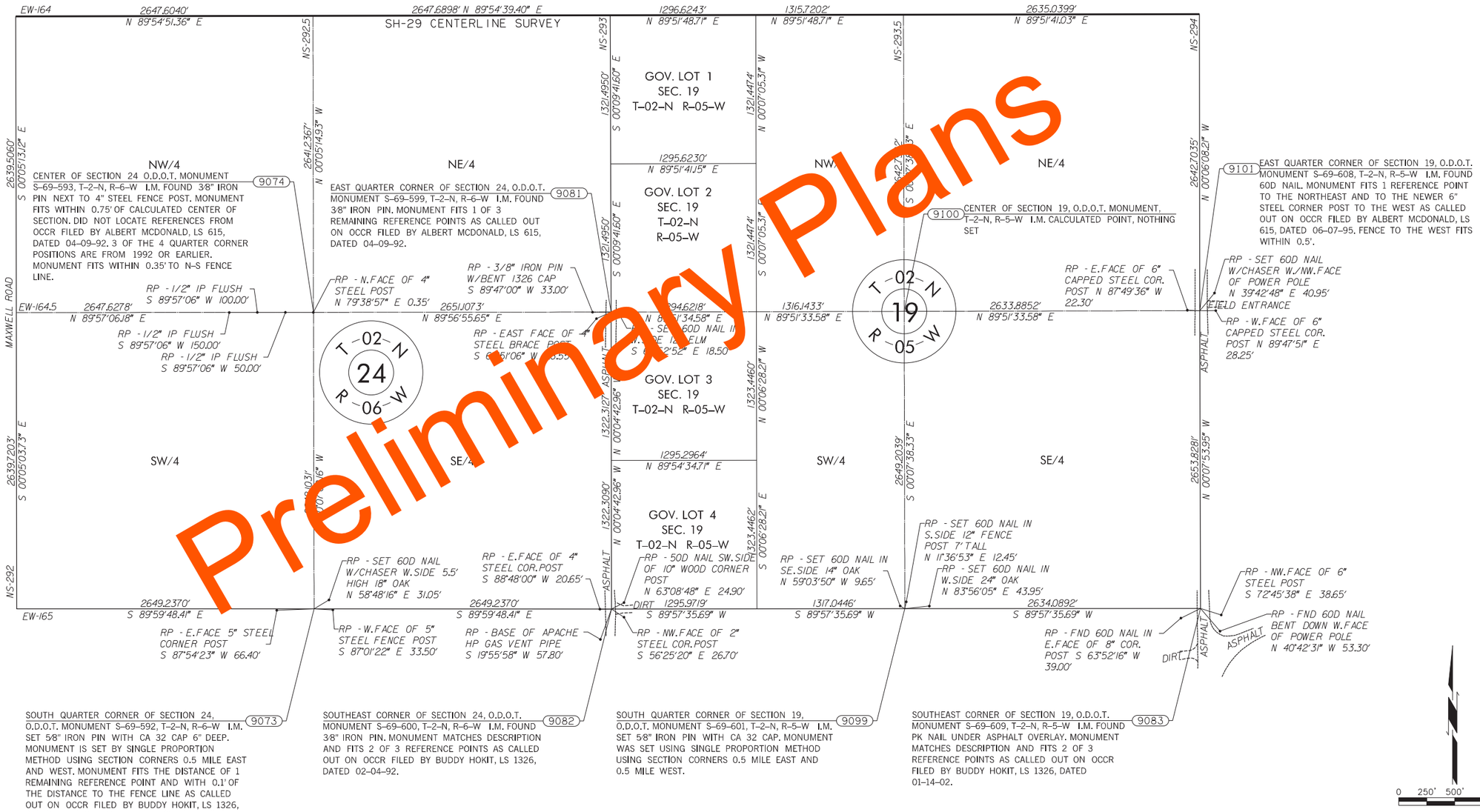


Preliminary Plans

P.L.S.	D.M.S.	01/29/2013	S.H. 29, FROM 7.48 MILES EAST OF U.S. 81 AT MARLOW, EAST 4.0 MILES — STEPHENS COUNTY
DRAWN	J.E.M.	01/29/2013	**LAND TIE SHEET**
CHECKED	B.C.B.	01/29/2013	
APPROV.	D.M.S.	01/29/2013	
CREW CHIEF		B.C.B.	SWO NO. 4762(I) J/P NO. 29657(04) SHEET NO. S044

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

REVISIONS	
DESCRIPTION	DATE



Preliminary Plans

P.L.S.	D.M.S.	01/29/2013	S.H. 29, FROM 7.48 MILES EAST OF U.S. 81 AT MARLOW, EAST 4.0 MILES — STEPHENS COUNTY
DRAWN	J.E.M.	01/29/2013	
CHECKED	B.C.B.	01/29/2013	**LAND TIE SHEET**
APPROV.	D.M.S.	01/29/2013	
CREW CHIEF		B.C.B.	SWO NO. 4762(I) J/P NO. 29657(04) SHEET NO. S045

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

REVISIONS	
DESCRIPTION	DATE

Preliminary Plans

SE/4 SEC 13
T02N R06W

GOV'T LOT 4
SEC 18
T02N R05W

SW/4 SEC 18
T02N R05W

NE/4 SEC 24
T02N R06W

GOV'T LOT 1
SEC 19
T02N R05W

NW/4 SEC 19
T02N R05W

MATCH LINE SHEET 12

MATCH LINE SHEET 14

545+00 550+00 555+00 560+00 565+00 570+00

P.O.T. STA.543+00.00 ℄ SURVEY (SET MAG NAIL W/CEC SHINER)

P.O.T. STA.549+00.00 ℄ SURVEY (SET MAG NAIL W/CEC SHINER)

P.O.T. STA.552+33.08 ℄ SURVEY (NOTHING SET), 2640.86' NORTH TO W/4 COR. SEC. 18 (FND 1/2" IP NO CAP EXPOSED) L.77' SOUTH TO SW/4 COR. SEC. 18 (FND MAG NAIL AT SURFACE)

P.O.T. STA.558+00.00 ℄ SURVEY (SET MAG NAIL W/CEC SHINER)

P.O.T. STA.567+00.00 ℄ SURVEY (SET MAG NAIL W/CEC SHINER)

PROPERTY LINE N 89°55'03" E 661.78'

PROPERTY LINE N 00°06'36" W 609.4'

PROPERTY LINE 198.97'

SECTION LINE S 00°07'20" E 1321.31'

GOV'T LOT S 00°15'53" E 1321.31'

STATUTORY R/W 608.89'

PROPERTY LINE 660.66'

NS-293 GOV'T LOT S 00°07'20" E 1269.55'

16.50'

PRESENT R/W 465.41'

PRESENT R/W 1315.77'

CL OF SURVEY & H-29 [illegible]

PROPERTY LINE 1296.62'

PRESENT R/W 1280.09'

GOV'T LOT S 89°51'49" W 1296.62'

EW-164 SECTION LINE S 89°51'49" W 2612.34'45"

N 89°53'43.61" E

PROPERTY LINE

PROPERTY LINE 779.34'

RP's-ALL #4 REBAR FLUSH

90°00'00"

428.73'

661.92'

133.18'

544.50'

528.00'

378.71'

300.00'

100.66'

148.38'

BM #83

BM #82

BM #81

BM #80

BM #79

CP [illegible]-573 AT #7401

51.05'

PROPERTY LINE N 00°09'40" W 351.62'

PROPERTY LINE S 89°[illegible]39" W 644.50'

PROPERTY LINE N 89°51'45" E 648.06'

PROPERTY LINE S 00°08'23" E 660.74'

STATUTORY R/W 921.49'

NS-293 SECTION LINE N 00°09'42" W 2642.9900'

GOV'T LOT S 00°09'42" E 1321.50'

GOV'T LOT N 00°07'05" W 1321.45'

660.75'

612.51'

8246 8247 8300 8301 5268 5265 5269 8260 8319 8318 8317 8306 5370 5396 8261 5369 5397 5271 5270 5264 5263 5274 5273 5272 5275 8244 8245 10554 10555 10556 10558 10559 5363 5364 5365 5366 5367 9080 5372 5368 8299 5398

0 50' 100' 200'

P.L.S.	D.M.S.	01/29/2013	S.H. 29, FROM 7.48 MILES EAST OF U.S. 81 AT MARLOW, EAST 4.0 MILES — STEPHENS COUNTY
DRAWN	J.E.M.	01/29/2013	**SURVEY DATA SHEETS**
CHECKED	B.C.B.	01/29/2013	
APPROV.	D.M.S.	01/29/2013	
CREW CHIEF		B.C.B.	SWO NO. 4762(I) J/P NO. 29657(04) SHEET NO. S046

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

REVISIONS	
DESCRIPTION	DATE

SW/4 SEC 18
T02N R05W

SE/4 SEC 18
T02N R05W

NW/4 SEC 19
T02N R05W

NE/4 SEC 19
T02N R05W

MATCH LINE SHEET 13

MATCH LINE SHEET 15

9091

8252

8248

8249

8250

8251

8320

8324

8325

575+00

580+00

585+00

590+00

595+00

600+00

P.O.T. STA. 572+00.00
℄ SURVEY (SET MAG NAIL W/CEC SHINER)

P.O.T. STA. 578+45.42
℄ SURVEY (NOTHING SET), 2642.29' NORTH TO CTR. SEC. 18 (FND 1/2" IP W/CARROLL 1522 CAP), 0.32' SOUTH TO S/4 COR. SEC. 18 (FND MAG NAIL AT SURFACE)

P.O.T. STA. 580+90.00
℄ SURVEY (SET MAG NAIL W/CEC SHINER)

P.O.T. STA. 590+00.00
℄ SURVEY (SET MAG NAIL W/CEC SHINER)

P.O.T. STA. 595+00.00
℄ SURVEY (SET NAG NAIL W/CEC SHINER)

PROPERTY LINE 2592.35'
NS-2935 1/4 SECTION LINE N 00°12'43" W 2642.6070'

PROPERTY LINE N 00°12'12" W 1271.86'

N 89°53'44" E 646.29'

PROPERTY LINE S 00°12'50" E 261.68'

RP's-ALL #4 REBAR FLUSH

90°00'00"

75'

50'

1315.72'

PRESENT R/W 1315.73'

342.64'

286.68'

2305.67'

303.60'

PRESENT R/W 1336.40'

671.23'

174.89'

1301.03'

PROPERTY LINE 1317.62'

CL OF SURVEY & SH-29

PROPERTY LINE 646.29'

PROPERTY LINE 1610.39'

PRESENT R/W 1610.39'

EW-164 SECTION LINE N 89°51'41" E 2635.0399'

BM #78

BM #77

BM #76

BM #75

5262
10561
9090
5399
10560
5260
5261
10562
5259
8250
5258
5257
10563
5256
8251
10564
5400
5401
473.66'
473.66'

RP's-ALL #4 REBAR FLUSH

N 00°10'42" W 1732.1'

S 00°02'23" W 1740.08'

PROPERTY LINE N 90°00'00" W 473.00'

PROPERTY LINE S 00°07'38" E 1932.41'
NS-2935 1/4 SECTION LINE S 00°07'38" E 2642.7982'

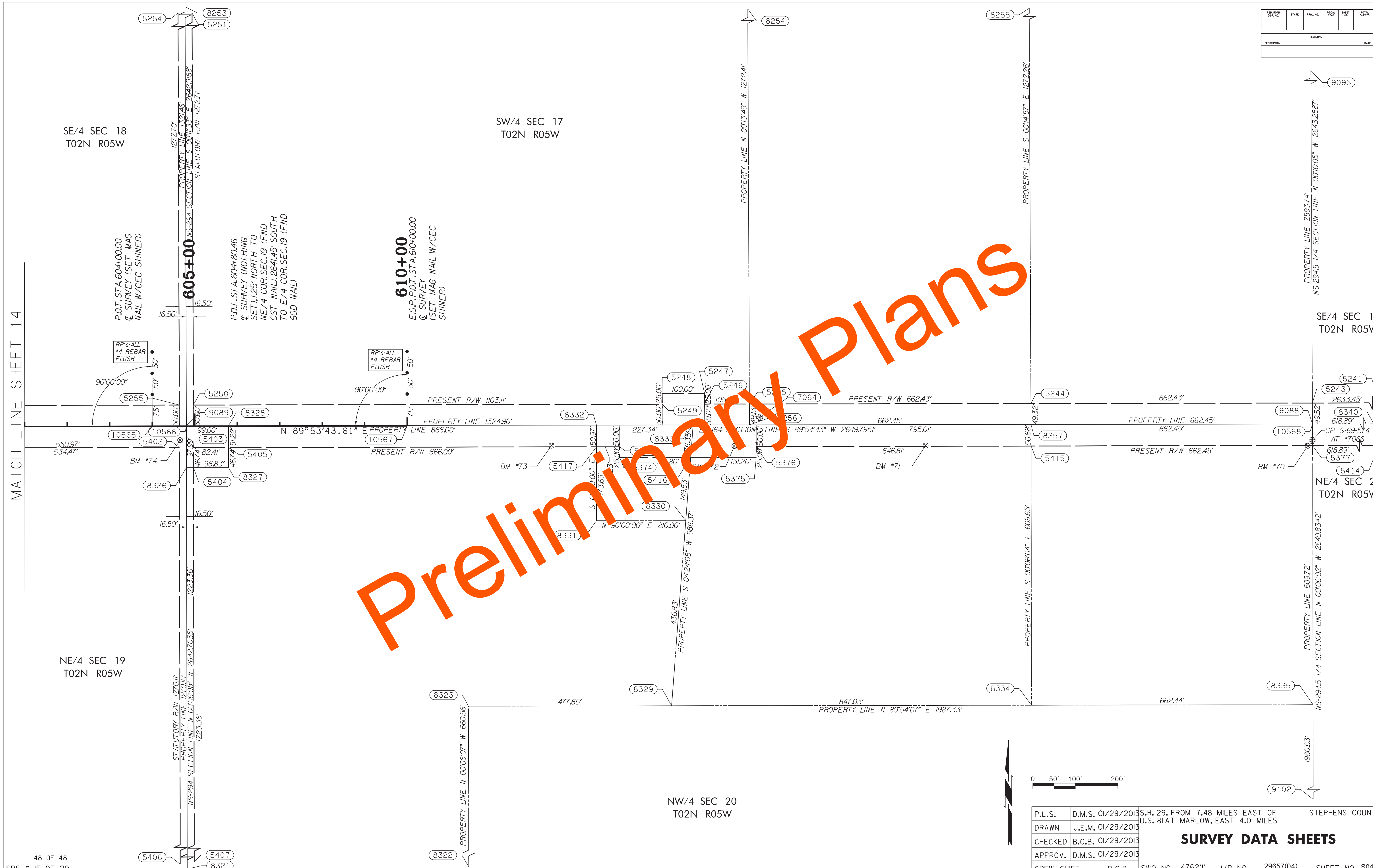
1271.71'

0 50' 100' 200'

