FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA	29530(04)	16		***

CONTROL SURVEY DATA:

SEE SURVEY DATA SHEETS

LOCATION MAP

DESIGN DATA: SH-152		
ADT 2016	=	4,000
ADT 2036	=	5,600
DESIGN SPEED	=	65 MPH
K	=	11%
D	=	58%
T(AADT)	=	30%
T(DHV)	=	27%
T3	=	25%
FLEX ESALS (20 YR)	=	3.58M

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

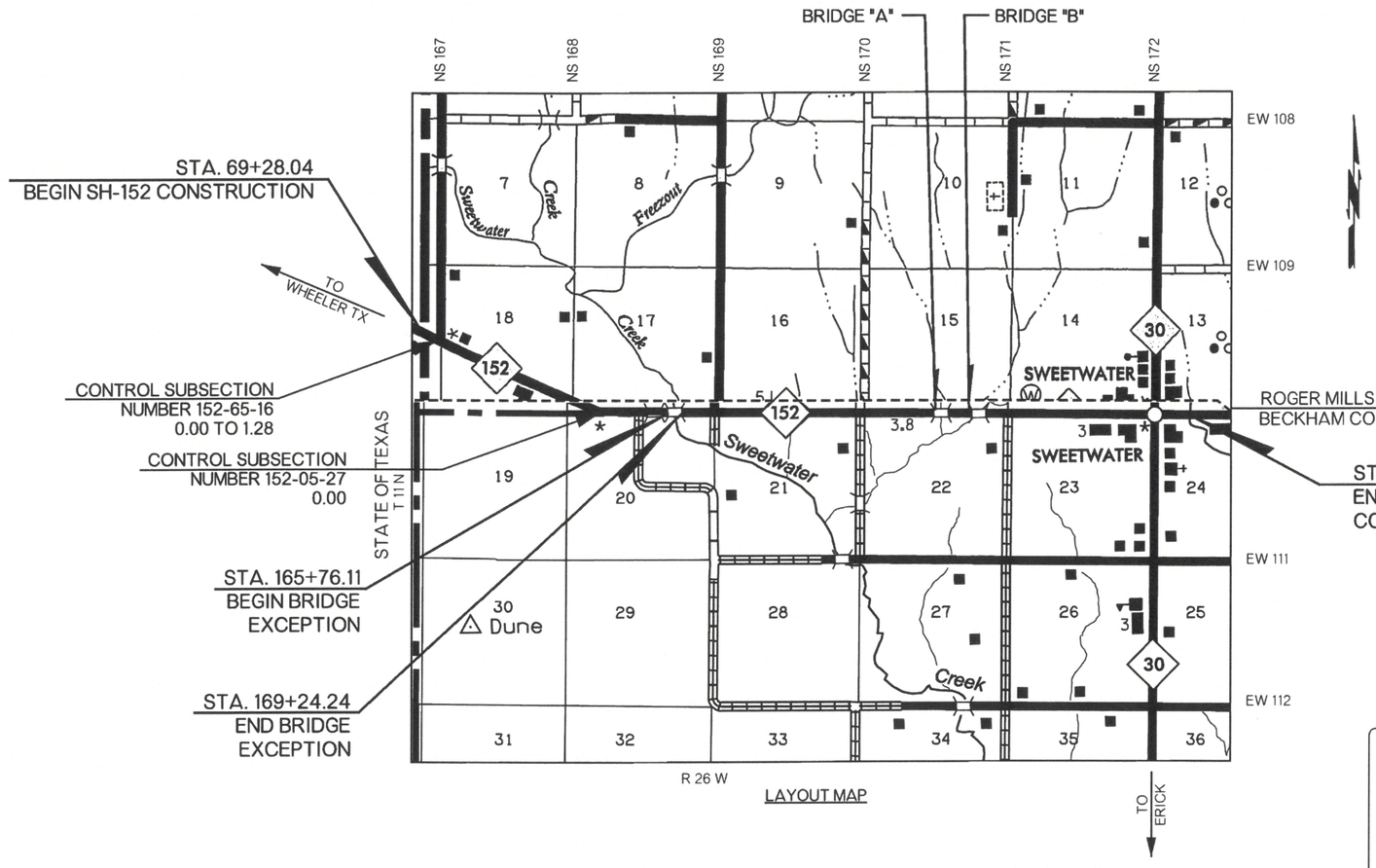
PLAN OF PROPOSED

STATE HIGHWAY

STATE AID PROJECT NO. STP-265C(023)PM
STATE JOB NO. 29530(04)

ROGER MILLS & BECKHAM COUNTIES

GRADE, DRAIN, SURFACE & BRIDGE PLANS
3R RESURFACING & REHABILITATION
(RESURFACE & REHABILITATION TO 3R DESIGN)
STATE HIGHWAY 152
CONTROL SECTION NO. 152-65-16 & NO. 152-05-27
BRIDGE 'A': EXTEND EXISTING NBI NO. 12744, LOCATION NO. 0527 0234X
BRIDGE 'B': EXTEND EXISTING NBI NO. 12777, LOCATION NO. 0527 0258X



LAYOUT MAP

BRIDGE 'A'
BEGIN STA. 263+00.19
BRIDGE LENGTH = 33.66'
END STA. 263+33.85

BRIDGE 'B'
BEGIN STA. 275+99.00
BRIDGE LENGTH = 48.87'
END STA. 276+47.87

SCALES
PLAN 1" = 50'
PROFILE HOR. 1" = 50'
VER. 1" = 5'
LAYOUT MAP 1" = 5,280'

CONVENTIONAL SYMBOLS

- TUG — TELEPHONE UNDERGROUND
- SS — SANITARY SEWER
- G — GAS LINE
- W — WATER LINE
- DRAINAGE STRUCTURES - IN PLACE
- DRAINAGE STRUCTURES - NEW
- RIGHT-OF-WAY LINES - EXISTING
- RIGHT-OF-WAY LINES - NEW
- RIGHT-OF-WAY MARKERS - IN PLACE
- RIGHT-OF-WAY MARKERS - REMOVE & REPLACE
- RIGHT-OF-WAY MARKERS - NEW
- CONTROLLED ACCESS
- RIGHT-OF-WAY FENCE
- PROPOSED ROAD
- RAILROADS
- RANGE & TOWNSHIP
- SECTION LINES
- QUARTER SECTION LINES
- FENCES
- GROUND LINE
- EXISTING ROADS
- BASE LINE
- GRADE LINES
- TELEPHONE & TELEGRAPH
- POWER LINES
- BUILDINGS
- OIL WELL

ROADWAY LENGTH	26,869.86 FT.	5.088 MI.
BRIDGE LENGTH	82.53 FT.	0.015 MI.
PROJECT LENGTH		5.103 MI.

EQUATIONS: CRL STA. 181+51.15 BACK = ℄ SURVEY STA. 181+80.00 AHEAD
EXCEPTIONS: BRIDGE EXCEPTION STA. 165+76.11 TO STA. 169+24.24 = 348.13 FT.

2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION GOVERN, APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, JANUARY 4 2010.

olsson
201 NW 63rd Street, Suite 130
Oklahoma City, OK 73116
(405) 242-6600
C.A. 2483
EXP. 06-30-2021

PREPARED BY:
OLSSON
LIESEL POLWORT, P.E.
OKLA. REG. NO. 24569
DATE 9/27/19

REGISTERED PROFESSIONAL ENGINEER
LIESEL POLWORT
24569
OKLAHOMA

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

S.W.O. 5126(1) Project No. STP-265C(023)PM Sheet No. 0001

9/27/2019 12:06:53 PM
F:\Projects\05-0552-04\Design\Microstation\SH-152\DGN\C_TITLE_29530.dgn

FED. ROAD DIST. NO.	STATE	J/P PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA	29530(04)	16		***

INDEX OF SHEETS

ODOT STANDARD DRAWINGS

ROADWAY 2019	TRAFFIC SIGNING 2009	TRAFFIC CONTROL 2009	TRAFFIC SAFETY 2009	BRIDGE 2009
SSS-2-0	PM1-1-03	TCS1-1-01	RS1-2-00	RCB-C1-3&4&5(2-20)
TSC2-4-0	PM3-1-02	TCS2-1-00	RS2-2-00	RCB-C1-8(2-14)
TSD-3-0	PM4-1-02	TCS3-1-01		RCB-C1-10(2-14)
TRFD-2-0	DU1-1-00	TCS4-1-01		
ASCD-6-0	DU2-1-00	TCS5-1-00		
CET4S-4-1	RSD1-1-00	TCS6-1-02		
CET4D-4-1	WSD1-1-00	TCS7-1-02		
PCES-5-0	WSD2-1-00	TCS8-1-00		
SMD-4-1	MSD1-1-00	TCS9-1-01		
SPI-5-1	MSD2-1-00	TCS10-1-00		
FPI-4-1	MSD3-1-01	TCS11-1-01		
SPB-2-1	MSD5-1-00	TCS12-1-00		
FHTMPP-2-0	SBS1-1-00	TCS13-1-00		
FHTCP-4-0	SBS2-1-00	TCS14-1-00		
SBI-5-1	SBS3-1-00	TCS15-1-00		
MI-4-1	SBS4-1-00	TCS16-1-00		
RDI-4-0	GMS1-1-00	TCS18-1-01		
DC-4-0	GMS2-1-00	TCS19-1-01		
PDT-2-0	SSP1-1-02	TCS20-1-00		
RWF2-3-0	SSA1-1-00	TCS21-1-02		
RWF3-3-1	SSA2-1-00	TCS24-1-02		
	FGS1-1-00	TCS25-1-00		
	SPA1-1-00			