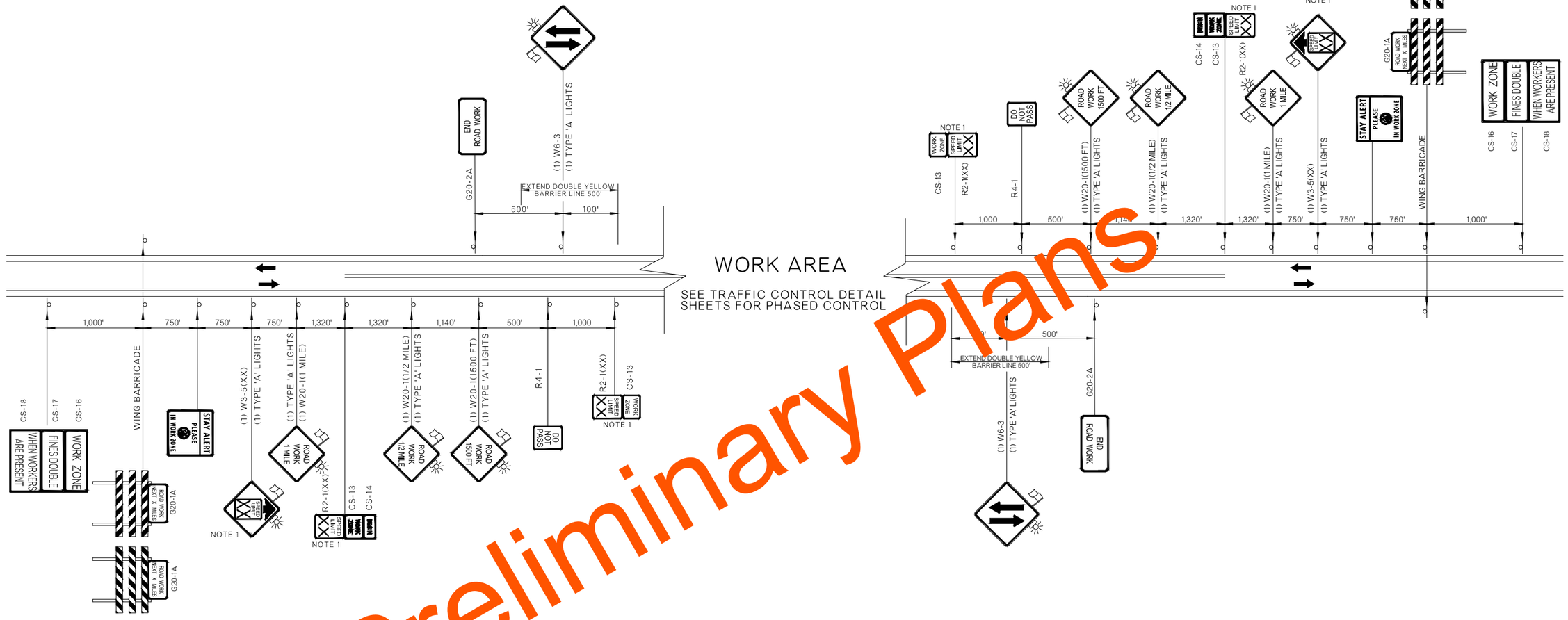
Preliminary Plans

P.L.S.	D.M.S.	01/29/2013	S.H. 29, FROM 7.48 MILES EAST OF U.S. 81 AT MARLOW, EAST 4.0 MILES — STEPHENS COUNTY
DRAWN	J.E.M.	01/29/2013	**SURVEY DATA SHEETS**
CHECKED	B.C.B.	01/29/2013	
APPROV.	D.M.S.	01/29/2013	
CREW CHIEF		B.C.B.	SWO NO. 4762(1) J/P NO. 29657(04) SHEET NO. S047

47 OF 48
SDS # ~~14 OF 20~~



Preliminary Plans



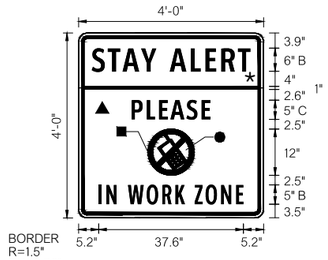
Preliminary Plans

NOTE 1
CONSTRUCTION SPEED LIMIT TO BE DETERMINED BY THE DIVISION ENGINEER.

ALL CONFLICTING PAVEMENT MARKINGS AND RAISED PAVEMENT MARKER REFLECTORS SHALL BE REMOVED. AFTER COMPLETION OF THE WORK, THE TEMPORARY INAPPLICABLE PAVEMENT MARKINGS SHALL BE REMOVED.

DRIVEWAY ACCESS SHALL BE OPEN AND MAINTAINED AT ALL TIMES.

FOR ADDITIONAL INFORMATION ABOUT TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES, SEE STANDARD DRAWING TCS2-1-(LATEST REVISION).



COLOR:
LEGEND, SYMBOL AND BORDER:
BLACK (NON-REFLECTORIZED)
BACKGROUND:
▲ FLUORESCENT ORANGE (REFLECTORIZED)
★ FLUORESCENT YELLOW (REFLECTORIZED)
● WHITE (REFLECTORIZED)
■ RED (NON-REFLECORIZED)

KEY:
⊸ SIGN

DRAWING NOT TO SCALE

(ADVANCE WARNING)

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T001

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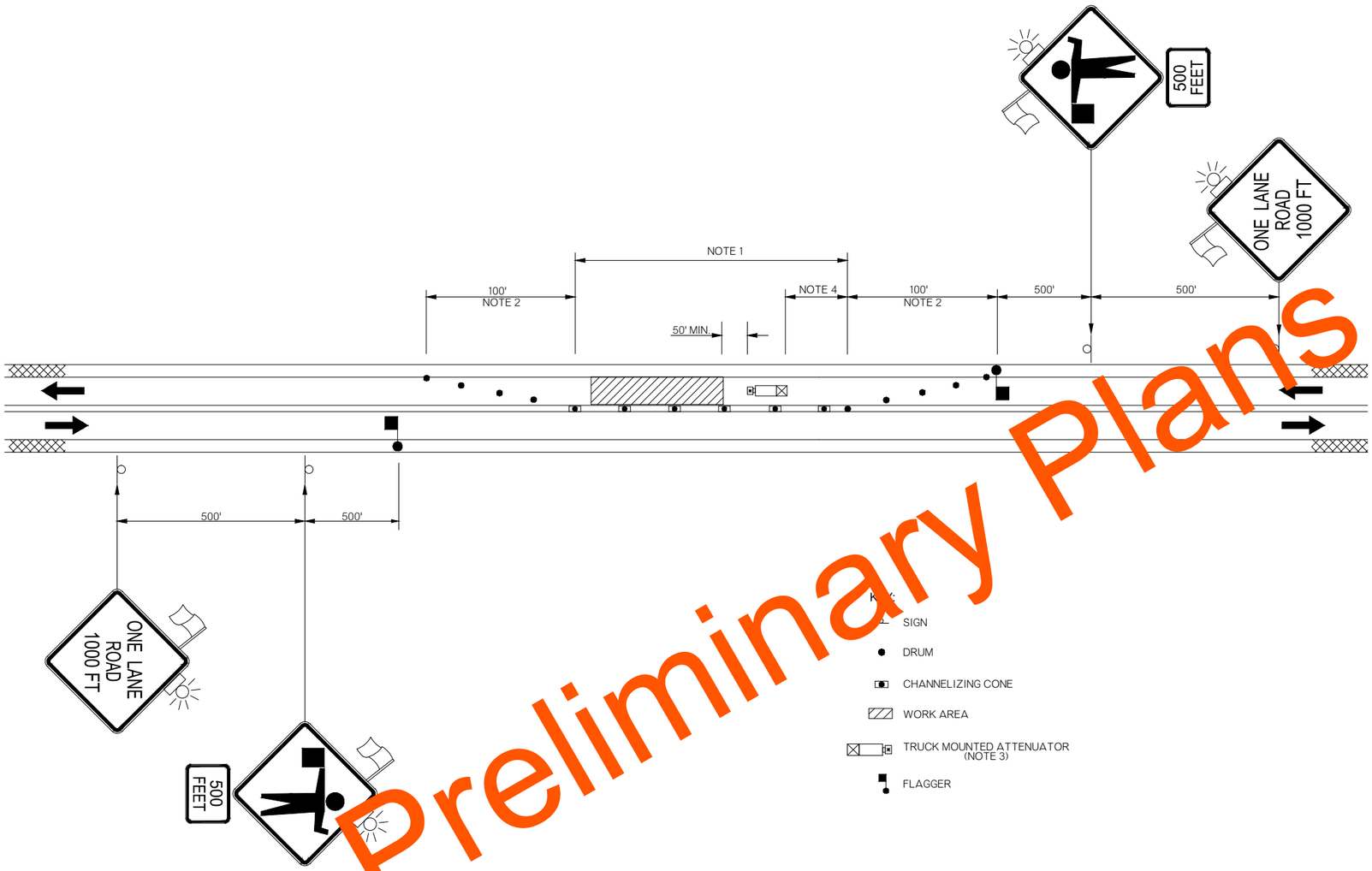
DESCRIPTION	REVISIONS	DATE



Preliminary Plans

LANE CLOSURE AND FLAGGING IS PROVIDED

NOTE 1
MAXIMUM SPACING OF CHANNELIZING DEVICES SHALL BE AS FOLLOWS:

(A) FIRST 250 FEET OF WORK AREA.
(1) 25 FEET FOR CONES AND CHANNELIZER CONES.
(2) 50 FEET FOR TYPE II BARRICADES, VERTICAL PANELS OR DRUMS.

(B) REMAINDER OF WORK AREA.
(1) 50 FEET FOR CONES AND CHANNELIZER CONES.
(2) 100 FEET FOR TYPE II BARRICADES, VERTICAL PANELS AND DRUMS.

NOTE 2
A MINIMUM OF FIVE (5) CHANNELIZING DEVICES SHALL BE PLACED THRU THIS AREA.

NOTE 3
THE TRUCK MOUNTED ATTENUATOR SHOWN AT THE BEGINNING OF THE WORK AREA SHALL BE IN PLACE WHENEVER WORKERS ARE IN THE WORK AREA. THIS VEHICLE SHALL BE REMOVED FROM THE ROADWAY WHENEVER WORKERS ARE NOT IN THE WORK AREA. THIS VEHICLE SHALL BE EQUIPPED WITH AN ACTUATED FLASHING OR REVOLVING YELLOW LIGHT.

NOTE 4
A LONGITUDINAL BUFFER AREA, TO ALLOW WORKERS TIME TO EVACUATE THE WORK AREA, SHOULD BE PROVIDED. FOR GUIDELINES ON SETTING THE LENGTH OF THIS BUFFER, SEE STANDARD DRAWING TCS2-1-(LATEST REVISION). ACTUAL LENGTH SHALL BE DETERMINED BY FIELD CONDITIONS AND THE JUDGEMENT OF THE ENGINEER.

THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT CONTACT AT ALL TIMES AND SHALL BE POSITIONED TO PROTECT THE WORKERS.

WHEN NO WORK IS BEING PREFORMED AND TWO LANE TRAFFIC IS OPERATING, FLAGGERS WILL NOT BE REQUIRED. WHENEVER FLAGGERS ARE NOT PRESENT, THE "FLAGGER" SIGNS SHALL BE REMOVED OR COVERED.

FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.

IN INSTANCES WHERE SIGHT DISTANCE MAY BE RESTRICTED DUE TO A CREST VERTICAL CURVE, HORIZONTAL CURVE OR OTHER FACTORS, THE CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T002

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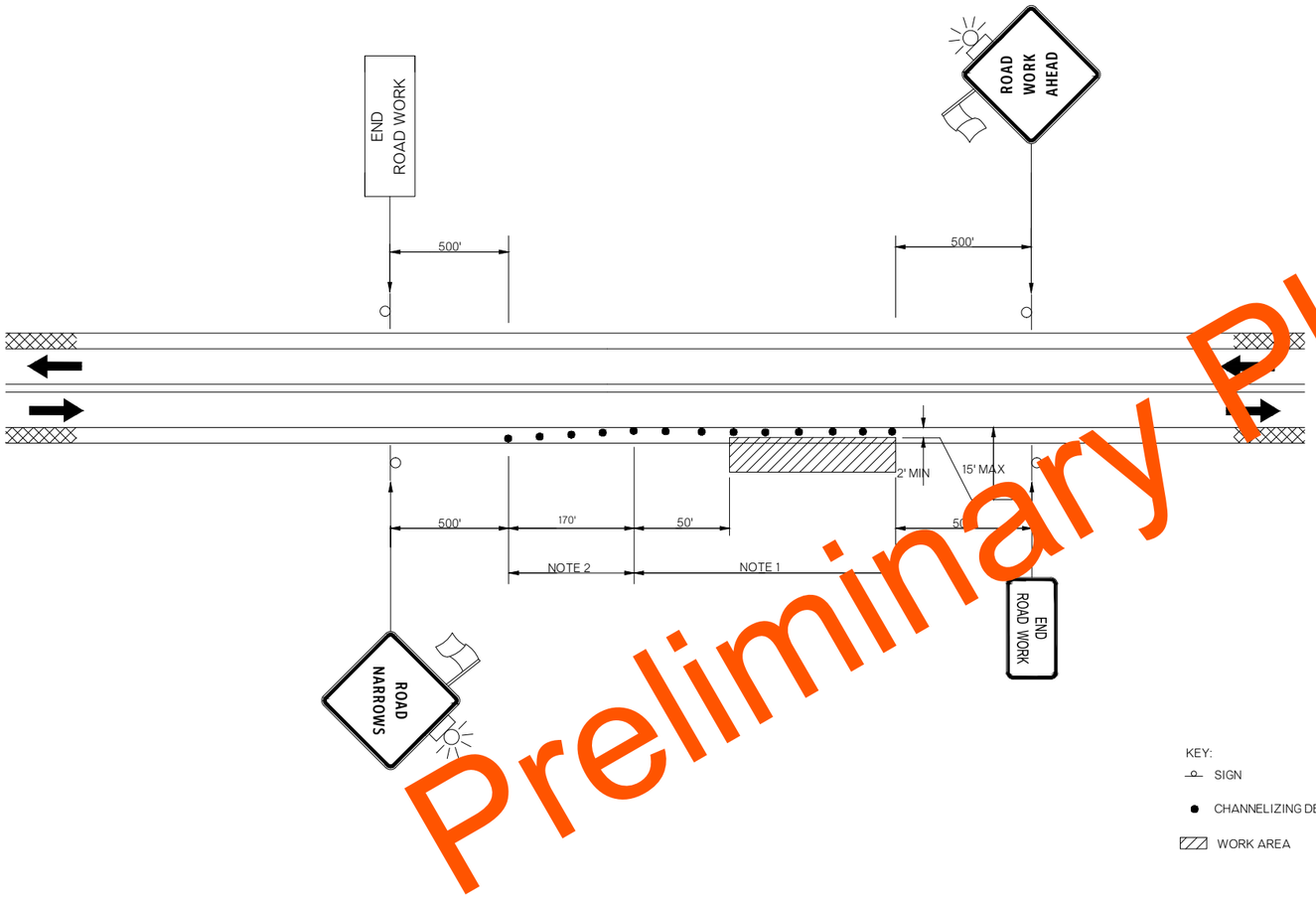
DESCRIPTION	REVISIONS	DATE



KEY:
- SIGN
- CHANNELIZING DEVICE
- WORK AREA

NOTE 1
MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES (FEET) SHALL BE EQUAL TO THE POSTED SPEED LIMIT (M.P.H.) WITH THE FOLLOWING EXCEPTIONS. SPACING SHALL NOT EXCEED 25 FEET FOR CONES OR TUBE CHANNELIZERS. SPACING SHALL NOT EXCEED 50 FEET FOR TYPE II BARRICADES, VERTICAL PANELS OR DRUMS.

NOTE 2
A MINIMUM OF FIVE (5) CHANNELIZING DEVICES SHALL BE PLACED THRU THIS AREA.

THE "ROAD WORK AHEAD" SIGN MAY BE REPLACED WITH OTHER APPROPRIATE SIGNS SUCH AS "SHOULDER WORK" IF CONDITIONS DICTATE.

IF THE WORKSPACE IS LOCATED IN THE MEDIAN OF A DIVIDED ROADWAY AN ADVANCE WARNING SIGN SHOULD ALSO BE PLACED ON THE LEFT SIDE OF THE ROADWAY.

FOR WORK REQUIRING (60 MINUTES OR LESS), OR MOBILE OPERATION, ALL SIGNS AND CHANNELIZING DEVICES MAY BE ELIMINATED IF A VEHICLE WITH AN ACTIVATED FLASHING OR REVOLVING YELLOW LIGHT IS USED.

ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGERS) AND THEIR ACTIVITIES SHALL BE RESTRICTED TO ONE SIDE OF THE ROADWAY.