PROFESSIONAL STRUCTURAL ENGINEER
KEARA A PHILLIPS-BERLIN
25804
OKLAHOMA
11/02/19

RESPONSIBLE FOR:
BRIDGE SHEETS: AB01, B001-B012
CRAINAGE STRUCTURE DETAILS: R037-R041

LICENSED PROFESSIONAL ENGINEER
LIESEL POLWORT
24569
OKLAHOMA
11/02/19

RESPONSIBLE FOR:
ALL OTHER SHEETS NOT
PREVIOUSLY LISTED

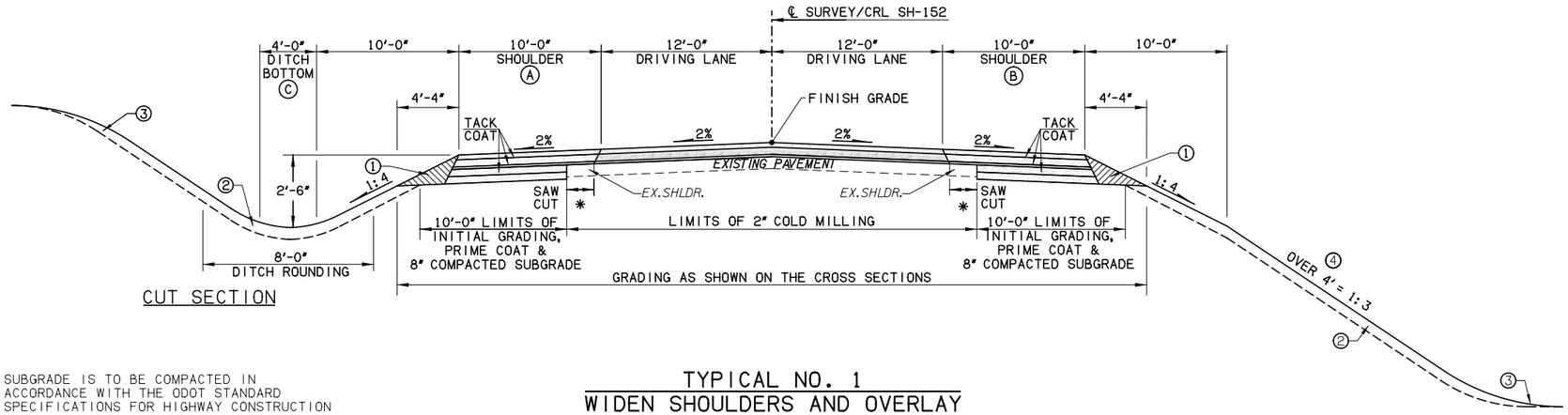
Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

INDEX OF SHEETS AND ODOT STANDARDS

State Job No. 29530(04) Sheet No. 0002

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***



NOTE: SUBGRADE IS TO BE COMPACTED IN ACCORDANCE WITH THE ODOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SECTION 202.04 (5)(b)(2), EARTH FILL.

TYPICAL NO. 1
WIDEN SHOULDERS AND OVERLAY

SH-152
STA. 72+38.40 TO 73+83.17 (RT. SHLDR. ONLY)
STA. 73+83.17 TO 78+76.07
STA. 78+76.07 TO 80+96.97 (LT. SHLDR. ONLY)
STA. 80+96.97 TO 120+00.00
STA. 184+00.00 TO 342+28.56

* WIDTH OF EXISTING SHOULDER VARIES. SAWCUT OUTER EDGE AND OVERLAY EXISTING SHOULDER.

SUPERPAVE REQUIREMENT - TYPICAL NO. 1		
12" PAVT. STRUCTURE	12'-0" DRIVING LANES	10'-0" SHOULDER
SURFACE COURSE	2" SUPERPAVE, TYPE S4 (PG 76-28 OK)	2" SUPERPAVE, TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE, TYPE S3 (PG 76-28 OK)	3" SUPERPAVE, TYPE S3 (PG 64-22 OK)
	1" RICH INTERMEDIATE LAYER	1" RICH INTERMEDIATE LAYER
		3" SUPERPAVE, TYPE S3 (PG 64-22 OK)
		3" SUPERPAVE, TYPE S3 (PG 64-22 OK)

TYPICAL SECTION	SEGMENT	WIDTH	STATION EXTENT
1	B	10' TO 8'-2"	119+80.00 TO 120+00.00
1	A	10' TO 15'-2"	119+45.00 TO 120+00.00
1	C	8'	209+36.79 TO 215+00.00 LT
1	C	8' TO 4'	215+00.00 TO STA 216+00.00 LT
1	C	8'	232+24.71 TO 235+50.00
1	C	8' TO 4'	235+50.00 TO STA 236+50.00 LT
1	C	4' TO 8'	326+50.00 TO 327+50.00 LT
1	C	8'	327+50.00 TO 338+80.00
1	B	10' TO 2'	334+10.00 TO 334+90.00
1	B	2'	334+90.00 TO 336+33.27
1	B	2' TO 10'	336+33.27 TO 337+13.27
1	A	10' TO 15'	339+31.67 TO 339+81.67
1	B	10' TO 13'	339+53.82 TO 339+83.82
1	B	13'	339+83.82 TO 340+89.90
1	A	15' TO 12'	339+81.67 TO 340+92.59
1	A	12' TO 6'	340+92.59 TO 341+26.49
1	B	13' TO 8'	340+89.90 TO 341+50.00
1	A	6'	341+26.49 TO 341+93.88
1	B	8'	341+50.00 TO 342+28.56
1	A	6' TO 2'-7"	341+93.88 TO 342+28.56

(1) BACKFILL NOTE:
THIS AREA IS TO BE BACKFILLED AND COMPACTED AS PART OF FINISHING OPERATIONS.

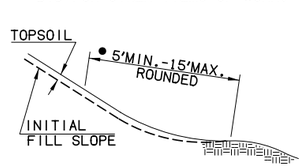
(2) TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD APPROX. 5" THICK FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGED TOPSOIL AND THE TOPSOIL QUANTITY IS INCLUDED IN THE EARTHWORK SUMMARY.

(3) SEE ROUNDING DETAIL.

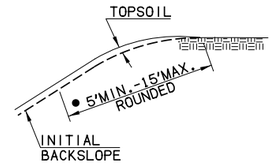
(4) FILL HEIGHT MEASURED VERTICALLY FROM EDGE OF FINISHED GRADE SHOULDER.

ROUNDING DETAIL

- INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDING SHALL BE 5' MINIMUM FOR SMALLER CUTS AND FILLS TO 15' MAXIMUM FOR LARGER CUTS AND FILLS OR AS DESIGNATED 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

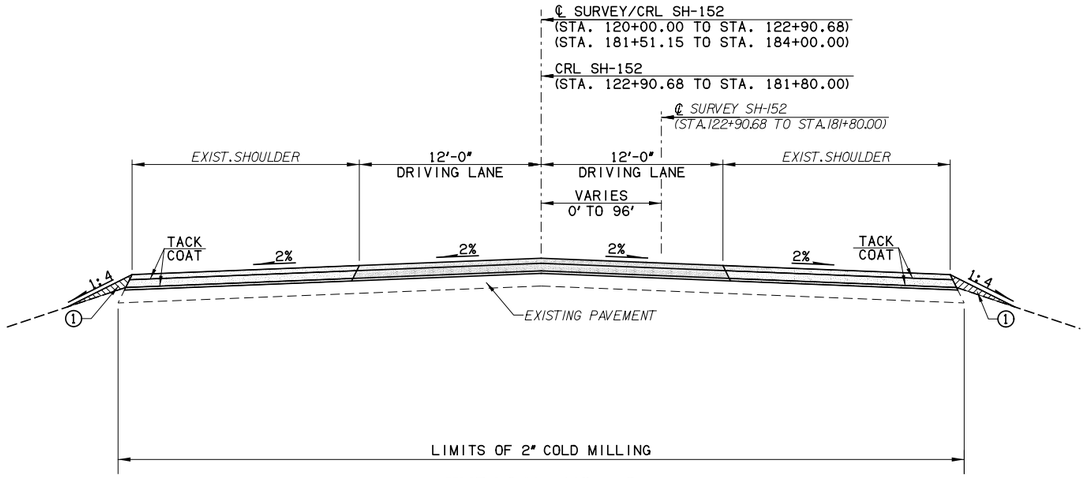
Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

TYPICAL SECTIONS
(SHEET 1 OF 2)

State Job No. 29530(04) Sheet No. 0003

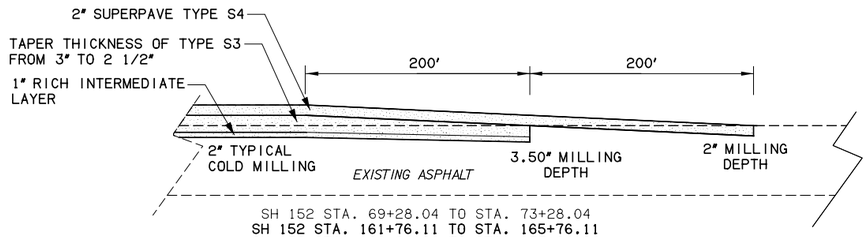
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***



TYPICAL NO. 2
MILL AND OVERLAY EXISTING SHLDRS

SH-152
STA. 69+28.04 TO STA. 72+38.40
STA. 72+38.40 TO 73+83.17 (LT. SHLDR. ONLY)
STA. 78+76.07 TO 80+96.97 (RT. SHLDR. ONLY)
STA. 120+00.00 TO 165+76.11
STA. 169+24.24 TO 184+00.00

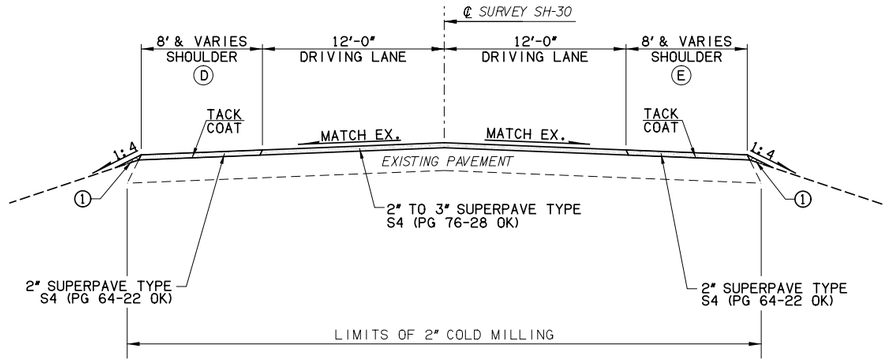
TYPICAL NO. 2 MILL AND OVERLAY		
6" PAVT. STRUCTURE	12'-0" DRIVING LANES	EXISTING SHOULDER
SURFACE COURSE	2" SUPERPAVE, TYPE S4 (PG 70-28 OK)	2" SUPERPAVE, TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE, TYPE S3 (PG 70-28 OK)	3" SUPERPAVE, TYPE S3 (PG 64-22 OK)
	1" RICH INTERMEDIATE LAYER	1" RICH INTERMEDIATE LAYER