Preliminary Plans

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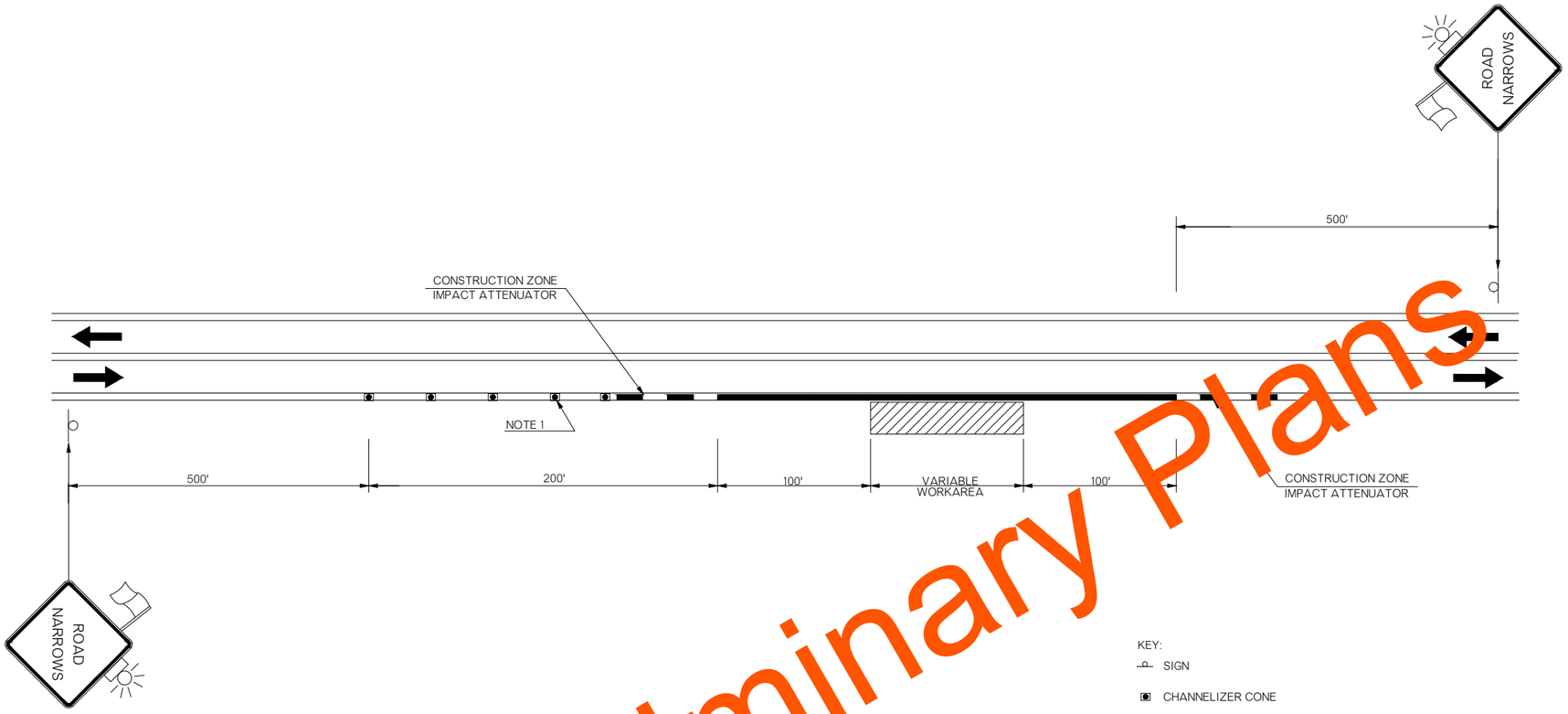
WORK ON SHOULDERS

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T003

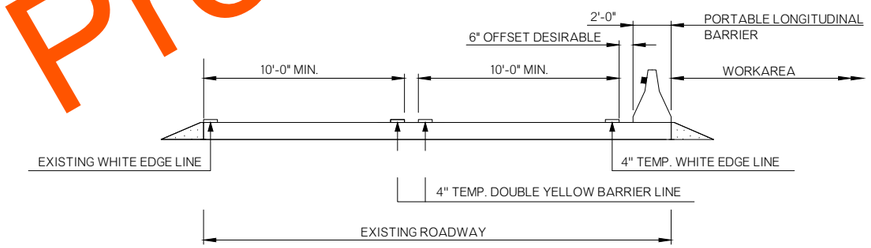
DESCRIPTION	REVISIONS	DATE



NOTE 1
A MINIMUM OF FIVE (5) CHANNELIZING DEVICES SHALL BE PLACED THRU THIS AREA.

Preliminary Plans

KEY:
- SIGN
- CHANNELIZER CONE
- WORK AREA
- PORTABLE LONGITUDINAL BARRIER



SECTION A - A

SHOULDER WORKAREA

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T004

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2N, R5W

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

610+00 615+00 620+00

STA. 609+00

STA. 624+00

ROAD NARROWS

W5-1

N89° 53' 43.61"E

E-W 164 $

℄ Survey

N89° 53' 43.61"E

(5) VERTICAL PANELS @ 100' C/C

CHANNELIZER CONES @ 25' C/C

W5-1

ROAD NARROWS

FOR ADDITIONAL SIGNING SEE ADVANCE WARNING SIGNING SHEET T001

LEGEND

- CONST. WORK AREA
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 20, T2N, R5W

SEC. 16, T2N, R5W

SEC. 16, T2N, R5W

660+00 665+00 670+00

LE: 1"=50'

M S 295 $

STA. 657+00

STA. 672+00

N89° 57' 05.79"E

E-W 164 $

℄ Survey

(5) VERTICAL PANELS @ 100' C/C

CHANNELIZER CONES @ 25' C/C

FOR ADDITIONAL SIGNING SEE ADVANCE WARNING SIGNING SHEET T001

SEC. 21, T2N, R5W

SEC. 21, T2N, R5W

Preliminary Plans

PHASE 1A

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T005

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SEC. 16, T2N, R5W

680+00

685+00

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

FOR ADDITIONAL SIGNING
SEE ADVANCE WARNING
SIGNING SHEET T001

STA. 675+00

STA. 690+00

ROAD NARROWS

W5-1

S00°17'57.18"E
N-S 282.514' ℄

N89° 57' 05.79"E

℄ Survey

E-W 164' ℄

VERTICAL PANEL @ 100' C/C

CHANNELIZER CONES
@ 25' C/C

LEGEND

- CONST. WORK AREA
- VERTICAL PANEL
- CHANNELIZER CONE
- SIGN
- TRAFFIC FLOW

N00°07'28.74"W

SEC. 21,
T2N, R5W

SEC. 14, T2N, R5W

SEC. 13, T2N, R5W

SCALE: 1"=50'

810+00

815+00

STA. 805+00

STA. 820+00

℄ Survey

N89° 49' 05.79"E

E-W 164' ℄

VERTICAL PANELS
@ 100' C/C

CHANNELIZER CONES
@ 25' C/C

W5-1

ROAD NARROWS

N-S 296' ℄

SEC. 23, T2N, R5W

Preliminary Plans

PHASE 1A

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T006

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DESCRIPTION	REVISIONS	DATE

SEC. 13, T2N, R5W

SCALE: 1"=50'

STA. 820+00

825+00

830+00

STA. 835+00

ROAD NARROWS

W5-1

℄ Survey N89° 49' 05.79"E

℄ Survey N89° 51' 05.79"E

LEGEND

- CONST. WORK AREA
- CHANNELIZER CONE
- SIGN
- VERTICAL PANEL
- TRAFFIC FLOW

WHEN WORK AREA IS WITHIN CLEAR ZONE, LANE CLOSURE AND FLAGGING SHALL BE PROVIDED.

Preliminary Plans

SEC. 13, T2N, R5W

SCALE: 1"=50'

STA. 835+00

STA. 850+00

N00° 11' 13.58"W

N 5285.114 ℄

E-W 164 ℄

℄ Survey N89° 51' 05.79"E

℄ Detour 'A'

CHANNELIZER CONES @ 25' C/C

FOR ADDITIONAL SIGNING SEE ADVANCE WARNING SIGNING SHEET T001

ROAD NARROWS

W5-1

LEGEND

- CONST. WORK AREA
- CHANNELIZER CONE
- SIGN
- TRAFFIC FLOW

WHEN WORK AREA IS WITHIN CLEAR ZONE, LANE CLOSURE AND FLAGGING SHALL BE PROVIDED.

PHASE 1A

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T007

R:\114574\Drawings\29657(04)\29657(04)-PHASE 1A-CONSTRUCTION TRAFFIC CONTROL.dwg 5/2/2021 11:27 AM

DESCRIPTION	REVISIONS	DATE

SEC. 18, T2N, R5W

575+00

580+00

SCALE: 1"=50'

FOR ADVANCE WARNING SIGN
SEE SHEET T001

END ROAD WORK
G20-2A

STA. 570+00

STA. 585+00

℄ Survey

N89° 53' 43.61"E

500'

800'

200'

(1) W20-1(1500 FT)
ROAD WORK 1500 FT
(1) TYPE 'A' LIGHTS

R4-1
DO NOT PASS

WHEN WORK AREA IS WITHIN CLEAR ZONE, LANE CLOSURE AND FLAGGING SHALL BE PROVIDED.

W5-1
ROAD NARROWS

SEC. 19, T2N, R5W

SEC. 18, T2N, R5W

590+00

595+00

SCALE: 1"=50'

ROAD NARROWS
W5-1

(5) TYPE III BARRICADES
(10) TYPE "A" LIGHTS
(3) R11-2(ROAD)

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

STA. 585+00

STA. 600+00

E-W 164 ℄

℄ Survey

N89° 53' 43.61"E

SOLID WHITE EDGE LINE (PAINT)

DOUBLE YELLOW CENTER LINE (PAINT)

200 LF PORT. LONGITUDINAL BARRIER

CONST. ZONE IMPACT ATTEN.

CONST. ZONE IMPACT ATTEN.

CHANNELIZER CONES 50' C/C

R2-1(XX)
SPEED LIMIT
CS-13
ROAD WORK AHEAD

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 19, T2N, R5W

PHASE 1B

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T008

Preliminary Plans

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SEC. 18, T2N, R5W

SEC. 17, T2N, R5W

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

605+00

610+00

N00° 11' 31.79"W

N-S 294 ℄

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

STA. 600+00

STA. 615+00

N89° 54' 41.55"E

E-W 164 ℄

℄ Survey

N89° 53' 43.61"E

SOLID WHITE
EDGE LINE
(PAINT)

DOUBLE YELLOW
CENTER LINE
(PAINT)

W5-1

ROAD NARROWS

NOTE:
CONFLICTING PAVEMENT MARKING SHALL BE REMOVED BEFORE INSTALLING CONSTRUCTION PAVEMENT MARKING.

SEC. 19, T2N, R5W

SEC. 20, T2N, R5W

N00° 06' 13.09"W

Preliminary Plans

SEC. 17, T2N, R5W

SCALE: 1"=50'

620+00

625+00

ROAD NARROWS

W5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
R11-2(ROAD)

STA. 615+00

STA. 630+00

FLARE BARRIER WALL
TO CLEAR ZONE

CONST. ZONE
IMPACT ATTEN.

275 LF PORT.
LONGITUDINAL BARRIER

200 LF PORT.
LONGITUDINAL BARRIER

CONST. ZONE IMPACT ATTEN.

DOUBLE YELLOW
CENTER LINE
(PAINT)

VERTICAL PANELS @ 100' C/C

E-W 164 ℄

℄ Survey

N89° 54' 41.55"E

N89° 53' 43.61"E

SOLID WHITE
EDGE LINE
(PAINT)

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- PORT. LONGITUDINAL BARRIER
- CONST. ZONE IMPACT ATTEN.
- TRAFFIC FLOW

NOTE:
CONFLICTING PAVEMENT MARKING SHALL BE REMOVED BEFORE INSTALLING CONSTRUCTION PAVEMENT MARKING.

SEC. 20, T2N, R5W

PHASE 1B

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T009

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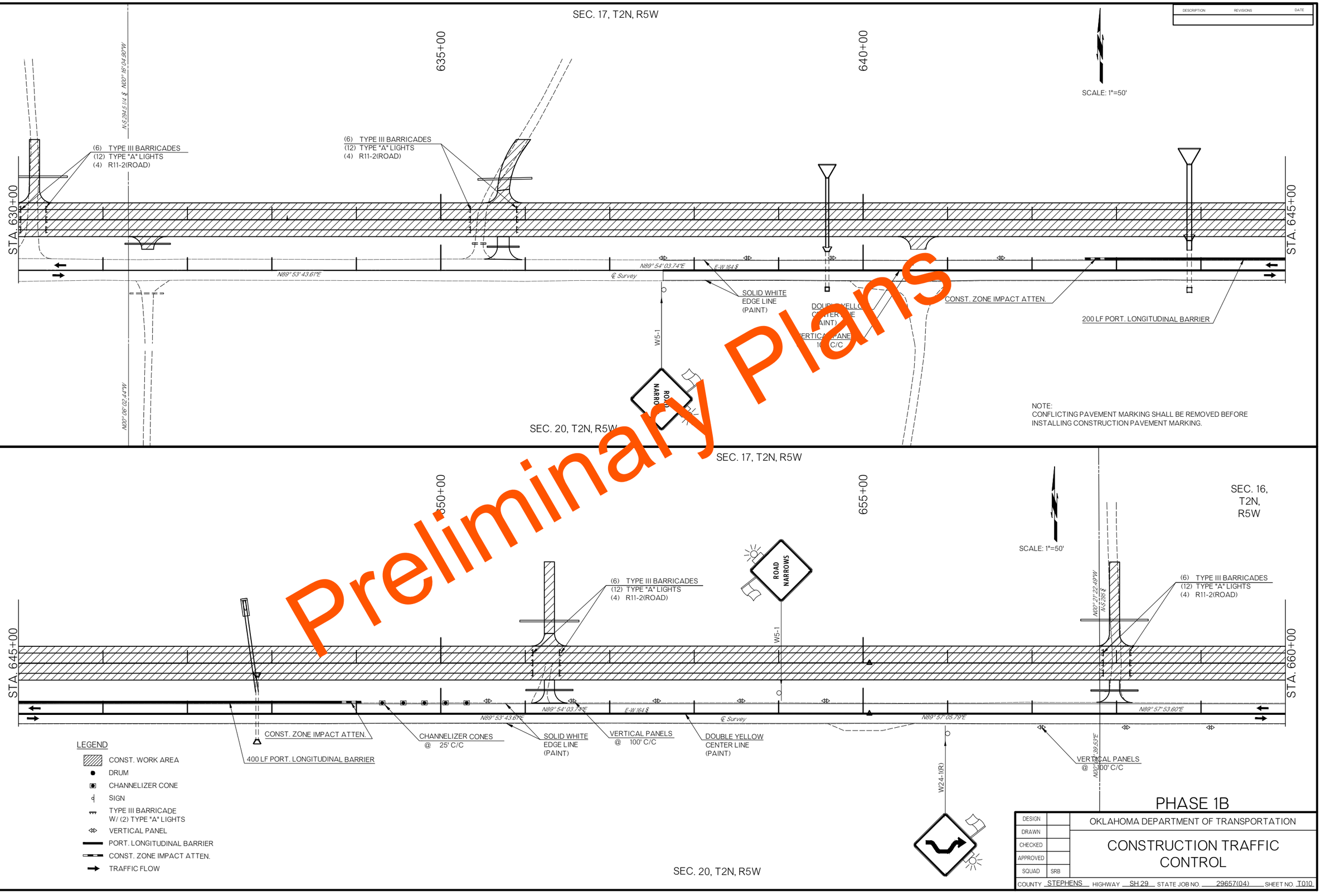

Preliminary Plans

DESCRIPTION	REVISIONS	DATE

PHASE 1B

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T010

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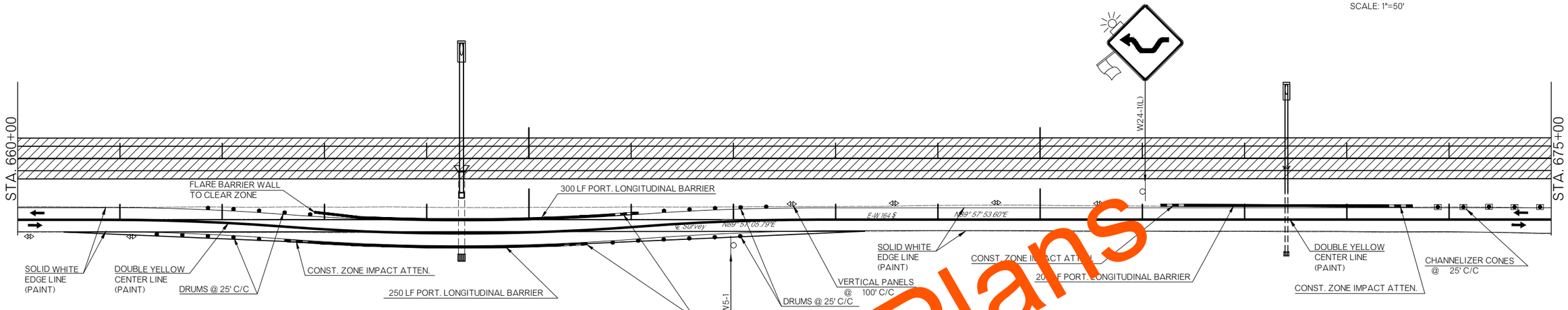
DESCRIPTION	REVISIONS	DATE

SEC. 16, T2N, R5W

665+00

670+00

SCALE: 1"=50'



NOTE:
CONFLICTING PAVEMENT MARKING SHALL BE REMOVED BEFORE INSTALLING CONSTRUCTION PAVEMENT MARKING.