SH 152 STA. 69+28.04 TO STA. 73+28.04
SH 152 STA. 161+76.11 TO STA. 165+76.11
SH 152 STA. 169+24.24 TO STA. 173+24.24
SH 152 STA. 338+28.56 TO STA. 342+28.56

2" S4 (PG 76-28 OK) TO BE USED FOR DRIVING LANES
3" S3 (PG 76-28) TO BE USED FOR FIRST LIFT UNDER DRIVING LANES
2" S4 (PG 64-22 OK) TO BE USED FOR SHOULDER SURFACE
S3 (PG 64-22 OK) TO BE USED ON REMAINING BASE LAYERS
1" RICH INTERMEDIATE LAYER TO BE USED UNDER TOP 5"

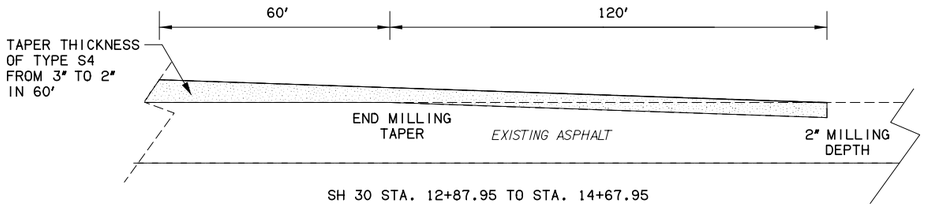
① BACKFILL NOTE: ▨
THIS AREA IS TO BE BACKFILLED WITH MILLINGS AS PART OF FINISHING OPERATIONS.



TYPICAL NO. 3
MILL AND OVERLAY

SH-30
STA. 12+87.95 TO 14+87.99
STA. 15+11.99 TO 17+00.00

TYPICAL SECTION	SEGMENT	WIDTH	STATION EXTENT
3	D	8' TO 18'	13+55.02 TO 14+55.02
3	E	8' TO 14'	13+84.90 TO 14+44.90
3	D	10' TO 8'	15+57.12 TO 15+77.12
3	E	12' TO 8'	15+58.78 TO 15+98.78



SH 30 STA. 12+87.95 TO STA. 14+67.95
SH 30 STA. 15+20.00 TO STA. 17+00.00

PROFILE TRANSITION TAPER DETAILS

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

TYPICAL SECTIONS
(SHEET 2 OF 2)

State Job No. 29530(04) Sheet No. 0004

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.

CALL OKIE:

IN ACCORDANCE WITH THE OKLAHOMA UNDERGROUND FACILITIES DAMAGE PREVENTION ACT THE CONTRACTOR WILL 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.

VERIFICATION OF EXISTING CONDITIONS:

THE CONTRACTOR WILL BE RESPONSIBLE FOR FULL UNDERSTANDING THE NATURE OF THE WORK AND CONDITIONS UNDER WHICH THE WORK WILL BE PERFORMED. ALL DIMENSIONS OF THE EXISTING BRIDGE COMPONENTS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR WILL VERIFY ALL DIMENSIONS NECESSARY TO CONNECT THE NEW MATERIAL AND WILL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF. THE CONTRACTOR WILL ADOPT METHODS CONSISTENT WITH GOOD CONSTRUCTION PRACTICE AND WILL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE EXISTING BRIDGE AND ATTACHMENTS. ANY DAMAGE TO THE EXISTING BRIDGE STRUCTURE OR ROADWAY DUE TO THE CONTRACTOR'S NEGLIGENCE WILL BE REPAIRED, AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE ENGINEER. CONSTRUCTION PLANS FOR THE EXISTING BRIDGE STRUCTURE MAY BE OBTAINED FROM THE REPRODUCTION BRANCH OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION.

CURTAIN WALL INTO ROCK:

IF ROCK IS ENCOUNTERED BEFORE THE TOTAL DEPTH OF THE CURTAIN WALL HAS BEEN REACHED, THE CURTAIN WALL MAY BE KEYED 6" INTO ROCK AS DIRECTED BY THE ENGINEER.

RCB EXTENSION:

THE EXISTING RCB OPENINGS HAVE A DEPRESSION TOWARDS THE CENTER OF THE CELLS. THE NEW CELLS OF THE BARREL EXTENSIONS WILL MATCH THIS DEPRESSION AT THE CUT LINES, THEN WITHIN A DISTANCE OF 3'-0", TRANSITION TO A FLAT SURFACE AS SHOWN IN THE NEW RCB BARREL DETAILS.

CONCRETE:

PROVIDE ALL EXPOSED CONCRETE EDGES OF THE RCB CULVERT, HEADWALL, WINGWALLS, AND CURTAIN WALL WITH A 1½" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL CHAMFER STRIPS WILL BE SIZED LUMBER.

J.P. NO. 29530(04)

PAY QUANTITIES

0200 BRIDGE A - NBI NO. 12744 - EXTEND 3-10'x9'x38' CLR. RDY. RCB TO 56' CLR. RDY.

ITEM NO.	ITEM		UNIT	TOTAL
202(A) 2210	UNCLASSIFIED EXCAVATION	(1)(4)	CY	1130.00
501(A) 1210	STRUCTURAL EXCAVATION UNCLASSIFIED	(1)	CY	124.00
502 1000	TEMPORARY EARTH RETAINAGE	(4)	LSUM	1.00
509(A) 0210	CLASS AA CONCRETE	(1)	CY	296.00
511(A) 2210	REINFORCING STEEL	(1)	LB	39960.00
619(B) 6304	REMOVAL OF BRIDGE ITEMS	(2)	LSUM	1.00

J.P. NO. 29530(04)

PAY QUANTITIES

0201 BRIDGE B - NBI NO. 12777 - EXTEND (12'-14'-12')x14'x38' CLR. RDY. RCB TO 56' CLR. RDY.

ITEM NO.	ITEM		UNIT	TOTAL
202(A) 2210	UNCLASSIFIED EXCAVATION	(1)(4)	CY	2480.00
501(A) 1210	STRUCTURAL EXCAVATION UNCLASSIFIED	(1)	CY	296.00
502 1000	TEMPORARY EARTH RETAINAGE	(4)	LSUM	1.00
509(A) 0210	CLASS AA CONCRETE	(1)	CY	755.60
511(A) 2210	REINFORCING STEEL	(1)	LB	93760.00
619(B) 6304	REMOVAL OF BRIDGE ITEMS	(3)	LSUM	1.00

PAY QUANTITIY NOTES

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

(2) ITEM "REMOVAL OF EXISTING BRIDGE ITEMS" CONSISTS OF REMOVAL AND DISPOSAL OF THE WINGWALLS, HEADWALL, CURTAINWALL, CONCRETE PARAPETS, AND A PORTION OF THE EXISTING 3-10'x9'x38' RCB CULVERT AS SHOWN IN THE PLANS. ALL WORK WILL BE DONE IN ACCORDANCE WITH SECTION 619.04(B)2 OF THE SPECIFICATIONS AND IN A MANNER APPROVED BY THE ENGINEER. THE REMOVED MATERIALS WILL BECOME PROPERTY OF THE CONTRACTOR. INCLUDE ALL COSTS FOR LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN THE CONTRACT UNIT PRICE OF "REMOVAL OF BRIDGE ITEMS".

(3) ITEM "REMOVAL OF EXISTING BRIDGE ITEMS" CONSISTS OF REMOVAL AND DISPOSAL OF THE WINGWALLS, HEADWALL, CURTAINWALL AND A PORTION OF THE EXISTING (12'-14'-12')x14'x48.9' RCB CULVERT AS SHOWN IN THE PLANS. ALL WORK WILL BE DONE IN ACCORDANCE WITH SECTION 619.04(B)2 OF THE SPECIFICATIONS AND IN A MANNER APPROVED BY THE ENGINEER. THE REMOVED MATERIALS WILL BECOME PROPERTY OF THE CONTRACTOR. INCLUDE ALL COSTS FOR LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN THE CONTRACT UNIT PRICE OF "REMOVAL OF BRIDGE ITEMS".

(4) A TEMPORARY EARTH RETAINAGE STRUCTURES SHALL BE USED DURING THE CONSTRUCTION. THE TEMPORARY EARTH RETAINAGE STRUCTURE SHOWN ON THE PLANS IS FOR INFORMATIONAL PURPOSES ONLY AND HAVE NOT BE DESIGNED AND DETAILED. ACTUAL LIMITS FOR THE TEMPORARY EARTH RETAINAGE STRUCTURE SHALL BE DETERMINED BY THE CONTRACTOR. TEMPORARY EARTH RETAINAGE STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH SUBSECTION 502.04 OF THE STANDARD SPECIFICATIONS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OKLAHOMA. ANY GEOTECHNICAL ENGINEERING REQUIRED TO COMPLETE THE STRUCTURAL ENGINEERING OF THE STRUCTURE WILL BE PERFORMED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OKLAHOMA. SUBMIT TEMPORARY EARTH RETAINAGE STRUCTURE DESIGN CALCULATIONS AND DRAWINGS AND AN EXCAVATION PLAN TO TH ENGINEER FOR APPROVAL.

DO NOT BEGIN INSTALLATION UNTIL APPROVAL OF THE DESIGN CALCULATIONS AND DRAWINGS BY THE ENGINEER IS RECEIVED. INCLUDE ALL COSTS FOR ENGINEERING, LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS TO COMPLETE THE WORK IN THE LUMP SUM PRICE OF "TEMPORARY EARTH RETAINAGE".

Design		
Drawn		
Checked		
Approved		
Squad		

SH-152 BECKHAM & ROGER MILLS COUNTIES

PAY QUANTITIES AND NOTES (BRIDGE)

State Job No. 29530(04) Sheet No. AB01

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-3) INCLUDES 2000 CU. YDS. FOR DRIVEWAYS, RETURNS, DIKES, AND MISCELLANEOUS EARTHWORK.

(R-4) AN ESTIMATED QUANTITY OF 12974 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 TYPE A SALVAGED TOPSOIL PRICE BID TO INCLUDE COST OF 18-46-0 FERTILIZER, ESTIMATED AT 150 POUNDS PER ACRE.

FOR SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF 10-20-10 FERTILIZER, ESTIMATED AT 200 POUNDS PER 1000 SQUARE YARDS.

(R-7) PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 50 GALLONS PER SY.

(R-11) THE QUANTITIES ESTIMATED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IS 30.1 ACRES.

(R-15) QUANTITY BASED ON TWO APPLICATIONS.

(R-18) ESTIMATED AT 120 LBS. PER CU. FT.

(R-21) 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 SECTIONS 708.03 OF THE STANDARD SPECIFICATION.

(R-25) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1″ THICK.

(R-27) PRICE BID TO INCLUDE COST OF FOG SEAL, MEETING THE REQUIREMENTS OF SECTION 407 OF THE STANDARD SPECIFICATIONS.

(R-31) QUANTITY INCLUDES AN ESTIMATED 150 C.Y. TO BE USED AS DIRECTED BY THE ENGINEER.

(R-38) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.

(R-39) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SECTION 202.06 UNCLASSIFIED EXCAVATION.

(R-41) INCLUDES 2% FOR GROUND MEASUREMENT.

(R-42) 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.

(1) EXISTING GUARDRAIL TO BE DIVIDED EQUALLY AND BECOME THE PROPERTY OF BECKHAM AND ROGER MILLS COUNTIES.

(2) THE CONTRACTOR SHALL STRIP ALL AVAILABLE TOPSOIL IN THE LIMITS OF THE CONSTRUCTION, APPROXIMATELY 5 INCHES DEEP. STOCKPILE THE MATERIAL AND REPLACE THE TOPSOIL ON THE FINISHED SLOPES OF THE GRADING SECTION. ALL ADDITIONAL COSTS NOT COVERED IN OTHER ITEMS SHALL BE INCLUDED IN THE LUMP SUM TOPSOIL ITEM AS FOLLOWS:

EXCAVATION SECTIONS:
CONTRACTORS ARE TO INCLUDE ANY ADDITIONAL COSTS TO REMOVE, STOCKPILE, AND REPLACE THE MATERIAL ON THE FINISHED GRADING SLOPES IN THE LUMP SUM TOPSOIL ITEM.

EMBANKMENT SECTIONS:
DETERMINE THE AMOUNT OF TOPSOIL IN THESE AREAS AND INCLUDE ALL COSTS TO REMOVE, STOCKPILE, AND REPLACE THE MATERIAL IN THE LUMP SUM TOPSOIL ITEM.

(3) ESTIMATED QUANTITIES TO BE USED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IN A MANNER APPROVED BY THE ENGINEER. PRICE BID TO INCLUDE COST OF SEDIMENT REMOVAL. SEDIMENT SHALL BE REMOVED WHEN EROSION CONTROL DEVICES ARE HALF FULL.

(4) INCLUDES 200 TONS TO BE USED AT THE DISCRETION OF THE ENGINEER.

(5) INCLUDES THE COST OF SAWING PAVEMENT.

STAKING PAY ITEMS

0600 STAKING

ITEM NO.	CODE NO.	ITEM DESCRIPTION	NOTES	UNIT	QUANTITY
642(B)	3300	CONSTRUCTION STAKING LEVEL II	(6)	LSUM	1.00

CONSTRUCTION PAY ITEMS

0640 CONSTRUCTION

ITEM NO.	CODE NO.	ITEM DESCRIPTION	NOTES	UNIT	QUANTITY
220	1100	SWPPP DOCUMENTATION AND MANAGEMENT		LSUM	1.00
641	2110	MOBILIZATION		LSUM	1.00

(6) 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 LIMITS AT A MINIMUM OF 500′ AS REQUIRED TO INSURE CONSTRUCTION OF A SMOOTH PROFILE OF MAINLINE TO INSURE SMOOTH TRANSITIONS AT 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 ENGINEER'S 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. THIS TRAINING SHALL INCLUDE ANY TECHNICAL SUPPORT REQUIRED BY THE INSPECTORS DURING CONSTRUCTION OF THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR ALL MAINTENANCE OF EQUIPMENT. ALL COST OF THE SYSTEM TO BE INCLUDED IN THE STAKING PAY ITEM.

(7) MULTIPLE MOBILIZATIONS FOR ALL EROSION CONTROL ITEMS WILL BE REQUIRED.

(8) PRICE BID SHALL INCLUDE REMOVAL OF OVERHEAD SIGNALS AND ALL ASSOCIATED WIRES AND/OR EQUIPMENT AT INTERSECTION OF SH152 AND SH30 IN SWEETWATER.

(9) ALL VEGETATIVE MULCHING SHALL BE WHEAT HAY ONLY.

(10) INCLUDES 16 CY TO BE USED FOR PLUGGING EXISTING STRUCTURE AND 30″ RCP AT STA 288+11.08.

(11) MILLINGS TO BECOME THE PROPERTY OF ODOT AND WILL BE HAULED TO A LOCATION WITHIN 10 MILES OF THE PROJECT.

(12) PRICE BID TO INCLUDE THE COST OF TRENCHING AND STANDARD BEDDING MATERIALS.

(13) DEPTH OF MILLING AND THICKNESS OF RICH INTERMEDIATE LAYER TO VARY IN ORDER TO REESTABLISH 2% CROWN.

(14) INCLUDES REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES, INLETS, AND OTHER STRUCTURES WITHIN THE RIGHT OF WAY.

(15) QUANTITIES INCLUDE 40 TONS SUPERPAVE TYPE S3 (PG 64-22 OK), 20 TONS SUPERPAVE TYPE S4 (PG 64-22 OK), 23 GALLONS TACK COAT, AND 54 GALLONS PRIME COAT FOR PATCHING SH30 AFTER CONSTRUCTION OF STRUCTURE #20.

(16) MILLINGS ARE TO BE USED TO BACKFILL EDGE OF PAVEMENT SECTION FOR EXTENTS OF TYPICAL SECTIONS #2 AND #3 AND TO ALLEVIATE TEMPORARY EDGE DROPOFF DURING CONSTRUCTION IN ACCORDANCE WITH ODOT STANDARD PDT-1-3.

THE FOLLOWING ITEMS ARE TO BE INCLUDED IN THE PRICE BID FOR "REMOVAL OF STRUCTURES AND OBSTRUCTIONS". ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION.

PARCEL NO.	LOCATION (STATION)	DESCRIPTION OF ITEMS TO BE REMOVED
1	STA. 96+50 RT. 51′ C/L	METAL PIPE ENTRY
5	STA. 213+40 LT. 51′ C/L	CATTLE PANEL ENTRY
11	STA. 278+00 RT. 51′ C/L	CATTLE PANEL ENTRY
14	STA. 337+00 LT. 40′ C/L	1 RAIL PIPE & 5′ CHAIN LINK CROSS FENCE
14	STA. 337+00 LT. TO 337+80 LT. 40′ C/L	1 RAIL PIPE & 5′ CHAIN LINK R/W FENCE
15	STA. 337+80 LT. TO 338+30 LT. 40′ C/L	1 RAIL PIPE & 5′ CHAIN LINK R/W FENCE
15	STA. 338+30 LT. 40′ TO 60′ C/L	1 RAIL PIPE & 5′ CHAIN LINK CROSS FENCE
16	STA. 338+50 LT. TO 339+40 LT. 50′ C/L	1 RAIL PIPE R/W FENCE
21	STA. 341+40 RT. 51′ C/L	25′X3′ CONCRETE PUMP ISLAND CUT & CAP PIPING @ R/W
21	STA. 341+90 RT. 51′ C/L	4′X8′ METAL SIGN ON 1 STEEL POST "SOS ENVIRONMENTAL"