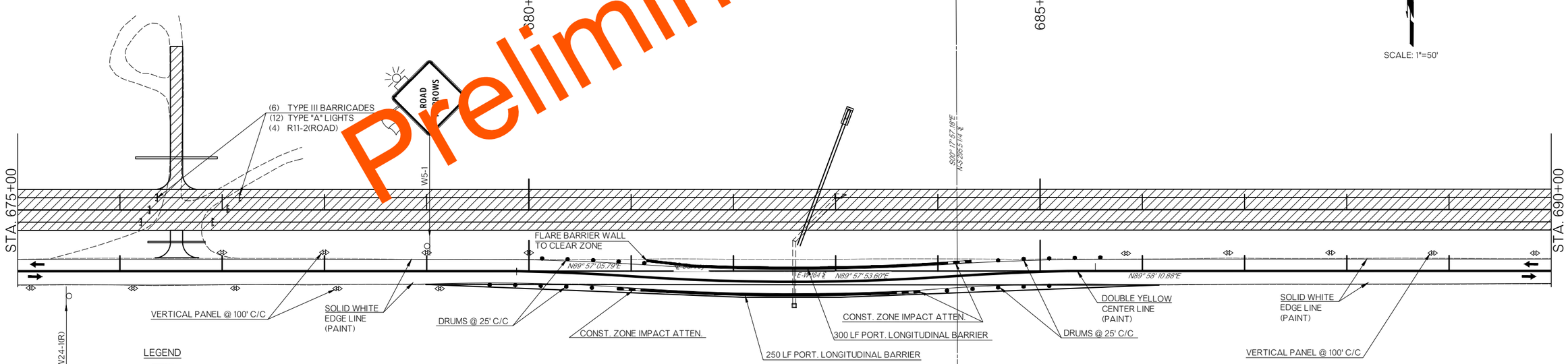
SEC. 21, T2N, R5W

SEC. 16, T2N, R5W

680+00

685+00

SCALE: 1"=50'



LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- PORT. LONGITUDINAL BARRIER
- CONST. ZONE IMPACT ATTEN.
- TRAFFIC FLOW

SEC. 21, T2N, R5W

PHASE 1B

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T011

Preliminary Plans

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SEC. 16, T2N, R5W

DESCRIPTION	REVISIONS	DATE

695+00

700+00

SCALE: 1"=50'

(3) TYPE III BARRICADES
(6) TYPE "A" LIGHTS
(2) R11-2(ROAD)

STA. 690+00

W24-1(L)

STA. 705+00

DOUBLE YELLOW
CENTER LINE
(PAINT)

SOLID WHITE
EDGE LINE
(PAINT)

CONST. ZONE IMPACT ATTEN.

℄ Survey

E-W 164'±

N89° 58' 10.88"E

300 LF PORT. LONGITUDINAL BARRIER

CONST. ZONE IMPACT ATTEN.

CHANNELIZER CONES
@ 25' C/C

VERTICAL PANELS
@ 100' C/C

W5-1

ROAD NARROWS

SEC. 21, T2N, R5W

NOTE:
CONFLICTING PAVEMENT MARKING SHALL BE REMOVED BEFORE INSTALLING CONSTRUCTION PAVEMENT MARKING.

Preliminary Plans

SEC. 16, T2N, R5W

SEC. 15, T2N, R5W

ROAD NARROWS

W5-1

710+00

715+00

SCALE: 1"=50'

(3) TYPE III BARRICADES
(6) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(9) TYPE III BARRICADES
(18) TYPE "A" LIGHTS
(5) R11-2(ROAD)

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

STA. 705+00

STA. 720+00

SOLID WHITE
EDGE LINE
(PAINT)

CONST. ZONE IMPACT ATTEN.

DOUBLE YELLOW
CENTER LINE
(PAINT)

150 LF PORT. LONGITUDINAL BARRIER

CONST. ZONE IMPACT ATTEN.

CHANNELIZER CONES
@ 25' C/C

N89° 56' 39.33"E

N89° 57' 05.79"E

E-W 164'±

℄ Survey

CONST. ZONE IMPACT ATTEN.

200 LF PORT. LONGITUDINAL BARRIER

CONST. ZONE IMPACT ATTEN.

CHANNELIZER CONES
@ 25' C/C

VERTICAL PANELS
@ 100' C/C

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- PORT. LONGITUDINAL BARRIER
- CONST. ZONE IMPACT ATTEN.
- TRAFFIC FLOW

SEC. 21, T2N, R5W

SEC. 22, T2N, R5W

PHASE 1B

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T012

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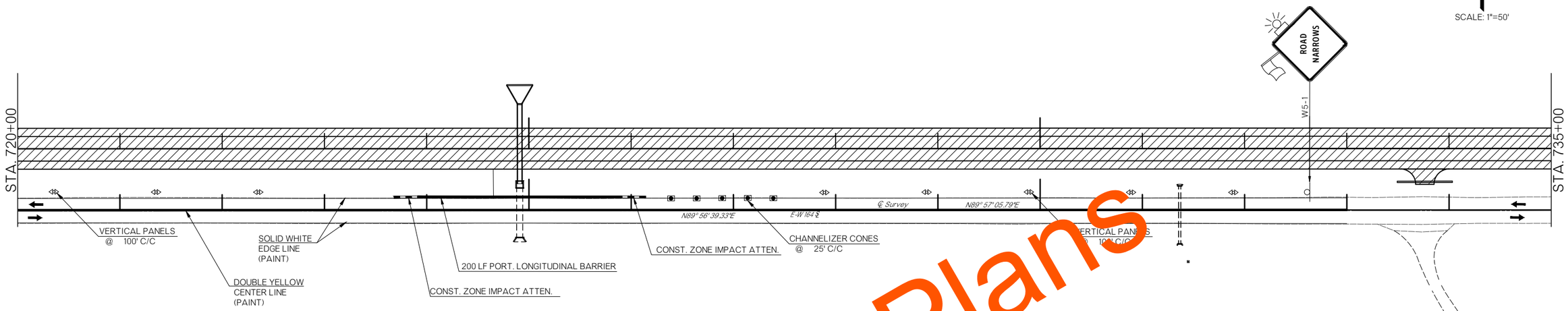
SEC. 15, T2N, R5W

DESCRIPTION	REVISIONS	DATE

725+00

730+00

SCALE: 1"=50'



SEC. 22, T2N, R5W

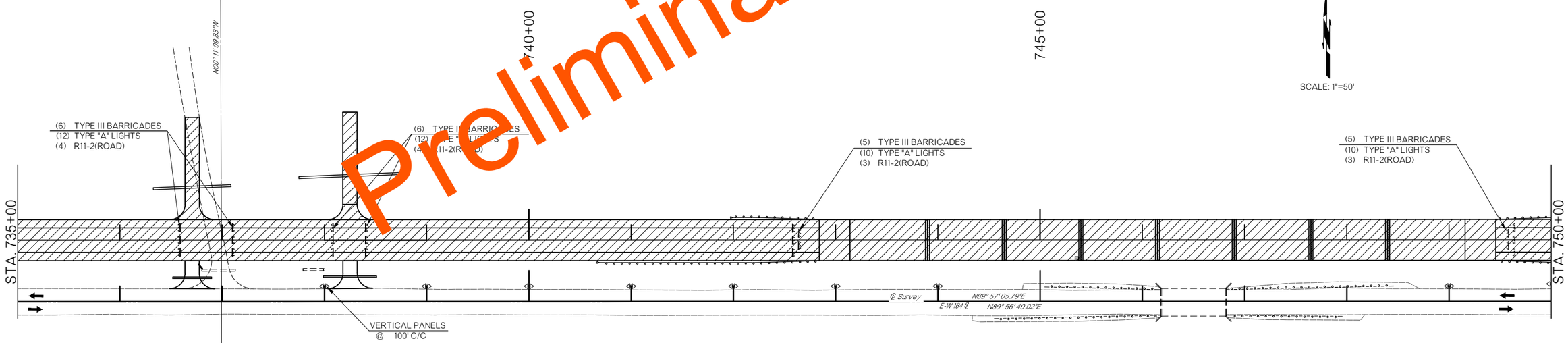
NOTE:
CONFLICTING PAVEMENT MARKING SHALL BE REMOVED BEFORE INSTALLING CONSTRUCTION PAVEMENT MARKING.

SEC. 15, T2N, R5W

740+00

745+00

SCALE: 1"=50'



LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 22, T2N, R5W

Preliminary Plans

PHASE 1B

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T013

R:\114574\Drawings\29657(04)\29657(04)-PHASE 1-CONSTRUCTION TRAFFIC CONTROL.dwg 10/7/2022 10:12 AM

SEC. 15, T2N, R5W

DESCRIPTION	REVISIONS	DATE

755+00

760+00

SCALE: 1"=50'

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

N00°18'49"W

STA. 750+00

STA. 765+00

N89° 57' 05.79"E

℄ Survey

N89° 56' 49.02"E

E-W 164 $

VERTICAL PANELS
@ 100' C/C

N00°02'50.59"W

N-S 292.3' $

SEC. 23,
T2N, R5W

Preliminary Plans

SEC. 22, T2N, R5W

SEC. 14, T2N, R5W

770+00

775+00

SCALE: 1"=50'

STA. 765+00

STA. 780+00

N89° 57' 05.79"E

℄ Survey

N89° 52' 46.78"E

E-W 164 $

N89° 49' 05.79"E

VERTICAL PANELS
@ 100' C/C

VERTICAL PANELS
@ 100' C/C

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 23, T2N, R5W

PHASE 1B

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T014

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DESCRIPTION	REVISIONS	DATE

SEC. 14, T2N, R5W

785+00

790+00

N02°07'31.88"W

SCALE: 1"=50'

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

STA. 780+00

STA. 795+00

N89° 52' 46.78"E

N89° 49' 05.79"E

E-W 164'±

N89° 49' 05.79"E

℄ Survey

N89° 48' 54.74"E

SEC. 23, T2N, R5W

N02° 06' 18.94"W

N-S 297.5'±

SEC. 14, T2N, R5W

800+00

805+00

SCALE: 1"=50'

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

STA. 795+00

STA. 810+00

N89° 49' 05.79"E

℄ Survey

N89° 48' 54.74"E

E-W 164'±

SOLID WHITE
EDGE LINE
(PAINT)

DOUBLE YELLOW
CENTER LINE
(PAINT)

CONST. ZONE IMPACT ATTEN.

200 LF PORT. LONGITUDINAL BARRIER

CONST. ZONE IMPACT ATTEN.

VERTICAL PANELS
@ 100' C/C

W5-1

ROAD NARROWS

W24-1(R)

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- PORT. LONGITUDINAL BARRIER
- CONST. ZONE IMPACT ATTEN.
- TRAFFIC FLOW

NOTE:
CONFLICTING PAVEMENT MARKING SHALL BE REMOVED BEFORE INSTALLING CONSTRUCTION PAVEMENT MARKING.

SEC. 23, T2N, R5W

Preliminary Plans

PHASE 1B

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T015

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SEC. 14, T2N, R5W

SEC. 13, T2N, R5W

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

815+00

820+00

N00° 12' 56.98"W

ROAD NARROWS

W5-1

(10) TYPE III BARRICADES
(20) TYPE "A" LIGHTS
(5) R11-2(ROAD)

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

W24-1(L)

STA. 810+00

STA. 825+00

DRUMS @ 50' C/C

N89° 48' 54.74"E

N89° 49' 05.79"E

N89° 58' 18.01"E

E-W 164.8'

SOLID WHITE
EDGE LINE
(PAINT)

DOUBLE YELLOW
CENTER LINE
(PAINT)

CHANNELIZER CONES
@ 25' C/C

DRUMS @ 25' C/C

CONST. ZONE IMPACT ATTEN.

300 LF PORT. LONGITUDINAL BARRIER

CONST. ZONE IMPACT ATTEN.

CONST. ZONE IMPACT ATTEN.

DRUMS @ 25' C/C

300 LF PORT. LONGITUDINAL BARRIER

CHANNELIZER CONES
@ 25' C/C

VERTICAL PANELS
@ 25' C/C

SOLID WHITE
EDGE LINE
(PAINT)

DOUBLE YELLOW
CENTER LINE
(PAINT)

N00° 03' 57.01"W

N-S 282.8'

SEC. 23, T2N, R5W

SEC. 24, T2N, R5W

SEC. 24, T2N, R5W

SCALE: 1"=50'

830+00

835+00

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

STA. 825+00

STA. 840+00

℄ Survey N89° 49' 05.79"E

℄ Survey N89° 51' 05.79"E

E-W 164.8' N89° 58' 18.01"E

350 LF PORT. LONGITUDINAL BARRIER

DOUBLE YELLOW
CENTER LINE
(PAINT)

SOLID WHITE
EDGE LINE
(PAINT)

FLARE BARRIER WALL
TO CLEAR ZONE

DRUMS @ 50' C/C

CONST. ZONE IMPACT ATTEN.

300 LF PORT. LONGITUDINAL BARRIER

W24-1(R)

WHEN WORK AREA IS WITHIN CLEAR ZONE, LANE CLOSURE AND FLAGGING SHALL BE PROVIDED.

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- PORT. LONGITUDINAL BARRIER
- CONST. ZONE IMPACT ATTEN.
- TRAFFIC FLOW

NOTE:
CONFLICTING PAVEMENT MARKING SHALL BE REMOVED BEFORE INSTALLING CONSTRUCTION PAVEMENT MARKING.

SEC. 24, T2N, R5W

Preliminary Plans

PHASE 1B

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T016

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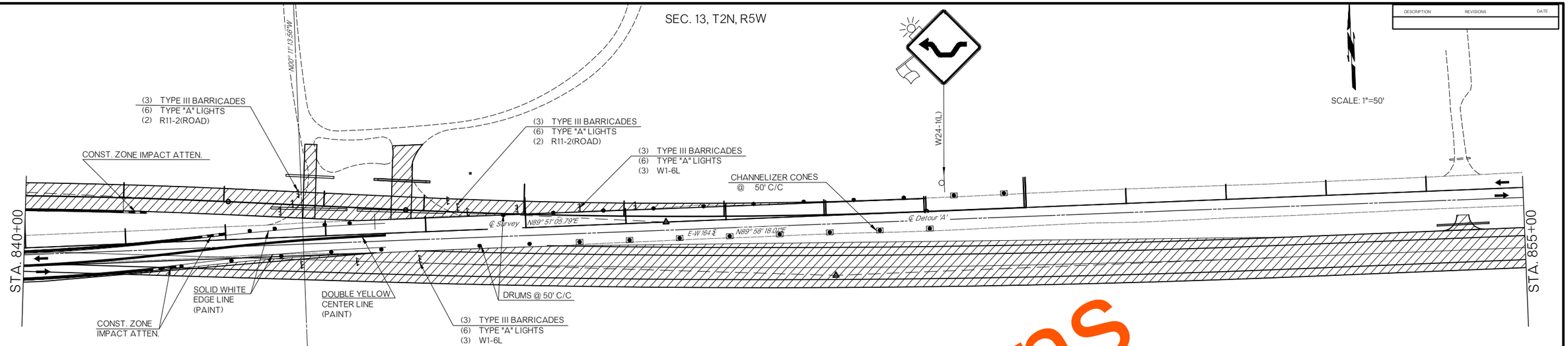
SEC. 13, T2N, R5W

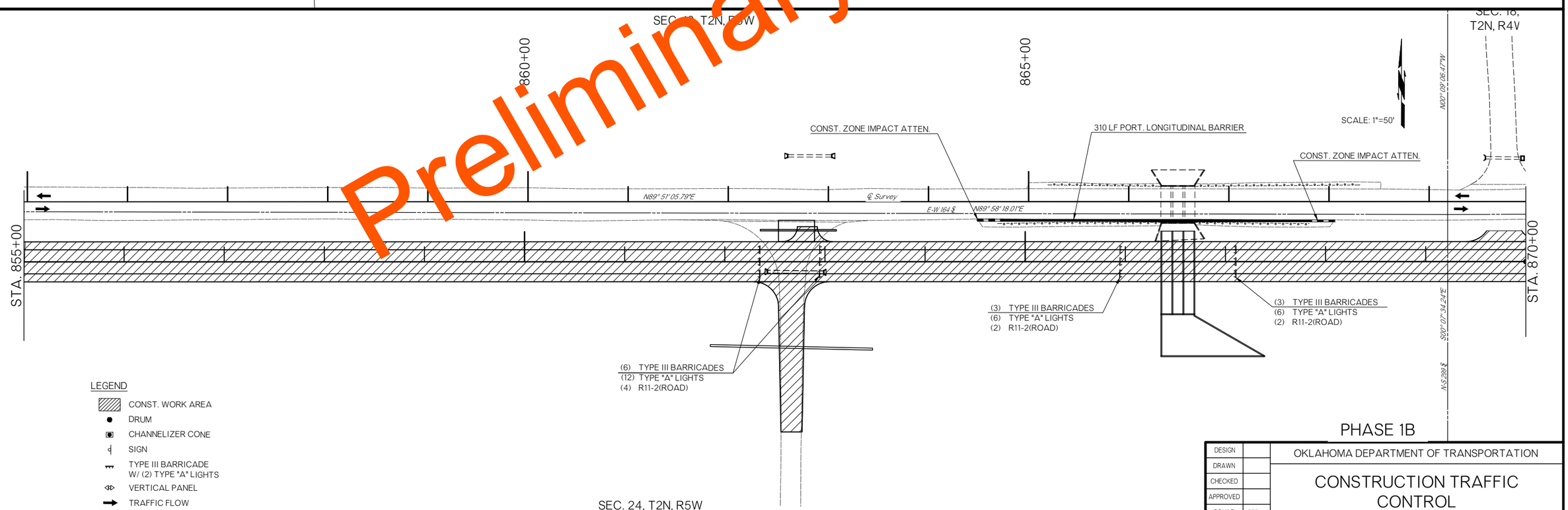


WHEN WORK AREA IS WITHIN CLEAR ZONE, LANE CLOSURE AND FLAGGING SHALL BE PROVIDED.

NOTE:
CONFLICTING PAVEMENT MARKING SHALL BE REMOVED BEFORE INSTALLING CONSTRUCTION PAVEMENT MARKING.

SEC. 24, T2N, R5W

SEC. 13, T2N, R5W



LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 24, T2N, R5W

PHASE 1B

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T017

DESCRIPTION	REVISIONS	DATE

Preliminary

R:\1145741Drawings\29657(04)\29657(04)-PHASE 1-CONSTRUCTION TRAFFIC CONTROL.dwg 10/7/2022 10:12 AM

SEC. 18, T2N, R4W

875+00

880+00

SCALE: 1"=50'

STA. 870+00

STA. 885+00

SOLID WHITE
EDGE LINE
(PAINT)

DOUBLE YELLOW
CENTER LINE
(PAINT)

CHANNELIZER CONES
@ 50' C/C

CONST. ZONE IMPACT ATTEN.

200 LF PORT.
LONGITUDINAL BARRIER

CONST. ZONE IMPACT ATTEN.

N89° 43' 16.77"E

N89° 51' 05.79"E

℄ Survey

E-W 164 ±

℄ CROSSOVER

W5-1

ROAD NARROWS

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

(10) TYPE III BARRICADES
(20) TYPE "A" LIGHTS
(6) R11-2(ROAD)

(3) TYPE III BARRICADES
(6) TYPE "A" LIGHTS
(2) R11-2(ROAD)

WHEN WORK AREA IS WITHIN CLEAR ZONE, LANE CLOSURE AND FLAGGING SHALL BE PROVIDED.

NOTE:
CONFLICTING PAVEMENT MARKING SHALL BE REMOVED BEFORE INSTALLING CONSTRUCTION PAVEMENT MARKING.

SEC. 19, T2N, R4W

SEC. 18, T2N, R4W

890+00

895+00

900+00

SCALE: 1"=50'

FOR ADDITIONAL SIGNING
AND ADVANCE WARNING
SIGNING SHEET T001

N00° 16' 52.53"W
N 5,289,514 ±

N00° 05' 37.21"W

(3) TYPE III BARRICADES
(6) TYPE "A" LIGHTS
(2) R11-2(ROAD)

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 19, T2N, R4W

Preliminary Plans

DESCRIPTION	REVISIONS	DATE

PHASE 1B

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION TRAFFIC CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T018

R:\1145741Drawings\29657(04)\29657(04)-PHASE 1-CONSTRUCTION TRAFFIC CONTROL.dwg 10/7/2022 10:12 AM

DESCRIPTION	REVISIONS	DATE

SEC. 18, T2N, R5W

575+00

580+00

SCALE: 1"=50'

FOR ADDITIONAL SIGNING SEE
ADVANCE WARNING SIGN SHEET

STA. 570+00

STA. 585+00

60'

N89° 53' 43.61"E
CRL SH 29

℄ Survey

WHEN WORK AREA IS WITHIN CLEAR ZONE, LANE CLOSURE AND FLAGGING SHALL BE PROVIDED.

SEC. 19, T2N, R5W

SEC. 18, T2N, R5W

590+00

595+00

SCALE: 1"=50'

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

STA. 585+00

STA. 600+00

N89° 53' 43.61"E
CRL SH 29

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(12) TYPE III BARRICADES
(24) TYPE "A" LIGHTS
(6) R11-2(ROAD)
(6) R5-1

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 19, T2N, R5W

PHASE 2 & 3

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION TRAFFIC CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T019

Preliminary Plans

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SEC. 18, T2N, R5W

SEC. 17, T2N, R5W

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

605+00

610+00

N00° 11' 31.79"W

N 5,294 ft

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

STA. 600+00

STA. 615+00

N89° 53' 43.61"E
CRL SH 29

60'

N89° 54' 41.85"E

E-W tie-in @ Survey

N89° 53' 43.61"E

(7) TYPE III BARRICADES
(14) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(3) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

N00° 06' 13.09"W

SEC. 19, T2N, R5W

SEC. 20, T2N, R5W

Preliminary Plans

SEC. 17, T2N, R5W

SCALE: 1"=50'

620+00

625+00

(1) TYPE III BARRICADE
TYPE "A" LIGHTS
R11-2(ROAD)

200 LF PORT. LONGITUDINAL BARRIER

CONST. ZONE IMPACT ATTEN.

CONST. ZONE IMPACT ATTEN.

(6) CHANNELIZER CONES @ 25' C/C

STA. 615+00

STA. 630+00

N89° 53' 43.61"E
CRL SH 29

60'

E-W tie-in @ Survey

N89° 54' 41.85"E

N89° 53' 43.61"E

(5) TYPE III BARRICADES
(10) TYPE "A" LIGHTS
(6) R11-2(ROAD)
(2) R5-1

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 20, T2N, R5W

PHASE 2 & 3

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T020

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SEC. 17, T2N, R5W

DESCRIPTION	REVISIONS	DATE

635+00

640+00

SCALE: 1"=50'

N15°04'53.14"E N00°16'04.90"W

STA. 630+00

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

N89° 53' 43.61"E
CRL SH 29

STA. 645+00

60'

N89° 53' 43.61"E

N89° 54' 05.74"E

℄ Survey

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

N00°08'02.44"W

SEC. 20, T2N, R5W

Preliminary Plans

SEC. 17, T2N, R5W

650+00

655+00

SEC. 16,
T2N,
R5W

SCALE: 1"=50'

N00°21'22.49"W
N.S.265'±

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

(8) CHANNELIZER CONES @ 25' C/C

(1) TYPE III BARRICADE
(2) TYPE "A" LIGHTS
(1) R11-2(ROAD)

STA. 645+00

60'

N89° 53' 43.61"E
CRL SH 29

N89° 53' 43.61"E

N89° 54' 03.74"E

℄ Survey

N89° 57' 05.79"E

N89° 57' 33.80"E

STA. 660+00

60'

N00°04'39.53"E

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 20, T2N, R5W

PHASE 2 & 3

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION TRAFFIC CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T021

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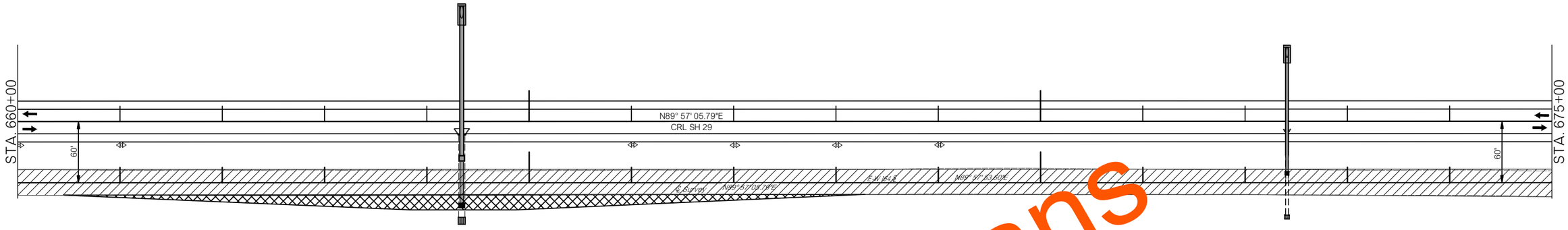
DESCRIPTION	REVISIONS	DATE

SEC. 16, T2N, R5W

665+00

670+00

SCALE: 1"=50'



Preliminary Plans

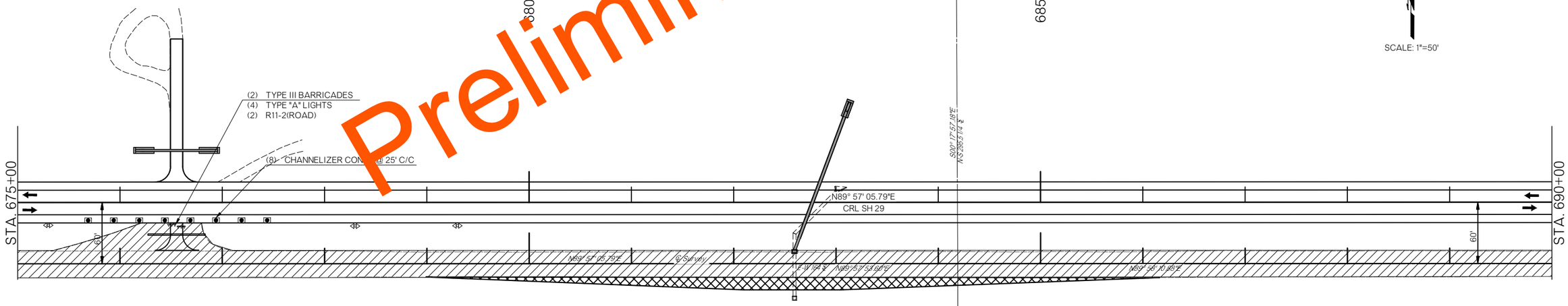
SEC. 21, T2N, R5W

SEC. 16, T2N, R5W

680+00

685+00

SCALE: 1"=50'



LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 21, T2N, R5W

PHASE 2 & 3

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T022

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SEC. 16, T2N, R5W

DESCRIPTION	REVISIONS	DATE

695+00

700+00

SCALE: 1"=50'

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

VERTICAL PANEL @ 100' C/C

STA. 690+00

STA. 705+00

60'

60'

N89° 57' 05.79"E
CRL SH 29

℄ Survey

℄ W 164.2'

N89° 58' 10.80"E

Preliminary Plans

SEC. 21, T2N, R5W

SEC. 16, T2N, R5W

SEC. 15, T2N, R5W

710+00

715+00

SCALE: 1"=50'

(1) TYPE III BARRICADE
(2) TYPE "A" LIGHTS
R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

(8) CHANNELIZER CONES @ 25' C/C

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

STA. 705+00

STA. 720+00

60'

60'

N89° 57' 05.79"E
CRL SH 29

N89° 58' 39.33"E

N89° 58' 05.79"E

℄ Survey

℄ W 164.2'

VERTICAL PANEL @ 100' C/C

W 55°10'-28"-NW

W 14°14'-20"-NW

(9) TYPE III BARRICADES
(18) TYPE "A" LIGHTS
(5) R11-2(ROAD)
(4) R5-1

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 21, T2N, R5W

SEC. 22, T2N, R5W

PHASE 2 & 3

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION TRAFFIC CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T023

R:\114574\Drawings\29657(04)\29657(04)-PHASE 3-CONSTRUCTION TRAFFIC CONTROL.dwg 10/7/2022 10:11 AM

DESCRIPTION	REVISIONS	DATE

SEC. 15, T2N, R5W

725+00

730+00

SCALE: 1"=50'

STA. 720+00

STA. 735+00

N89° 57' 05.79"E
CRL SH 29

N89° 56'39.31"E

E-W 1/4 S

@ Survey

N89°57' 05.79"E

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

SEC. 22, T2N, R5W

Preliminary Plans

SEC. 15, T2N, R5W

740+00

745+00

SCALE: 1"=50'

N00° 11'09.83"W

(3) TYPE III BARRICADES
(6) TYPE "A" LIGHTS
(3) R11-2(ROAD)

(14) CHANNELIZER CONES
@ 25' C/C

STA. 735+00

STA. 750+00

N89° 57' 05.79"E
CRL SH 29

@ Survey

E-W 1/4 S

N89°57' 05.79"E

N89°58' 48.02"E

N00° 06' 21.05"W

N.S 2645.14' S

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 22, T2N, R5W

PHASE 2 & 3

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T024

R:\1145741\Drawings\29657(04)\29657(04)-PHASE 3-CONSTRUCTION TRAFFIC CONTROL.dwg 10/7/2022 10:11 AM

SEC. 15, T2N, R5W

DESCRIPTION	REVISIONS	DATE

755+00

760+00

SCALE: 1"=50'

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

STA. 750+00

STA. 765+00

60'

N89° 57' 05.79"E
CRL SH 29

N89° 57' 05.79"E
℄ Survey
N89° 56' 49.82"E
E-W 1815'

WETLANDS

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

N00°-08'-18"W

N00°-02'-50"W

N-S 2635'

SEC. 23,
T2N, R5W

SEC. 22, T2N, R5W

SEC. 14, T2N, R5W

Preliminary Plans

770+00

775+00

SCALE: 1"=50'

STA. 765+00

STA. 780+00

60'