ROADWAY PAY ITEMS

0100 ROADWAY

ITEM NO.	CODE NO.	ITEM DESCRIPTION	NOTES	UNIT	QUANTITY
201(A)	1200	CLEARING AND GRUBBING		LSUM	1.00
202(A)	2200	UNCLASSIFIED EXCAVATION	(R-1)	CY	22,495.00
202(D)	2500	UNCLASSIFIED BORROW	(R-3)	CY	17,843.00
205(A)	6200	TYPE A - SALVAGED TOPSOIL	(R-4)(R-6)(2)(7)	LSUM	1.00
221(B)	2300	TEMPORARY SILT FENCE	(3)(7)	LF	14,920.00
221(E)	2600	TEMPORARY SILT DIKE	(3)(7)	LF	1,589.00
221(F)	2700	TEMPORARY ROCK FILTER DAM TYPE 1	(3)(7)	CY	245.00
230(A)	7200	SOLID SLAB SODDING	(R-6)(R-7)(7)	SY	94,498.00
233(A)	0200	VEGETATIVE MULCHING	(R-11)(7)(9)	AC	30.12
241	3100	MOWING	(R-15)	AC	60.24
402(E)	2600	TRAFFIC BOUND SURFACE COURSE TYPE E	(R-18)(4)	TON	695.00
407(B)	7300	TACK COAT	(15)	GAL	68,847.00
408	8100	PRIME COAT	(R-21)(15)	GAL	15,432.00
411(B)	1300	SUPERPAVE, TYPE S3 (PG 76-28 OK)	(R-25)	TON	11,889.00
411(B)	1330	SUPERPAVE, TYPE S3 (PG 64-22 OK)	(R-25)(15)	TON	23,768.00
411(C)	1400	SUPERPAVE, TYPE S4 (PG 76-28 OK)	(R-25)	TON	8,345.00
411(C)	1430	SUPERPAVE, TYPE S4 (PG 64-22 OK)	(R-25)(15)	TON	7,182.00
411(J)	2100	(SP) RICH INTERMEDIATE LAYER	(R-25)(13)	TON	7,585.00
412	3100	COLD MILLING PAVEMENT	(R-27)(11)(13)(16)	SY	102,439.00
501(A)	1200	STRUCTURAL EXCAVATION UNCLASSIFIED	(R-1)	CY	110.00
509(A)	0200	CLASS AA CONCRETE		CY	285.00
509(D)	0500	CLASS C CONCRETE	(R-31)(10)	CY	674.00
511(A)	2200	REINFORCING STEEL		LB	38,494.00
601(A)	1100	TYPE I PLAIN RIPRAP		TON	235.00
611(G)	0350	INLET (SMD-TYPE 1)		EA	5.00
611(G)	0354	INLET (SMD-TYPE 2)		EA	1.00
611(G)	0358	INLET (SMD-TYPE 2A)		EA	1.00
613(A)	5208	18" R.C. PIPE CLASS III	(12)	LF	490.00
613(A)	5216	24" R.C. PIPE CLASS III	(12)	LF	128.00
613(A)	5220	30" R.C. PIPE CLASS III	(12)	LF	246.00
613(A)	5224	36" R.C. PIPE CLASS III	(12)	LF	80.00
613(A)	5228	42" R.C. PIPE CLASS III	(12)	LF	140.00
613(A)	5350	22"X13" R.C. PIPE ARCH CLASS A-III	(12)	LF	112.00
613(A)	5366	36"X22" R.C. PIPE ARCH CLASS A-III	(12)	LF	104.00
613(B)	5604	21" X 15" CORR. GALV. STEEL PIPE ARCH		LF	262.00
613(B)	5612	28" X 20" CORR. GALV. STEEL PIPE ARCH		LF	368.00
613(B)	5616	35" X 24" CORR. GALV. STEEL PIPE ARCH		LF	62.00
613(B)	5620	42" X 29" CORR. GALV. STEEL PIPE ARCH		LF	106.00
613(L)	6716	24" PREFAB. CULVERT END SECTION, ROUND		EA	3.00
613(L)	6728	36" PREFAB. CULVERT END SECTION, ROUND		EA	3.00
613(M)	6960	TYPE A4 CULVERT END TREATMENT		EA	6.00
613(M)	6964	TYPE B4 CULVERT END TREATMENT		EA	2.00
613(M)	6968	TYPE C4 CULVERT END TREATMENT		EA	2.00
613(M)	6984	TYPE BB4 CULVERT END TREATMENT		EA	6.00
613(M)	6992	TYPE DD4 CULVERT END TREATMENT		EA	2.00
619(A)	6200	REMOVAL OF STRUCTURES & OBSTRUCTIONS	(R-38)(R-39)(8)(14)	LSUM	1.00
619(B)	6300	REMOVAL OF HEADWALL		EA	6.00
619(B)	6352	REMOVAL OF FENCE	(R-38)(R-39)	LF	15,138.00
619(B)	6364	REMOVAL OF ASPHALT PAVEMENT	(R-38)(R-39)(5)	SY	1,822.00
619(B)	6396	REMOVAL OF GUARDRAIL	(1)	LF	1,106.00
624(C)	3405	FENCE-STYLE SWF (5 BARBED WIRE)	(R-41)(R-42)	LF	6,817.00
624(C)	3410	FENCE-STYLE SWF (6 BARBED WIRE)	(R-41)(R-42)	LF	4,350.00
624(E)	3600	FENCE-STYLE CLF (4' HIGH, CLASS A)	(R-41)	LF	168.00
629(A)	7200	MAILBOX INSTALLATION-SINGLE		EA	1.00
629(C)	7400	REMOVAL OF MAILBOX INSTALLATION		EA	1.00
629(E)	7600	MAILBOX		EA	1.00

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

PAY QUANTITIES AND NOTES (ROADWAY)

State Job No. 29530(04) Sheet No. AR01

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

ROADWAY GENERAL CONSTRUCTION NOTES

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.

FOR PROJECTS THAT INCLUDE WIDENING AND RESURFACING, 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 STANDARD PDT-1 (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 SHALL 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 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.

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.

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

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.

MISCELLANEOUS GENERAL CONSTRUCTION NOTES

STAY IN PLACE FORMS WILL NOT BE ALLOWED FOR ANY STRUCTURE GREATER THAN 36" IN HEIGHT.

TRAFFIC LIGHTING GENERAL CONSTRUCTION NOTES

THE CONTRACTOR SHALL CONTACT OG&E REGARDING A PLAN TO KEEP THE LIGHT POLES BURNING THAT ARE ADJACENT TO THIS PROJECT ONCE THE CONFLICTING LIGHT POLES ARE REMOVED. OG&E SHOULD DETERMINE THE LOCATIONS OF ADDITIONAL SERVICE POLES AND OTHER WORK THAT NEEDS TO BE DONE TO KEEP THESE LIGHTS BURNING AND THE CONTRACTOR SHALL INCLUDE THE PRICE BID FOR THIS ITEM. THE PRICE BID FOR THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO KEEP THE REMAINING LIGHTING CIRCUITS ADJACENT TO THIS PROJECT COMPLETELY OPERATIONAL TO THE SATISFACTION OF THE ENGINEER.

TRAFFIC OPERATIONS GENERAL CONSTRUCTION NOTES

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 SERVICE ASSOCIATION (ATSSA) OR THE OKLAHOMA TRAFFIC ENGINEERING ASSOCIATION (OTEA) AS A TRAFFIC CONTROL TECHNICIAN OR TRAFFIC CONTROL SUPERVISOR.

ANY SIGNS AND/OR DELINEATORS WHICH ARE TO BE REMOVED DURING THIS PROJECT WILL BE STORED IN A PROTECTED AREA DESIGNATED BY THE RESIDENT ENGINEER, UNTIL SUCH A TIME THAT THEY ARE TO BE RESET BY THE CONTRACTOR. COST OF THIS WORK TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BARRICADES, LIGHTS, AND SIGNING WITHIN THE LIMITS OF CONSTRUCTION. ALL CONSTRUCTION SIGNING WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS. CONSTRUCTION TRAFFIC CONTROL WILL BE 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.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING TRAFFIC ON CROSS STREETS. A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION ON THIS PROJECT, THE RESIDENT ENGINEER SHALL CONTACT THE OKLAHOMA HIGHWAY PATROL, SIZE AND WEIGHTS SECTION (405) 425-2210 AND ADVISE THE OFFICE WHEN SAID DETOURING WILL BEGIN AND THAT WIDE LOADS OVER XXXXXX FT. SHOULD BE ADVISED AND RESTRICTED. UPON COMPLETION OF THE PROJECT, THE RESIDENT ENGINEER SHALL CONTACT THE OKLAHOMA HIGHWAY PATROL AND ADVISE THE OFFICE THAT THE PROJECT IS COMPLETE.

ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL MEET O.D.O.T.'S QUALITY STANDARD FOR TEMPORARY TRAFFIC CONTROL DEVICES.

TRAFFIC SIGNING GENERAL CONSTRUCTION NOTES

REMOVED MATERIAL TO BECOME PROPERTY OF CONTRACTOR AND 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 THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE ENGINEER.

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) 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 BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT.

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

ALL ANCHOR BOLTS SHALL BE GRADE A-36 STEEL.

THE STATION 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.

THE COST OF REPLACEMENT OF MISSING OR DAMAGED EDGE STRIP ON EXISTING SIGNS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

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

TRAFFIC SIGNING GENERAL CONSTRUCTION NOTES CONT'D

ALL REMOVED SIGNS, SIGN POSTS, BOLTS, MISCELLANEOUS HARDWARE, AND DELINEATORS SHALL REMAIN THE PROPERTY OF THE STATE. THE CONTRACTOR SHALL NEATLY STACK SUCH REMOVED MATERIAL AT A LOCATION ON THE JOB SITE AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

ALL SIGNS SHALL BE REMOVED FROM THE POSTS IN A SALVAGEABLE MANNER FOR REUSE. CARE SHALL BE TAKEN DURING REMOVAL AND TRANSPORTING TO ALLEVIATE DAMAGE OF MATERIALS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED DURING REMOVAL OF SIGNS AND SIGN POSTS.

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.

ENVIRONMENTAL MITIGATION NOTES

ARCHAEOLOGICAL SITES:

LOCATIONS OUTSIDE THE PROJECT AREA IN THE FOLLOWING AREA MUST NOT BE UTILIZED FOR BORROW, EQUIPMENT STAGING, HAUL ROADS, SPOIL DUMPS OR ANY OFF-SITE PROJECT-RELATED ACTIVITY.

T11N R26W
SECTION 7: SE1/4 SE1/4
SECTION 17: NE1/4 SE1/4
SECTION 18: NE1/4 NE1/4
SECTION 22: SW1/4 SW1/4

LUST SITES

LATITUDE/LONGITUDE	OCC FAC./CASE NO.	FACILITY
35.4230, -99.9099	55-6591/064-3730	TOTAL OIL FIELD SERVICES

PETROLEUM CONTAMINATION MAY EXIST AT OR NEAR THE REFERENCED LEAKING UNDERGROUND STORAGE TANK (LUST) SITE. 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.