CRL SH 29
PI STA. 772+13.01
Δ=000° 08' 00"
N=474918.1332
E=2068513.5228

N89° 57' 05.79"E
CRL SH 29

N89° 49' 05.79"E
CRL SH 29

N89° 57' 05.79"E
℄ Survey
N89° 52' 46.76"E
E-W 613'
N89° 49' 05.79"E

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 23, T2N, R5W

PHASE 2 & 3

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION TRAFFIC CONTROL

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T025

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Preliminary Plans

DESCRIPTION	REVISIONS	DATE

SEC. 14, T2N, R5W

785+00

790+00

N02°07'31.88"W

SCALE: 1"=50'

STA. 780+00

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

PROPOSED RIPRAP

N89° 49' 05.79"E
CRL SH 29

60'

STA. 795+00

N89°52'46.76"E

N89°49'08.78"E

℄ Survey

E/W 1842.3

N89°49'54.78"E

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

N02°06'18.14"W
N/S 2975.14'

SEC. 23, T2N, R5W

SEC. 14, T2N, R5W

800+00

805+00

SCALE: 1"=50'

STA. 795+00

VERTICAL PANELS @ 100' C/C

N89° 49' 05.79"E
CRL SH 29

60'

N89° 49' 05.79"E

N88° 49'54.78"E

℄ Survey

E/W 1842.3

STA. 810+00

(3) TYPE III BARRICADES
(6) TYPE "A" LIGHTS
(3) R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 23, T2N, R5W

PHASE 2 & 3

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T026

R:\114574\Drawings\29657(04)\29657(04)-PHASE 3-CONSTRUCTION TRAFFIC CONTROL.dwg 10/7/2022 10:11 AM

DESCRIPTION	REVISIONS	DATE

SEC. 14, T2N, R5W

SEC. 13, T2N, R5W

815+00

820+00

N00° 12' 56.98"W

SCALE: 1"=50'

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(2) TYPE III BARRICADES
(4) TYPE "A" LIGHTS
(2) R11-2(ROAD)

(8) CHANNELIZER CONES @ 25' C/C

(8) CHANNELIZER CONES @ 25' C/C

(8) CHANNELIZER CONES @ 25' C/C

STA. 810+00

STA. 825+00

60'

60'

N89° 49' 05.79"E
CRL SH 29

N89° 49' 05.79"E

N89° 49' 05.79"E

N89° 49' 05.79"E

N89° 49' 05.79"E

N89° 49' 05.79"E

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

N00° 03' 57.01"W
N-3,282.8

SEC. 23, T2N, R5W

SEC. 24, T2N, R5W

SEC. 1, T2N, R5W

830+00

835+00

SCALE: 1"=50'

(1) TYPE III BARRICADES
(2) TYPE "A" LIGHTS
(1) R11-2(ROAD)

CHANNELIZER CONES @ 25' C/C

4" SOLID WHITE
EDGE LINE (PAINT)

4" DOUBLE YELLOW
(PAINT)

(4) CHANNELIZER CONES @ 25' C/C

(4) CHANNELIZER CONES @ 25' C/C

STA. 825+00

STA. 840+00

N89° 49' 05.79"E

N89° 49' 05.79"E

N89° 49' 05.79"E

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

WHEN WORK AREA IS WITHIN CLEAR ZONE, LANE CLOSURE AND FLAGGING SHALL BE PROVIDED.

SEC. 24, T2N, R5W

Preliminary Plans

PHASE 2

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T027

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SEC. 13, T2N, R5W

DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'

4" SOLID WHITE EDGE LINE (PAINT)

4" DOUBLE YELLOW LINE (PAINT)

(28) CHANNELIZER CONE @ 25' C/C

N00° 11' 13.58"W

S85° 10' 54.21"E
℄ DETOUR 'A'

S86° 08' 16.39"E
CRL SH 29

℄ Survey N89° 51' 05.79"E

E-W 164.5'

N89° 58' 18.01"E

℄ Detour 'A'

60'

N89° 51' 05.79"E
CRL SH 29

STA. 840+00

STA. 855+00

N00° 05' 45.67"W N 5285.11'

SEC. 24, T2N, R5W

SEC. 18, T2N, R5W

860+00

865+00

SCALE: 1"=50'

CONST. ZONE IMPACT ATTEN.

310 LF PORT. LONGITUDINAL BARRIER

CONST. ZONE IMPACT ATTEN.

(3) TYPE III BARRICADES
(6) TYPE "A" LIGHTS
(2) R11-2(ROAD)

N89° 51' 05.79"E

℄ Survey

E-W 164.5'

N89° 58' 18.01"E

N89° 51' 05.79"E
CRL SH 29

STA. 855+00

STA. 870+00

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)
(2) R5-1

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 24, T2N, R5W

PHASE 2

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T028

Preliminary Plans

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DESCRIPTION	REVISIONS	DATE

SEC. 13, T2N, R5W

830+00

835+00

SCALE: 1"=50'

W1-4(R)

STA. 825+00

STA. 840+00

CHANNELIZER CONES @ 25' C/C

N89° 49' 05.79"E
℄ Survey

S86° 08' 16.39"E
CRL SH 29

℄ Survey N89° 51' 05.79"E

℄ Survey N89° 51' 05.79"E

℄ Survey N89° 51' 05.79"E

℄ Survey N89° 51' 05.79"E

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

(7) TYPE III BARRICADES
(14) TYPE "A" LIGHTS
(5) R11-2(ROAD)

CHANNELIZER CONES @ 25' C/C

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 24, T2N, R5W

SEC. 13, T2N, R5W

N00° 17' 13.58"W

845+00

850+00

SCALE: 1"=50'

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

(6) TYPE III BARRICADES
(12) TYPE "A" LIGHTS
(4) R11-2(ROAD)

S85° 10' 54.21"E
℄ DETOUR "A"

S86° 08' 16.39"E
CRL SH 29

℄ Survey N89° 51' 05.79"E

℄ Survey N89° 51' 05.79"E

℄ Detour "A"

STA. 840+00

STA. 855+00

CHANNELIZER CONES @ 25' C/C

N89° 51' 05.79"E
CRL SH 29

N-5,288,5 1/4 ℄

N00° 05' 45.67"W

SEC. 24, T2N, R5W

Preliminary

PHASE 3

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T029

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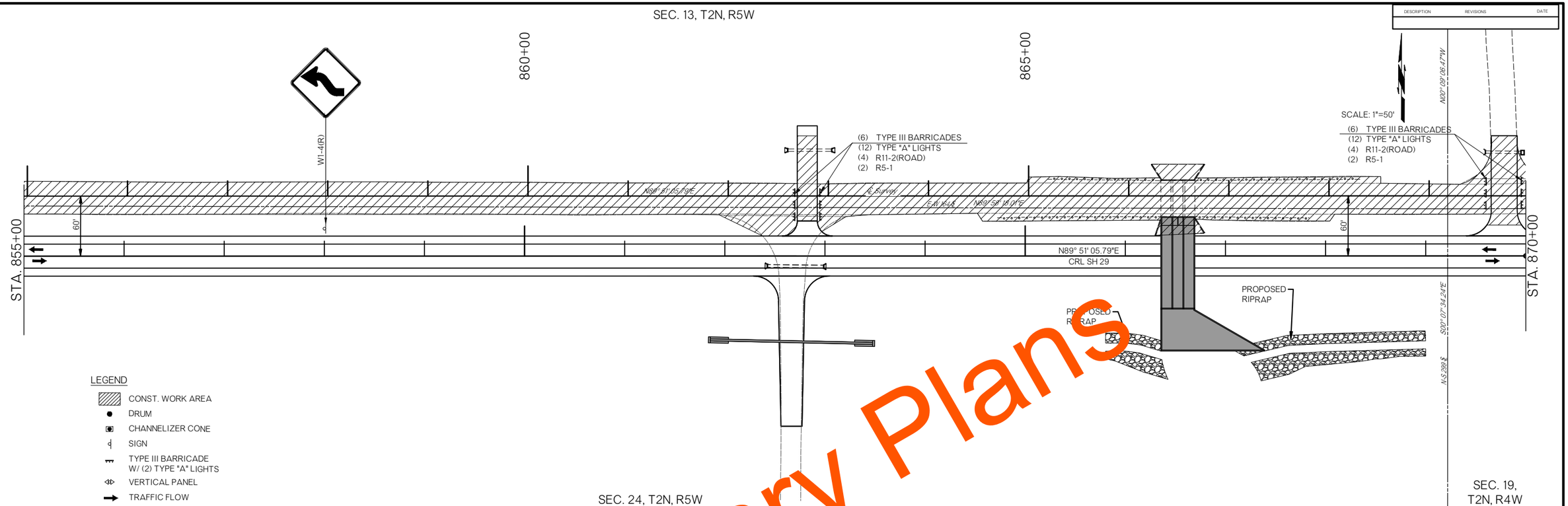
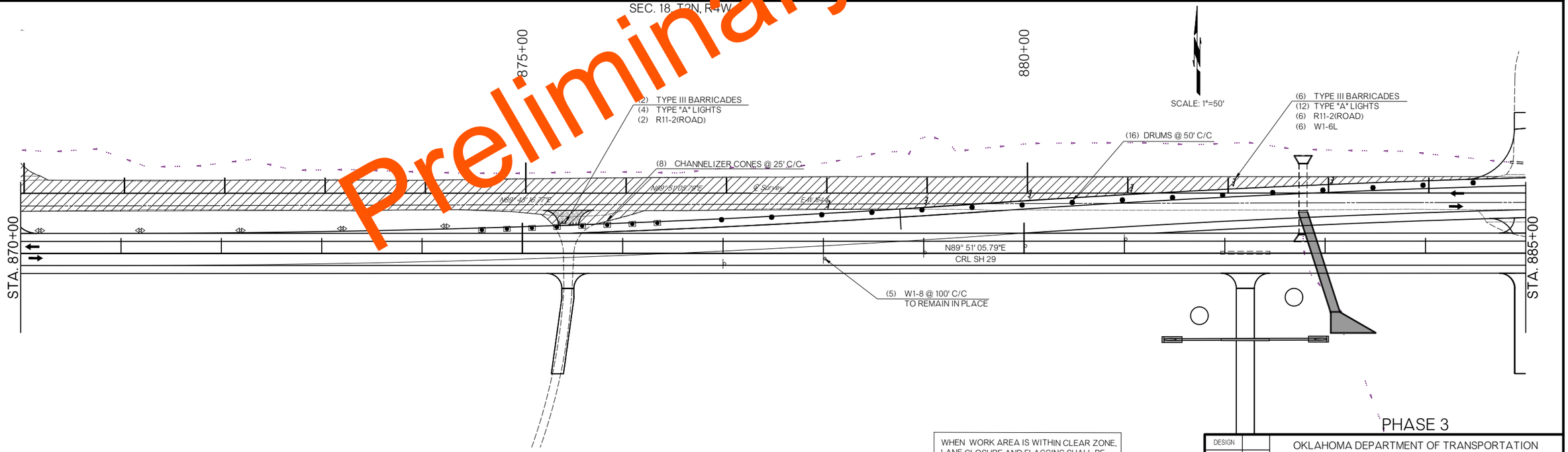
SEC. 13, T2N, R5W



SEC. 24, T2N, R5W

SEC. 19, T2N, R4W

SEC. 18, T2N, R4W



WHEN WORK AREA IS WITHIN CLEAR ZONE, LANE CLOSURE AND FLAGGING SHALL BE PROVIDED.

SEC. 19, T2N, R4W

PHASE 3

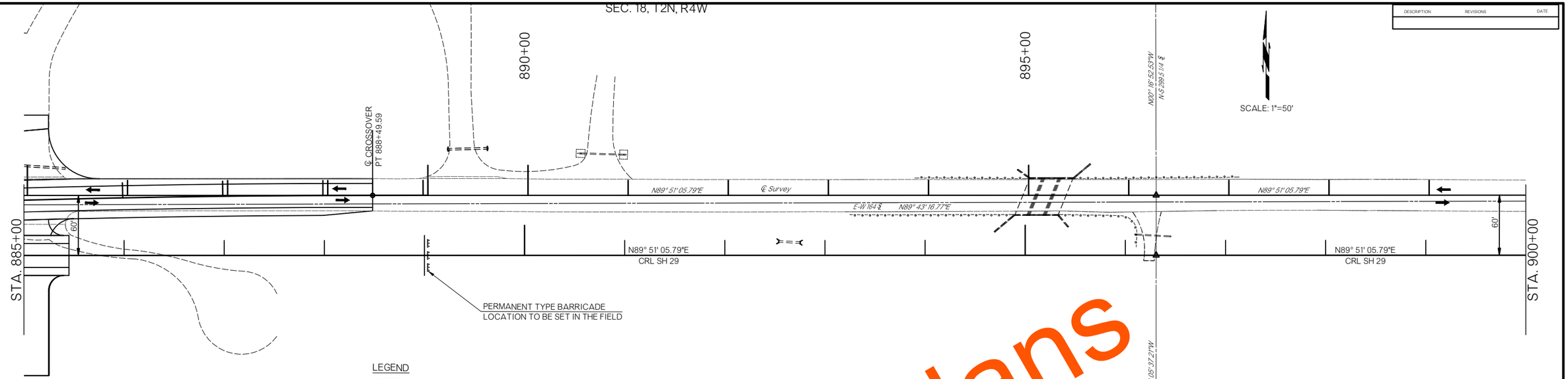
DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T030

Preliminary Plans

R:\1145741Drawings\29657(04)\29657(04)-PHASE 3-CONSTRUCTION TRAFFIC CONTROL.dwg 10/7/2022 10:11 AM

SEC. 18, T2N, R4W



LEGEND

- CONST. WORK AREA
- DRUM
- CHANNELIZER CONE
- SIGN
- TYPE III BARRICADE W/ (2) TYPE "A" LIGHTS
- VERTICAL PANEL
- TRAFFIC FLOW

SEC. 19, T2N, R4W

DESCRIPTION	REVISIONS	DATE

Preliminary Plans

PHASE 3

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		CONSTRUCTION TRAFFIC CONTROL
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T031

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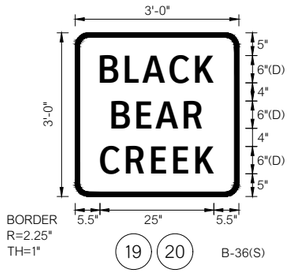
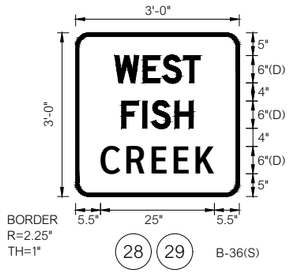
DESCRIPTION	REVISIONS	DATE