MIGRATORY BIRD:

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 BRIDGE NBI NO. 12744 AND 12777 AND REINFORCED CONCRETE BOXES AT STA. 182+25, STA. 209+33 AND STA. 232+20 INVOLVED WITH THIS PROJECT WAS OBSERVED. PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGE/STRUCTURES 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 BRIDGE 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 405-521-2515 IF ANY BIRD USE OF THE EXISTING STRUCTURES IS OBSERVED. IF BIRDS ARE OBSERVED THEN PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGE/STRUCTURES SHALL BE CONDUCTED BETWEEN SEPTEMBER 1 AND FEBRUARY 28, WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

GENERAL CONSTRUCTION NOTES

State Job No. 29530(04) Sheet No. AR02

SUMMARY OF SURFACING

STATION		TO	STATION	TACK COAT 407(B)	PRIME COAT 408	SUPERPAVE, TYPE S3 (PG 76-28 OK) 411(B)	SUPERPAVE, TYPE S3 (PG 64-22 OK) 411(B)	SUPERPAVE, TYPE S4 (PG 76-28 OK) 411(C)	SUPERPAVE, TYPE S4 (PG 64-22 OK) 411(C)	RICH INTERMEDIATE LAYER 411(J)	COLD MILLING PAVEMENT 412
				GAL	GAL	TON	TON	TON	TON	TON	SY
SH152	69+28.04	TO	80+00.00	2665.60	461.45	384.79	864.35	322.43	282.78	308.75	4784.97
SH152	80+00.00	TO	95+00.00	4938.97	1061.60	688.24	1607.95	451.18	385.72	427.04	4867.11
SH152	95+00.00	TO	110+00.00	3812.50	1099.01	688.24	1588.18	451.18	373.34	420.85	4710.56
SH152	110+00.00	TO	125+00.00	3733.14	732.67	688.24	1204.20	451.18	402.63	435.50	6243.78
SH152	125+00.00	TO	140+00.00	3409.89	-	688.24	606.98	451.18	394.20	431.28	7517.89
SH152	140+00.00	TO	155+00.00	3251.49	-	688.24	518.73	451.18	335.07	401.72	6992.22
SH152	155+00.00	TO	170+00.00	2494.30	-	402.63	453.92	346.47	256.35	308.01	5645.89
SH152	170+00.00	TO	185+00.00	3217.37	73.27	573.34	644.49	442.50	413.12	436.40	7750.78
SH152	185+00.00	TO	200+00.00	3822.50	1099.00	688.24	1471.28	451.18	373.34	420.85	5201.56
SH152	200+00.00	TO	215+00.00	3822.50	1099.00	688.24	1569.75	451.18	373.34	420.85	4765.78
SH152	215+00.00	TO	230+00.00	3822.50	1099.00	688.24	1561.91	451.18	373.34	420.85	4789.33
SH152	230+00.00	TO	245+00.00	3822.50	1099.00	688.24	1592.30	451.18	373.34	420.85	4747.22
SH152	245+00.00	TO	260+00.00	3822.50	1099.00	688.24	1577.80	451.18	373.34	420.85	4741.67
SH152	260+00.00	TO	275+00.00	3822.50	1099.00	688.24	1488.50	451.18	373.34	420.85	5011.67
SH152	275+00.00	TO	290+00.00	3822.50	1099.00	688.24	1506.36	451.18	373.34	420.85	4995.11
SH152	290+00.00	TO	305+00.00	3822.50	1099.00	688.24	1586.35	451.18	373.34	420.85	4716.89
SH152	305+00.00	TO	320+00.00	3822.50	1099.00	688.24	1550.75	451.18	373.34	420.85	4821.44
SH152	320+00.00	TO	335+00.00	3765.44	1023.33	688.24	1572.70	451.18	368.36	418.36	5029.56
SH152	335+00.00	TO	342+28.56	1943.41	499.14	204.54	497.58	241.41	168.90	209.33	3212.60
SH30	12+87.95	TO	17+00.00	275.89	-	-	-	223.51			1892.39
TOTALS				67910.50	14841.47	11888.90	23464.08	8344.02	6740.53	7584.89	102438.41

SUMMARY OF PAVED DITCHES

Location Station to Station	Design No.	Bottom Width	Side Slope Ratio	Length	No. of Curtain Walls	Class C Conc. 509(D)
		FT.	XX:1	L.F.	EA.	C.Y.
Sta. 112+00.00 to Sta. 115+00.00, RT	2A	4	3:1	300.04	5	39.12
Sta. 209+36.78 to Sta. 211+00.00, LT	2A	8	3:1	163.56	3	29.60
Sta. 208+50.00 to Sta. 209+28.78, RT	2A	4	3:1	79.54	2	10.49
Sta. 209+36.78 to Sta. 210+00.00, RT	2A	4	3:1	63.93	2	8.50
Sta. 231+00.00 to Sta. 232+14.71, LT	2A	8	3:1	115.93	3	21.18
Sta. 232+24.71 to Sta. 234+00.00, LT	2A	8	3:1	177.55	3	32.08
Sta. 235+12.00 to Sta. 236+50.00, LT	2A	8	3:1	138.14	3	25.11
Sta. 254+00.00 to Sta. 257+00.00, LT	2A	4	3:1	300.17	5	39.14
Sta. 260+00.00 to Sta. 263+00.19, LT	2A	4	3:1	301.03	5	39.25
Sta. 262+00.00 to Sta. 263+00.19, RT	2A	4	3:1	101.75	3	13.50
Sta. 263+33.85 to Sta. 264+50.00, RT	2A	4	3:1	117.61	3	15.52
Sta. 273+00.00 to Sta. 275+98.99, LT	2A	4	3:1	302.21	5	39.40
Sta. 276+47.87 to Sta. 280+00.00, LT	2A	4	3:1	353.91	5	45.98
Sta. 274+00.00 to Sta. 275+98.99, RT	2A	4	3:1	200.43	4	26.25
Sta. 283+21.23 to Sta. 284+00.00, RT	2A	4	3:1	78.80	2	10.40
Sta. 283+21.23 to Sta. 284+00.00, LT	2A	4	3:1	79.31	2	10.46
Sta. 294+24.88 to Sta. 297+00.00, RT	2A	4	3:1	275.43	4	35.81
Sta. 298+00.00 to Sta. 299+61.04, RT	2A	4	3:1	163.29	3	21.34
Sta. 299+65.71 to Sta. 302+00.00, RT	2A	4	3:1	235.42	4	30.71
Sta. 299+00.00 to Sta. 299+63.38, LT	2A	4	3:1	67.77	2	8.99
Sta. 299+63.38 to Sta. 300+00.00, LT	2A	4	3:1	37.48	2	5.13
TOTAL						507.95

SUMMARY OF EROSION CONTROL

STATION TO STATION	SOLID SLAB SODDING 230(A)	
	SY	AC
69+28.04 TO 95+00	11,471	2.37
95+00 TO 125+00	11,270	2.33
125+00 TO 155+00	0	0.00
155+00 TO 185+00	293	0.06
185+00 TO 215+00	12,551	2.59
215+00 TO 245+00	14,020	2.90
245+00 TO 275+00	13,749	2.84
275+00 TO 305+00	18,807	3.89
305+00 TO 335+00	10,481	2.17
335+00 TO 342+28.56	1,855	0.38
TOTALS	94,498	19.53

SUMMARY OF DRIVES & STREET RETURNS

STATION/LOCATION	LT	RT	TYPE	WIDTH	LENGTH	RADII	TRAFFIC BOUND SURFACE COURSE TYPE E 402(E)	TACK COAT 407(B)	PRIME COAT 408	SUPERPAVE, TYPE S3 (PG 64-22 OK) 411(B)	SUPERPAVE, TYPE S4 (PG 64-22 OK) 411(C)
				FT	FT	FT	TONS	GAL	GAL	TON	TON
CRL SH152 STA 71+63.38	X		SL RETURN	28	43.50	20		47.58	57.20	27.90	17.40
CRL SH152 STA 71+91.99		X	SL RETURN	24	43.00	20		41.21	49.55	24.29	15.09
CRL SH152 STA 73+16.89	X		ASPH DRIVE	30	30.00	15		34.12	41.02	20.00	12.48
CRL SH152 STA 96+36.05		X	TBSC DRIVE	40	38.17	50	51.48				
CRL SH152 STA 125+76.88	X		ASPH DRIVE	18	64.50	15		43.06			23.80
CRL SH152 STA 127+62.38	X		TBSC DRIVE	20	53.35	20	24.53				
CRL SH152 STA 128+16.95		X	SL RETURN	22	79.20	25		68.84			37.95
CRL SH152 STA 129+43.40		X	ASPH DRIVE	22	66.67	20		56.09			30.93
CRL SH152 STA 131+04.24		X	ASPH DRIVE	36	86.40	20		112.37			61.70
CRL SH152 STA 148+98.00	X		TBSC DRIVE	18	69.38	20	28.13				
CRL SH152 STA 154+37.19		X	SL RETURN	24	79.00	20		70.79			39.00
CRL SH152 STA 154+86.47		X	TBSC DRIVE	15	79.00	15	25.38				
CRL SH152 STA 154+91.01	X		TBSC DRIVE	18	69.70	25	30.15				
CRL SH152 STA 182+03.52	X		SL RETURN	21	70.00	20		56.21			31.01
CRL SH152 STA 182+03.52		X	SL RETURN	18	88.00	20		60.11			33.22
CRL SH152 STA 213+38.37	X		TBSC DRIVE	33	37.00	50	45.42				
CRL SH152 STA 213+41.65		X	TBSC DRIVE	56	28.00	50	45.35				
CRL SH152 STA 226+44.09	X		TBSC DRIVE	30	28.00	25	21.94				
CRL SH152 STA 234+68.98	X		SL RETURN	20	78.00	25		62.59	75.26	37.07	22.94
CRL SH152 STA 234+68.98		X	SL RETURN	21	108.00	25		86.83	104.40	51.33	31.81
CRL SH152 STA 252+40.43	X		TBSC DRIVE	51	28.00	50	42.62				
CRL SH152 STA 255+97.99	X		TBSC DRIVE	18	28.00	15	11.89				
CRL SH152 STA 266+41.00		X	TBSC DRIVE	44	28.00	50	38.65				
CRL SH152 STA 272+44.51	X		TBSC DRIVE	35	28.00	50	33.66				
CRL SH152 STA 278+09.64		X	ASPH DRIVE	12	48.00	15		23.03	27.69	14.05	8.48
CRL SH152 STA 287+63.44		X	SL RETURN	24	38.00	25		40.41	48.58	23.80	14.79
CRL SH152 STA 307+78.41		X	TBSC DRIVE	36	28.00	15	21.87				
CRL SH152 STA 313+34.34	X		TBSC DRIVE	38	28.00	50		60.56	72.82	35.28	22.13
CRL SH152 STA 314+19.12		X	TBSC DRIVE	16	28.00	15	10.78				
CRL SH152 STA 328+01.97	X		TBSC DRIVE	18	38.00	40	27.14				
CRL SH152 STA 332+53.00		X	TBSC DRIVE	16	28.00	15	10.78				
CRL SH152 STA 334+32.51		X	TBSC DRIVE	18	20.25	15	9.13				
CRL SH152 STA 336+52.91	X		ASPH DRIVE	18	38.00	15	15.46				
CRL SH152 STA 336+57.70		X	ASPH DRIVE	18	23.67	15		17.89	21.51	10.70	6.57
CRL SH152 STA 341+20.00		X	ASPH DRIVE	30	27.67	15		31.73	38.15	18.60	11.60
TOTALS							494.36	913.42	536.18	263.02	420.90