SUMMARY OF SIGN QUANTITIES FOR RURAL AREA SIGNS

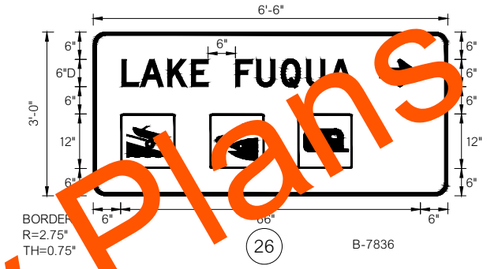
ITEM NO.	APPROXIMATE LOCATION	SIGN DESCRIPTION	SIGN DESIGNATION	POST SIZE 2" A	POST SIZE 2" B	POST SIZE 2.5" A	POST SPACING FT.	SIGN AREA SHEET 850(A) S.F.	REMOVE & RESET EXIST. SIGNS 805(D) EA	REMARKS
1	603+65 LT. CRL	BRAY CITY LIMITS	SPEC.						1.00	EXISTING BRAY CITY LIMITS
2	604+64 RT. CRL	STREET NAME	STREET NAME						1.00	EXISTING STREET NAME SIGNS
3	604+64 LT. CRL	STOP SIGN	R1-1			13.50		5.18		
4	605+04 RT. CRL	STOP SIGN	R1-1			13.50		5.18		
5	605+50 RT. CRL	SCHOOL BUS STOP	S3-1E			15.00		9.00		
6	629+00 LT. CRL	SCHOOL BUS STOP	S3-1E			15.00		9.00		
7	666+00 RT. CRL	SCHOOL BUS STOP	S3-1E			15.00		9.00		
8	687+00 LT. CRL	SCHOOL BUS STOP	S3-1E			15.00		9.00		
9	703+00 RT. CRL	CROSS ROAD	W2-1E			15.00		9.00		
10	706+00 RT. CRL	EKOWAH	D1-1	12.50	12.50		3.00	7.50		
11	710+24 LT. CRL	STOP SIGN	R1-1			13.50		5.18	1.00	REMOVE & RESET EXISTING STREET NAME SIGNS
12	710+92 RT. CRL	STOP SIGN	R1-1			13.50		5.18	1.00	REMOVE & RESET EXISTING STREET NAME SIGNS
13	716+00 LT. CRL	EKOWAH	D1-1	12.50	12.50		3.00	7.50		
14	718+00 LT. CRL	CROSS ROAD	W2-1E			15.00		9.00		
15	723+00 RT. CRL	SCHOOL BUS STOP	S3-1E			15.00		9.00		
16	728+00 RT. CRL	CEMETERY	D1-1	12.50	12.50		3.50	8.25		
17	737+50 RT. CRL	BRIDGE ICES	W8-13E			15.00		9.00		
18	739+00 LT. CRL	CEMETERY	D1-1	12.50	12.50		3.50	8.25		
19	742+85 RT. CRL	BLACK BEAR CREEK	I-3			13.50		9.00		
20	749+45 LT. CRL	BLACK BEAR CREEK	I-3			13.50		9.00		
21	755+00 LT. CRL	BRIDGE ICES	W8-13E			15.00		9.00		
22	763+13 LT. CRL	STOP SIGN	R1-1			13.50		5.18	1.00	REMOVE & RESET EXISTING INFO SIGN
23	770+00 RT. CRL	SCHOOL BUS STOP	S3-1E			15.00		9.00		
24	755+00 LT. CRL	SIDE ROAD	W2-2E			15.00		9.00		
25	824+75 RT. CRL	SCHOOL BUS STOP	S3-1E			15.00		9.00		
26	854+75 RT. CRL	LAKE FUQUA	2M-2	15.00	15.00		4.00	19.50		WITH RS-054, RS-063 AND RS-040 ARROW RIGHT
27	826+93 RT. CRL	STOP SIGN	R1-1			13.50		5.18	1.00	REMOVE & RESET EXISTING STREET NAME SIGNS
28	866+00 RT. CRL	WEST FISH CREEK	I-3			13.50		9.00		
29	867+00 LT. CRL	WEST FISH CREEK	I-3			13.50		9.00		
30	868+50 LT. CRL	LAKE FUQUA	2M-2	15.00	15.00		4.00	19.50		WITH RS-054, RS-063 AND RS-040 ARROW LEFT
31	869+50 LT. CRL	STOP SIGN	R1-1			13.50		5.18	1.00	REMOVE & RESET EXISTING INFO SIGN
32	870+07 LT. CRL	STREET NAME	STREET NAME						1.00	EXISTING STREET NAME SIGNS
33	876+00 RT. CRL	TRUCK CROSSING	W11-10E			15.00		9.00		
34	884+38 RT. CRL	BRIDGE ICES	W8-13E			15.00		9.00		
				518.50		358.50		268.76	8.00	



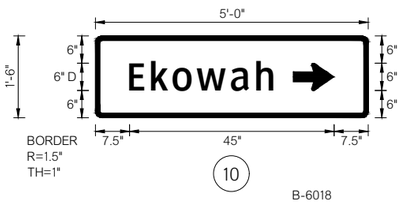
BACKGROUND __ GREEN REFLECTORIZED
LEGEND & BORDER __ WHITE



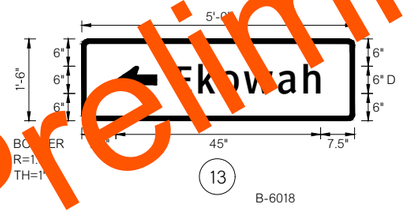
BACKGROUND __ GREEN REFLECTORIZED
LEGEND & BORDER __ WHITE



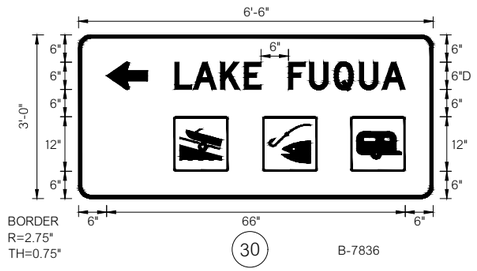
BACKGROUND __ BROWN
LEGEND & BORDER __ WHITE (REFLECTIVE)



BACKGROUND __ GREEN REFLECTORIZED
LEGEND & BORDER __ WHITE

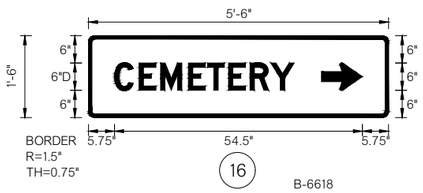


BACKGROUND __ GREEN REFLECTORIZED
LEGEND & BORDER __ WHITE

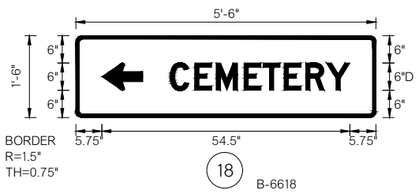


BACKGROUND __ BROWN
LEGEND & BORDER __ WHITE (REFLECTIVE)

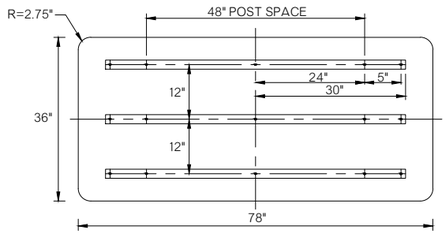
FOR CONSTRUCTION NOTE SEE
TRAFFIC STANDARD SBS1-1(LATEST REV.)



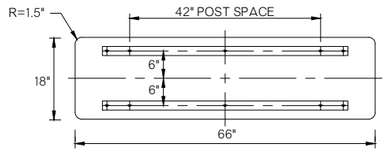
BACKGROUND __ GREEN REFLECTORIZED
LEGEND & BORDER __ WHITE



BACKGROUND __ GREEN REFLECTORIZED
LEGEND & BORDER __ WHITE



B-7836
(2) 2" SQUARE POST



B-6618
(2) 2" SQUARE POST

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		SIGN SUMMARY & DETAILS
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T032

Preliminary Plans

R:\1145741\Drawings\29657(04)\29657(04) SIGN SUMMARY & DETAILS.dwg 5/2/2021 11:55 AM

DESCRIPTION	REVISIONS	DATE

SEC. 18, T2N, R5W

575+00

580+00

SCALE: 1"=50'

STA. 576+00 BEGIN INCIDENTAL CONST. BEGIN PAVEMENT MARKING.

MATCH TO EXISTING PAVEMENT MARKING.

6" WHITE EDGE LINE

★6" YELLOW CENTER LINE

N89° 53' 43.61"E
CRL SH 29

STA. 585+00

℄ Survey

★ PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

SEC. 19, T2N, R5W

SEC. 18, T2N, R5W

590+00

595+00

SCALE: 1"=50'

6" WHITE EDGE LINE

★6" YELLOW CENTER LINE

STA. 585+00

N89° 53' 43.61"E
CRL SH 29

E-W 164 ℄

℄ Survey

N89° 53' 43.61"E

6" WHITE EDGE LINE

★6" YELLOW CENTER LINE

STA. 600+00

SEC. 19, T2N, R5W

Preliminary

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SIGNING & PAVEMENT MARKING
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T033

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DESCRIPTION	REVISIONS	DATE

SEC. 18, T2N, R5W

SEC. 17, T2N, R5W

SCALE: 1"=50'

STA. 600+00

STA. 615+00

605+00

610+00

01 603+65 LT. BRAY CITY LIMITS (REMOVE & RESET)

03 604+64 LT. R1-1 — N69° 11' 31" W — 5.294 ℄

4" WHITE EDGE LINE

6" DOUBLE YELLOW BARRIER LINE

24" WHITE STOP LINE

6" WHITE EDGE LINE

★ 6" YELLOW CENTER LINE

N89° 53' 43.61"E
CRL SH 29

N89° 54' 41.55"E

℄ Survey — E-W 164 ℄ — N89° 53' 43.61"E

02 604+64 RT. STREET NAME (REMOVE & RESET)

6" WHITE EDGE LINE

6" DOUBLE YELLOW BARRIER LINE

04 605+04 RT. R1-1

05 605+50 RT. S3-1E

N20° 08' 13.09"W

★ PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

SEC. 19, T2N, R5W

SEC. 20, T2N, R5W

SEC. 17, T2N, R5W

SCALE: 1"=50'

STA. 615+00

STA. 630+00

620+00

625+00

06 629+00 LT. S3-1E

6" WHITE EDGE LINE

★ 6" YELLOW CENTER LINE

N89° 53' 43.61"E
CRL SH 29

℄ Survey — E-W 164 ℄ — N89° 53' 43.61"E — N89° 54' 41.55"E

SEC. 20, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		SIGNING & PAVEMENT MARKING
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T034

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SEC. 17, T2N, R5W

DESCRIPTION	REVISIONS	DATE

635+00

640+00

SCALE: 1"=50'

N:S:294.51'\ℓ\$ N00° 16' 04.90"W

STA. 630+00

6" WHITE EDGE LINE

* 6" YELLOW CENTER LINE

6" WHITE EDGE LINE

* 6" YELLOW CENTER LINE

STA. 645+00

N89° 53' 43.61"E
CRL SH 29

N89° 53' 43.61"E

N89° 54' 03.74"E

E-W 164 \$

℄ Survey

N00° 08' 02.44"W

* PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

SEC. 20, T2N, R5W

Preliminary Plans

SEC. 17, T2N, R5W

650+00

655+00

SEC. 16, T2N, R5W

SCALE: 1"=50'

N00° 21' 22.49"W
N:S:265 \$

STA. 645+00

6" WHITE EDGE LINE

* 6" YELLOW CENTER LINE

6" WHITE EDGE LINE

* 6" YELLOW CENTER LINE

STA. 660+00

N89° 53' 43.61"E
CRL SH 29

N89° 53' 43.61"E

N89° 54' 03.74"E

E-W 164 \$

℄ Survey

N89° 57' 05.79"E

N89° 57' 53.60"E

N00° 04' 39.53"E

SEC. 20, T2N, R5W

SEC. 21, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SIGNING & PAVEMENT MARKING
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T035

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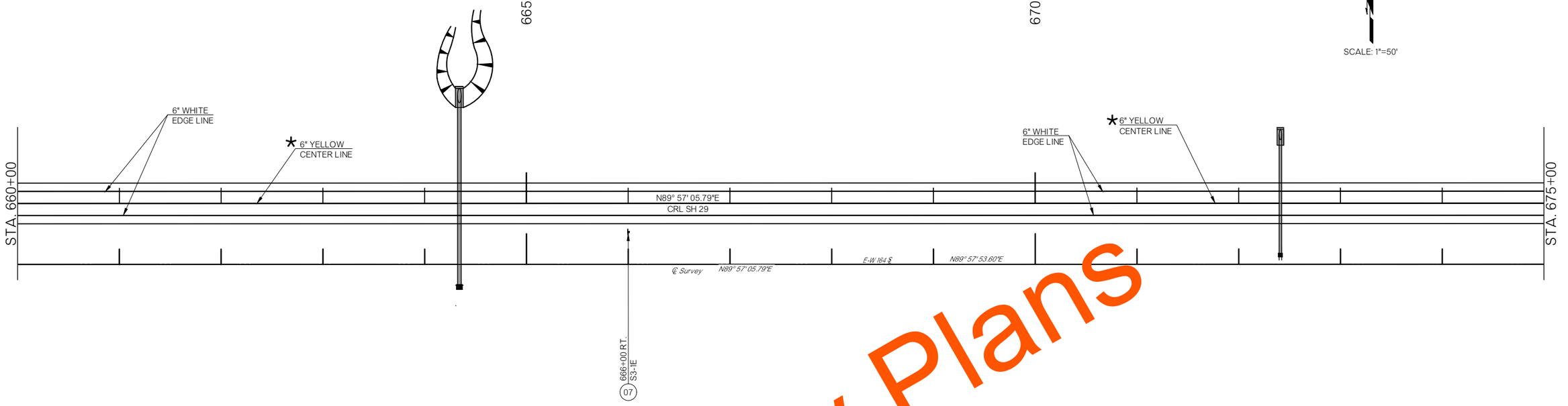
DESCRIPTION	REVISIONS	DATE

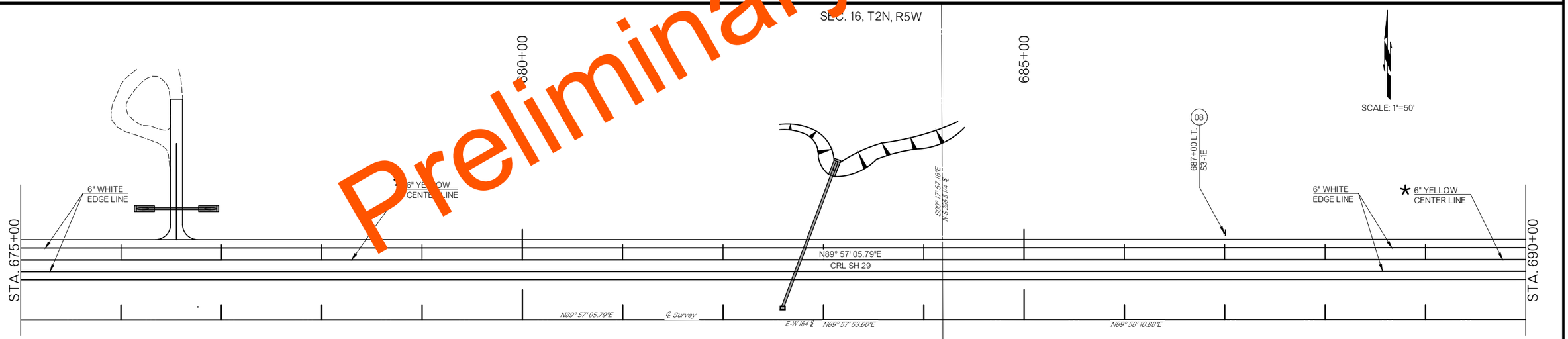
SEC. 16, T2N, R5W



★ PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

SEC. 21, T2N, R5W

SEC. 16, T2N, R5W



SEC. 21, T2N, R5W

SEC. 21, T2N, R5W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SIGNING & PAVEMENT MARKING
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T036

Preliminary Plans

R:\1145741Drawings\29657(04)\29657(04) SIGNING PAVEMENT MARKING.dwg 9/23/2022 1:10 PM

SEC. 16, T2N, R5W

DESCRIPTION	REVISIONS	DATE

695+00

700+00

SCALE: 1"=50'

6" WHITE EDGE LINE

* 6" YELLOW CENTER LINE

6" WHITE EDGE LINE

* 6" YELLOW CENTER LINE

STA. 690+00

STA. 705+00

N89° 57' 05.79"E
CRL SH 29

℄ Survey

E-W 164 ±

N89° 58' 10.88"E

703+00 RT.
W2-1E
09

SEC. 21, T2N, R5W

* PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

SEC. 16, T2N, R5W

SEC. 15, T2N, R5W

710+00

715+00

11

710+24 LT.
R1-1 / STREET NAME

N20° 08' 05.56"W

6" WHITE EDGE LINE

6" DOUBLE YELLOW BARRIER LINE

24" WHITE STOP LINE

13

716+00 LT.
D1-1 (Ekowok)

Ekowah

14

718+00 LT.
W2-1

SCALE: 1"=50'