ASPHALT DRIVES AND STREET RETURNS BETWEEN STA 123+00.00 - 183+00.00 TO E OVERLAID WITH AVERAGE THICKNESS OF 3" SUPERPAVE TYPE S4 (PG 64-22-OK)
ALL OTHER ASPHALT DRIVES AND STREET RETURNS TO BE FULL DEPTH 2" SUPERPAVE TYPE S4 (PG 64-22-OK) AND 3" SUPERPAVE TYPE S3 (64-22)
TBSC DRIVES TO BE 4" IN THICKNESS

SUMMARY OF FENCE

STATION TO STATION				LT	RT	FENCE STYLE SWF (5 BARBED WIRE) 624(C)	FENCE STYLE SWF (6 BARBED WIRE) 624(C)	FENCE STYLE CLF (4' HIGH, CLASS A) 624(E)
						LF	LF	LF
77+00.00	TO	119+60.00		X			4350	
91+00.00	TO	96+12.22			X	524		
96+82.34	TO	100+50.00			X	377		
112+50.00	TO	114+50.00			X	204		
188+50.00	TO	192+00.00		X		362		
206+50.00	TO	213+00.00		X		666		
213+82.47	TO	216+00.00		X		210		
229+00.00	TO	234+35.71		X		556		
229+00.00	TO	234+35.93			X	553		
287+56.50	TO	289+00.00		X		157		
290+00.00	TO	307+50.00			X	1801		
292+00.00	TO	302+00.00		X		1045		
315+00.00	TO	318+50.00			X	362		
336+94.71	TO	338+59.07		X				168
			TOTALS			6817	4350	168

QUANTITIES INCLUDE 2% FOR GROUND MEASUREMENT

SUMMARY OF RIP RAP

LOCATION	LENGTH	WIDTH	THICKNESS	TYPE 1 PLAIN RIPRAP 601(A)
	FT	FT	FT	TON
CRL SH-152 STA 113+32.83 LT	36.5	18	1.5	54.2
CRL SH-152 STA 209+32.78 RT	40	13	1.5	42.1
CRL SH-152 STA 232+19.71 RT	26	29	1.5	62.2
CRL SH-152 STA 283+21.23 LT	13.5	8	1.5	8.9
CRL SH-152 STA 294+24.88 LT	20	14	1.5	23.1
CRL SH-152 STA 299+63.17 LT	23.5	18	1.5	34.9
CRL SH-152 STA 341+30.00 LT	12	9	1.5	8.9
TOTALS				234.3

SUMMARY OF MAILBOXES

APPROXIMATE LOCATION		MAILBOX INSTALLATION - SINGLE 629(A)	MAILBOX 629(E)	REMOVAL OF MAILBOX INSTALLATION 629(C)
		EA	EA	EA
334+65	RT	1	1	1
TOTALS		1	1	1

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

SUMMARY SHEETS (ROADWAY)

(SHEET 1 OF 2)

State Job No. 29530(04) Sheet No. AR03

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

SUMMARY OF TEMPORARY SEDIMENT CONTROL

STATION TO STATION	TEMPORARY SILT FENCE 221(B)	TEMPORARY SILT DIKE 221(E)	TEMPORARY ROCK FILTER DAM TYPE 1 221(F)	TEMPORARY VEGETATIVE MULCHING 233(A)
	LF	LF	CY	AC
69+28.04 TO 95+00	1,700	154	0.00	3.89
95+00 TO 125+00	1,700	175	6.58	3.53
125+00 TO 155+00	0	0	0.00	0.00
155+00 TO 185+00	0	0	0.00	0.12
185+00 TO 215+00	1,550	224	32.87	3.77
215+00 TO 245+00	2,015	294	26.30	4.40
245+00 TO 275+00	2,300	322	52.59	4.58
275+00 TO 305+00	3,400	406	115.03	5.29
305+00 TO 335+00	2,150	0	0.00	3.67
335+00 TO 342+28.56	105	14	10.96	0.87
TOTALS	**14,920**	**1589**	**244.33**	**30.12**

VEGETATIVE MULCH WILL BE USED AS TEMPORARY EROSION CONTROL ON DISTURBED AREAS, AND THE ESTIMATED QUANTITY IS FOR COVERAGE ON ALL DISTURBED AREAS. SOLID SLAB SOD WILL BE USED AS PERMANENT EROSION CONTROL TO COVER REMAINING DISTURBED AREAS OUTSIDE NEW SURFACED AREAS.

SUMMARY OF EARTHWORK

LOCATION	UNCLASSIFIED EXCAVATION 202(A)	EMBANKMENT +15%	UNCLASSIFIED BORROW 202(D)	WASTE
	CY	CY	CY	CY
SH-152	20,390	36,326	15,937	0
SH-30	114	20	0	94
TOTALS (ROADWAY)	**20,504**	**36,346**	**15,843**	

BORROW HAS BEEN REDUCED BY AMOUNT OF WASTE

SUMMARY OF REMOVALS

	STATION	TO	STATION	REMOVAL OF FENCE 619(B)	REMOVAL OF ASPHALT PAVEMENT 619(B)	REMOVAL OF GUARDRAIL 619(B)
				LF	SY	LF
SH152	69+28.04	TO	95+00.00	2198	-	-
SH152	95+00.00	TO	125+00.00	3168	347	-
SH152	125+00.00	TO	155+00.00	-	-	-
SH152	155+00.00	TO	185+00.00	-	164	-
SH152	185+00.00	TO	215+00.00	1346	144	-
SH152	215+00.00	TO	245+00.00	1664	-	-
SH152	245+00.00	TO	275+00.00	1683	259	647
SH152	275+00.00	TO	305+00.00	4292	710	459
SH152	305+00.00	TO	335+00.00	596	198	-
SH152	335+00.00	TO	342+45.77	191		-
TOTALS				**15138**	**1822**	**1106**

SUMMARY OF STRIPING

SHEET NO.	STATION TO STATION		RUMBLE CENTERLINE HMA - CON	RUMBLE METHOD HMA - CYC	TRAFFIC STRIPE (PLASTIC) (4" WIDE)		TRAFFIC STRIPE (PLASTIC) (24" WIDE)
			413(A)	413(B)	855(A)		855(A)
			LF	LF	LF		LF
					WHITE	YELLOW	WHITE
SIGNING & STRIPING (1)	69+28	95+00	2533	5012	5,240	5,164	44
SIGNING & STRIPING (2)	95+00	125+00	3000	6000	6,000	6,000	
SIGNING & STRIPING (3)	125+00	155+00	3000	5864	6,320	6,310	38
SIGNING & STRIPING (4)	155+00	185+00	2550	5185	5,622	5,414	44
SIGNING & STRIPING (5)	185+00	215+00	3000	6000	6,000	6,000	
SIGNING & STRIPING (6)	215+00	245+00	2926	5854	6,350	6,180	44
SIGNING & STRIPING (7)	245+00	275+00	3000	6000	6,000	6,000	
SIGNING & STRIPING (8)	275+00	305+00	2953	5926	6,060	5,980	24
SIGNING & STRIPING (9)	305+00	335+00	3000	5240	6,000	6,000	
SIGNING & STRIPING (10)	335+00	342+29	997		2,230	2,040	88
TOTALS			**26,959**	**51,081**	**55,822**	**55,088**	**282**
					110,910		