6" WHITE EDGE LINE

* 6" YELLOW CENTER LINE

6" WHITE EDGE LINE

* 6" YELLOW CENTER LINE

STA. 705+00

STA. 720+00

N89° 57' 05.79"E
CRL SH 29

N89° 56' 39.33"E

N89° 57' 05.79"E

E-W 164 ±

℄ Survey

6" WHITE EDGE LINE

6" DOUBLE YELLOW BARRIER LINE

N-S 296' ±

N20° 08' 05.56"W

M-H 1-H 1-H 1-20W

Ekowah

706+00 RT.
D1-1 (Ekowah)
10

710+92 RT.
R1-1 / STREET NAME
12

SEC. 21, T2N, R5W

SEC. 22, T2N, R5W

Preliminary

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		SIGNING & PAVEMENT MARKING
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T037

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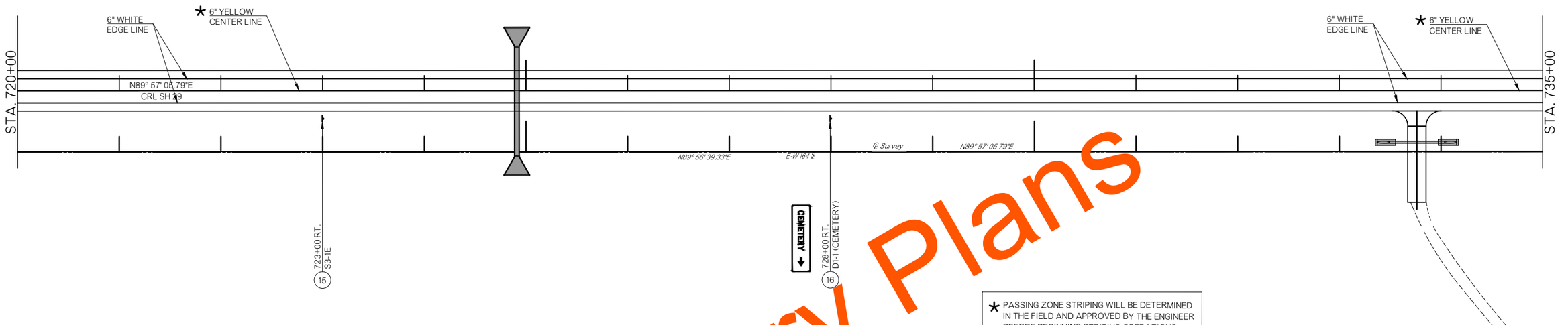
SEC. 15, T2N, R5W

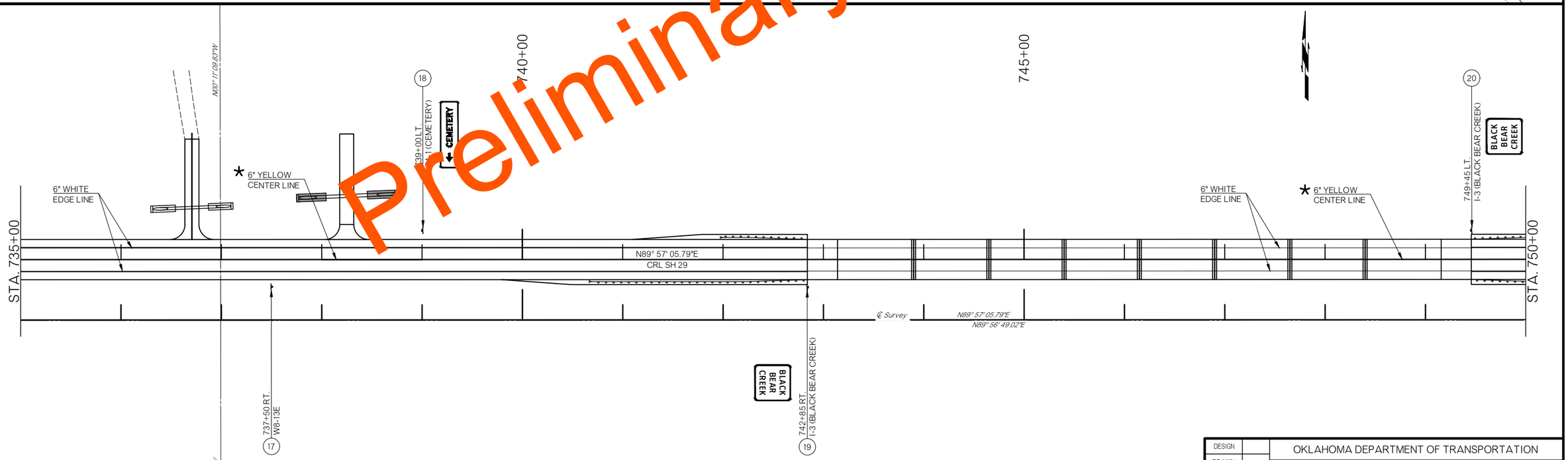
DESCRIPTION	REVISIONS	DATE

SCALE: 1"=50'



* PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

SEC. 22, T2N, R5W



Preliminary Plans

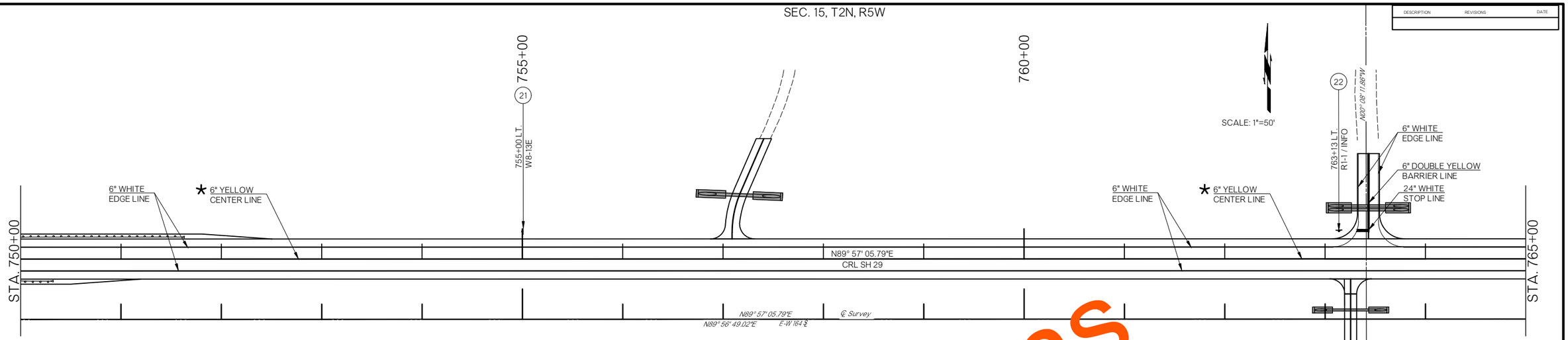
DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		SIGNING & PAVEMENT MARKING
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T038

R:\1145741\Drawings\29657(04)\29657(04) SIGNING PAVEMENT MARKING.dwg 9/23/2022 1:10 PM

SEC. 15, T2N, R5W

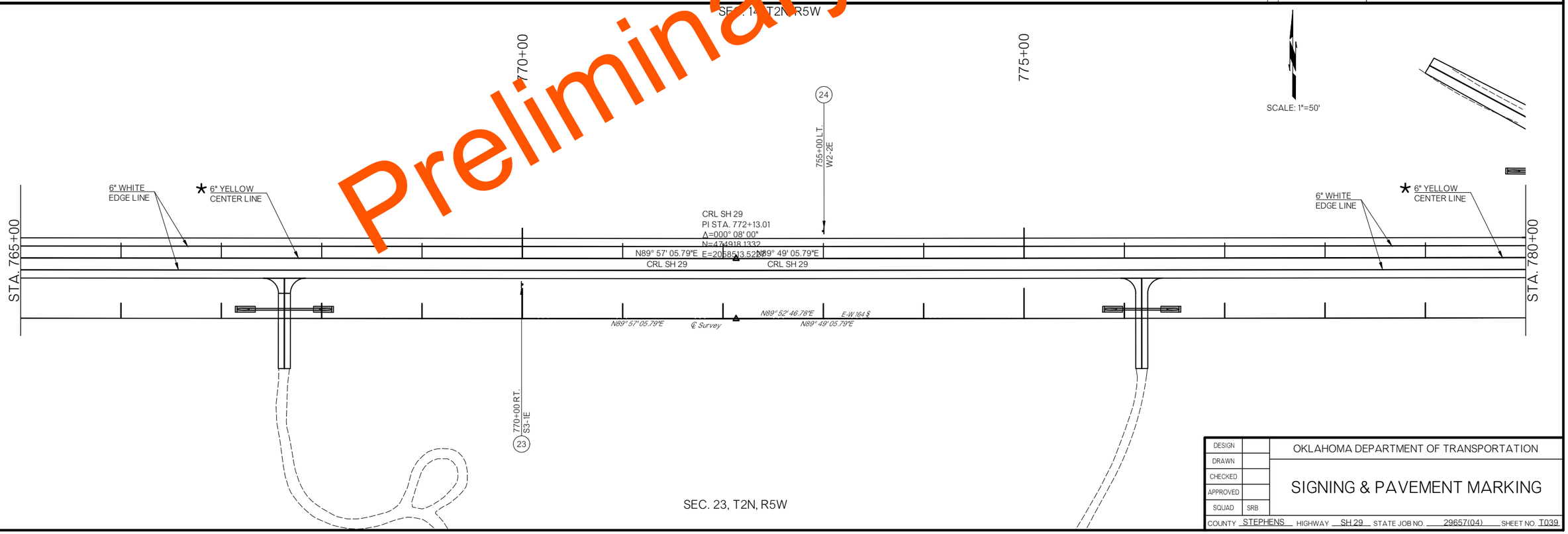
DESCRIPTION	REVISIONS	DATE



* PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

SEC. 22, T2N, R5W

SEC. 14, T2N, R5W



SEC. 23, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SIGNING & PAVEMENT MARKING
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T039

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DESCRIPTION	REVISIONS	DATE

SEC. 14, T2N, R5W

785+00

790+00

N02°07'31.88"W

SCALE: 1"=50'

STA. 780+00

6" WHITE EDGE LINE

★ 6" YELLOW CENTER LINE

N89° 49' 05.79"E
CRL SH 29

6" WHITE EDGE LINE

★ 6" YELLOW CENTER LINE

STA. 795+00

N89° 52' 46.78"E

N89° 49' 05.79"E
E-W 164 ₹

℄ Survey

N89° 48' 54.74"E

N02° 06' 18"W
N-S 297.5 ₹

SEC. 23, T2N, R5W

★ PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

SEC. 14, T2N, R5W

800+00

805+00

SCALE: 1"=50'

STA. 795+00

6" WHITE EDGE LINE

6" YELLOW CENTER LINE

N89° 49' 05.79"E
CRL SH 29

6" WHITE EDGE LINE

★ 6" YELLOW CENTER LINE

STA. 810+00

N89° 49' 05.79"E
N89° 48' 54.74"E

℄ Survey

E-W 164 ₹

SEC. 23, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		
CHECKED		SIGNING & PAVEMENT MARKING
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T040

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DESCRIPTION	REVISIONS	DATE

SEC. 14, T2N, R5W

SEC. 13, T2N, R5W

SCALE: 1"=50'

815+00

820+00

N00° 12' 56.98"W

6" WHITE EDGE LINE

★ 6" YELLOW CENTER LINE

STA. 810+00

N89° 49' 05.79"E
CRL SH 29

℄ Survey

N89° 48' 54.74"E

N89° 49' 05.79"E

N89° 58' 18.01"E

E-W 164.8'

STA. 825+00

★ PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

824+75 RT.
S3-1E
25

N00° 03' 57.01"W
W-3.28'

SEC. 23, T2N, R5W

SEC. 24, T2N, R5W

SEC. 1, T2N, R5W

830+00

835+00

SCALE: 1"=50'

6" WHITE EDGE LINE

★ 6" YELLOW CENTER LINE

CRL SH 29
PC STA. 826+39.21

CRL SH 29
PI STA. 830+94.63
Δ=004° 02' 38" RT.
N=474936.7879
E=2064395.1127

STA. 825+00

℄ Survey

N89° 49' 05.79"E

℄ Survey

N89° 51' 05.79"E

S86° 08' 16.39"E
CRL SH 29

CRL SH 29
PT STA. 835+49.67

E-W 164.8'

6" WHITE EDGE LINE

★ 6" YELLOW CENTER LINE

STA. 840+00

SEC. 24, T2N, R5W

Preliminary Plans

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SIGNING & PAVEMENT MARKING
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T041

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Preliminary Plans

DESCRIPTION	REVISIONS	DATE

SEC. 13, T2N, R5W

845+00

850+00

SCALE: 1"=50'

STA. 840+00

STA. 855+00

6" WHITE EDGE LINE

★6" YELLOW CENTER LINE

N00°-11'-13.58"W

N00°-05'-45.67"W N-S 285.114 ℄

E-W 164 ℄

CRL SH 29
PC STA. 843+59.54

CRL SH 29
PI STA. 848+11.20
Δ=004° 00' 38" LT.
N=474821.1416
E=2066108.1658

CRL SH 29
PT STA. 852+62.50

LAKE FUQUA

854+75 RT.
2M-2 (LAKE FUQUA)
26

★ PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

SEC. 24, T2N, R5W

SEC. 18, T2N, R4W

860+00

865+00

STA. 855+00

STA. 870+00

N89° 51' 05.79"E

℄ Survey

E-W 164 ℄

N89° 58' 18.01"E

N89° 51' 05.79"E
CRL SH 29

6" WHITE EDGE LINE

★6" YELLOW CENTER LINE

6" DOUBLE YELLOW BARRIER LINE

24" WHITE STOP LINE

862+93 RT.
R1-1 / STREET NAME
27

866+00 RT.
I-3 (WEST FISH CREEK)
28

867+00 LT.
I-3 (WEST FISH CREEK)
29

868+50 LT.
2M-2 (LAKE FUQUA)
30

869+50 LT.
R1-1 / INFO
31

WEST FISH CREEK

LAKE FUQUA

SCALE: 1"=50'

N00°-09'-06.47"W

S00°-07'-34.23"E

W-S 289 ℄

SEC. 19, T2N, R5W

DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	SRB

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SIGNING & PAVEMENT MARKING

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T042

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SEC. 18, T2N, R4W

DESCRIPTION	REVISIONS	DATE

875+00

880+00

SCALE: 1"=50'

32

870+07 LT.
STREET NAME
(REMOVE & RESET)

6" WHITE
EDGE LINE

* 6" YELLOW
CENTER LINE

N89° 43' 16.77"E

N89° 51' 05.79"E

℄ Survey

E-W 164 $

N89° 51' 05.79"E
CRL SH 29

STA. 870+00

STA. 885+00

NOTE:
TUBE CHANNELIZERS SHALL BE PLACED ON ROADWAY WITH AN APPROVED ADHESIVE.

872+00 RT. BEGIN
(19) TUBE CHANNELIZERS
@ 50' C/C

876+00 RT.
33
W11-10E

* PASSING ZONE STRIPING WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER BEFORE BEGINNING STRIPING OPERATIONS.

884+38 RT.
34
W8-13E

SEC. 19, T2N, R4W

Preliminary Plans

SEC. 18, T2N, R4W

890+00

895+00

N00° 16' 52.53"W
N 5,289.114 $

SCALE: 1"=50'

6" WHITE
EDGE LINE

* 6" YELLOW
CENTER LINE

N89° 51' 05.79"E

℄ Survey

E-W 164 $

N89° 43' 16.77"E

N89° 51' 05.79"E

STA. 885+00

N89° 51' 05.79"E
CRL SH 29

N89° 51' 05.79"E
CRL SH 29

STA. 900+00

PERMANENT TYPE III (A)
BARRICADE

N00° 05' 37.21"W

SEC. 19, T2N, R4W

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN		SIGNING & PAVEMENT MARKING
CHECKED		
APPROVED		
SQUAD	SRB	

COUNTY STEPHENS HIGHWAY SH 29 STATE JOB NO. 29657(04) SHEET NO. T043

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