SUMMARY OF SIGNS

SIGN NO.	STATION	ROADWAY ALIGNMENT	SIGN TYPE	SIGN PANELS	SIGN POST					FOOTING			REMARKS
				SHEET ALUM. SIGNS	3" @ 7.58 GALV. STEEL PIPE POST "A"	3" @ 7.58 GALV. STEEL PIPE POST "B"	2 1/4" SQUARE STL. TUBE "A"	2 1/4" SQUARE STL. TUBE "B"	POST SPACE	TYPE	STRUCTURAL CONCRETE	REINFORCING STEEL	
				850(A)	851(B)	851(B)	851(C)	851(C)			804(A)	804(B)	
				SF	LF	LF	LF	LF			CY	LB	
1	71+32	SH-152	R1-1E	7.46			14.00						
2	72+22	SH-152	R1-1E	7.46			14.00						
3	-	NS 167	W3-1	6.25			13.00						
4	76+00	SH-152	W3-5(65)	9.00			15.00						
5	84+00	SH-152	R2-1E (65 MPH)	12.00			15.00	15.00	2.00				
6	89+00	SH-152	M3-2, M1-6(152)	7.00			10.00						
7	89+00	SH-152	M3-4, M1-6(152)	7.00			10.00						
8	116+00	SH-152	W1-2E(L)	9.00			15.00						
9	128+39	SH-152	R1-1E	7.46			14.00						
10	154+58	SH-152	R1-1E	7.46			14.00						
11	156+00	SH-152	W1-2E(R)	9.00			15.00						
12	163+00	SH-152	W1-10eE(R)	9.00			15.00						
13	181+81	SH-152	R1-1E, W4-4PE	11.96			16.50	16.50	2.00				
14	182+21	SH-152	R1-1E, W4-4PE	11.96			16.50	16.50	2.00				
15	190+50	SH-152	W1-10eE(R)	9.00			15.00						
16	205+00	SH-152	R2-1E (65 MPH)	12.00			15.00	15.00	2.00				
17	205+00	SH-152	R2-1E (65 MPH)	12.00			15.00	15.00	2.00				
18	220+00	SH-152	M3-2, M1-6(152)	7.00			10.00						
19	220+00	SH-152	M3-4, M1-6(152)	7.00			10.00						
20	234+46	SH-152	R1-1E	7.46			14.00						
21	235+00	SH-152	R1-1E	7.46			14.00						
22	287+88	SH-152	R1-1E	7.46			14.00						
23	311+00	SH-152	W3-5(55)	9.00			15.00						
24	321+00	SH-152	R2-1E (55 MPH)	12.00			15.00	15.00	2.00				
25	321+00	SH-152	R2-1E (65 MPH)	12.00			15.00	15.00	2.00				
26	329+50	SH-152	R2-1E (45 MPH)	12.00			15.00	15.00	2.00				
27	329+50	SH-152	R2-1E (55 MPH)	12.00			15.00	15.00	2.00				
28	333+00	SH-152	M2-1, M1-6	7.00			10.00						
29	336+00	SH-152	W3-1E (SPECIAL) (LED)		16.50	16.50			2.33	A-4	0.46	64.00	
30	336+00	SH-152	SP. SIGN 01	12.50			15.00	15.00	3.00				
31	338+00	SH-152	SP. SIGN 02	15.75			16.00	16.00	2.70				
31B	338+00	SH-152	M3-4, M1-6(152)	7.00			10.00						
32	339+95	SH-152	R1-1E, R1-3PE	11.96			16.50	16.50	2.00				
33	339+80	SH-152	ROUTE ASSEMBLY 1	15.38			12.00	12.00	2.33				
34	340+70	SH-152	R1-1E, R1-3PE	11.96			16.50	16.50	2.00				
35	340+90	SH-152	ROUTE ASSEMBLY 2	15.38			12.00	12.00	2.33				
36	343+00	SH-152	SP. SIGN 03	15.75			16.00	16.00	2.70				
37	343+00	SH-152	M3-2, M1-6(152)	7.00			10.00						
38	345+00	SH-152	SP. SIGN 04	12.50			15.00	15.00	3.00				
39	10+60	SH-30	SP. SIGN 05	12.50			15.00	15.00	3.00				
40	12+60	SH-30	SP. SIGN 06	15.75			16.00	16.00	2.70				
41	12+60	SH-30	M3-3, M1-6(30)	6.00			10.00						
42	14+72	SH-30	ROUTE ASSEMBLY 3	15.38			12.00	12.00	2.33				
43	14+60	SH-30	R1-1E, R1-3PE	11.96			16.50	16.50	2.00				
44	15+35	SH-30	ROUTE ASSEMBLY 4	15.38			12.00	12.00	2.33				
45	15+40	SH-30	R1-1E, R1-3PE	11.96			16.50	16.50	2.00				
46	17+35	SH-30	M3-1, M1-6(30)	6.00			10.00						
47	17+50	SH-30	SP. SIGN 07	15.75			16.00	16.00	2.70				
48	19+50	SH-30	SP. SIGN 08	12.50			15.00	15.00	3.00				
49	345+50	SH-152	W3-1E (SPECIAL) (LED)		16.50	16.50			2.33	A-4	0.46	64.00	
50	10+00	SH-152	W3-1E (SPECIAL) (LED)		16.50	16.50			2.33	A-4	0.46	64.00	
51	20+00	SH-152	W3-1E (SPECIAL) (LED)		16.50	16.50			2.33	A-4	0.46	64.00	
TOTALS				**503.75**	66.00	66.00	667.00	376.00			**1.84**	**256.00**	
					132.00		**1,043.00**						

SUMMARY OF DELINEATORS

SHEET NO.	STATION TO STATION		DELINEATORS (TYPE 2, CODE 3)
			853
			EA
SIGNING & STRIPING (1)	69+28	95+00	-
SIGNING & STRIPING (2)	95+00	125+00	2
SIGNING & STRIPING (3)	125+00	155+00	-
SIGNING & STRIPING (4)	155+00	185+00	8
SIGNING & STRIPING (5)	185+00	215+00	8
SIGNING & STRIPING (6)	215+00	245+00	4
SIGNING & STRIPING (7)	245+00	275+00	4
SIGNING & STRIPING (8)	275+00	305+00	12
SIGNING & STRIPING (9)	305+00	335+00	2
SIGNING & STRIPING (10)	335+00	342+29	9
TOTALS			**49**

◓ NOTE: SIGN PANELS WITH FLASHING YELLOW LED LIGHTS, SOLAR PANEL AND ALL REQUIRED HARDWARE TO BE PAID FOR AS ITEM NO. 890 "(PL) TRAFFIC ITEMS".

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

SUMMARY SHEETS (ROADWAY)

(SHEET 2 OF 2)

State Job No. 29530(04) Sheet No. AR04

TRAFFIC CONTROL 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-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-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-27) WHEN A PILOT CAR IS REQUIRED ON TWO LANE / TWO-WAY ROADWAYS, THE CONTRACTOR SHALL USE A PILOT CAR WITH A LICENSED OPERATOR. THE PILOT CAR OPERATOR SHALL BE IN RADIO CONTACT WITH PERSONNEL IN THE TEMPORARY TRAFFIC CONTROL ZONE. MAXIMUM SPEED OF THE PILOT CAR THROUGH THE WORK ZONE AREA SHALL BE 25 MPH. FULL COMPENSATION FOR FURNISHING AND OPERATING THE PILOT CAR (INCLUDING DRIVER, RADIO, AND ANY OTHER EQUIPMENT OR LABOR REQUIRED) SHALL BE INCLUDED IN THE PRICE BID OF PILOT CAR.

PILOT CAR SHALL BE APPROVED VEHICLE, SHOULD CARRY THE CONTRACTOR'S INSIGNIA, AND BE EQUIPPED WITH SIGNS READING "PILOT CAR--FOLLOW ME" MOUNTED A MINIMUM OF ONE (1) FOOT ABOVE THE TOP OF THE VEHICLE AND CLEARLY VISIBLE FROM BOTH DIRECTIONS.

(TC-28) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 0.00 S.F. AND 6.25 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS

(TC-29) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 6.26 S.F. AND 15.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

(TC-30) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 16.00 S.F. AND 32.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

(TC-31) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE 33.0 S.F. AND OVER. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

(TC-32) SPECIAL CONSTRUCTION SIGNS 33.0 S.F. AND OVER SHALL BE CONSTRUCTED OF EXTRUDED ALUMINUM TO THE DIMENSIONS SHOWN ON THE PLANS. THE SIGNS SHALL BE INSTALLED EITHER ON WIDE FLANGE BEAM POSTS OR OVERHEAD SIGN STRUCTURES IN A MANNER APPROVED BY THE ENGINEER.

(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-52) ANY USED TRUCK MOUNTED ATTENUATORS OR CHANGEABLE MESSAGE SIGNS 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.

TRAFFIC CONTROL PAY ITEMS

0300 TRAFFIC CONTROL PAY ITEMS

ITEM NO.	CODE NO.	ITEM DESCRIPTION	NOTES	UNIT	QUANTITY
857(E)	9620	(PL) CONSTRUCTION ZONE PAVEMENT MARKERS (FLEX TAB) TYPE 2-1	(TC-20,21,61,73,75)	EA	6,440.00
857(E)	9630	(PL) CONSTRUCTION ZONE PAVEMENT MARKERS (FLEX TAB) TYPE 2-2	(TC-20,21,61,73,75)	EA	4,840.00
857(F)	9700	PAVEMENT MARKING REMOVAL (TRAFFIC STRIPE)	(TC-22, 61, 70, 75)	LF	40,000.00
876(A)	3210	(PL) TRUCK MOUNTED ATTENUATOR	(TC-52,76,77,78,84)	SD	225.00
877(B)	4300	DELIVER PORTABLE LONGITUDINAL BARRIER	(TC-1, 2)	LF	900.00
877(C)	4400	RELOCATION OF PORTABLE LONGITUDINAL BARRIER	(TC-1)	LF	4,500.00
880(A)	6220	ARROW DISPLAY (TYPE C)	(TC-70, 84)	SD	450.00
880(B)	6300	CONSTRUCTION SIGNS 0 TO 6.25 SF	(TC-26, 28, 33, 84)	SD	7,200.00
880(B)	6310	CONSTRUCTION SIGNS 6.26 SF TO 15.99 SF	(TC-26, 29, 33, 84)	SD	4,500.00
880(B)	6320	CONSTRUCTION SIGNS 16.0 SF TO 32.99 SF	(TC-26, 30, 33, 84)	SD	13,500.00
880(B)	6330	CONSTRUCTION SIGNS 33.0 SF & OVER	(TC-26, 31, 32, 33, 84)	SD	3,600.00
880(C)	6410	CONSTRUCTION BARRICADES (TYPE III)	(TC-26, 84)	SD	1,800.00
880(C)	6420	WING BARRICADES	(TC-26, 84)	SD	900.00
880(D)	6500	VERTICAL PANELS	(TC-26, 84)	SD	33,750.00
880(E)	6600	WARNING LIGHTS (TYPE A)	(TC-26, 84)	SD	18,000.00
880(F)	6700	DRUMS	(TC-26, 84)	SD	9,000.00
880(W)	7700	PILOT CAR	(TC-27)	LSUM	1.00
882(A)	8210	PORT.CHANGEABLE MESSAGE SIGN	(TC-52, 84, 85)(125)	SD	478.00

TRAFFIC CONTROL PAY QUANTITY NOTES (CONTD.)

(TC-61) ANY DAMAGE TO A FINISHED OR EXISTING SURFACE RESULTING FROM THE CONTRACTORS 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 DEEMED NECESSARY BY THE ENGINEER.

(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-84) 225 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 O.D.O.T. 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 A LIST OF THE APPROVED SIGNS GO TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION WEB SITE AT:
http://www.okladot.state.ok.us/traffic/qpl/index.php

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

PAY QUANTITIES AND NOTES (TRAFFIC)
(SHEET 1 OF 2)

State Job No. 29530(04) Sheet No. AT01

7/27/2022 9:37:07 AM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\PAYQUANT02_29530.dgn

TRAFFIC SIGNING PAY QUANTITY NOTES

(TS-19) QUANTITY SHOWN INCLUDES 55,822 L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND 55,088 L.F. TRAFFIC STRIPE(PLASTIC)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF FOUR INCH (4") WIDE TRAFFIC STRIPE.

(TS-23) QUANTITY SHOWN INCLUDES 282 L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWENTY-FOUR INCH (24") WIDE TRAFFIC STRIPE.

(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.

(TS-41) "REMOVAL OF EXISTING SIGNS" SHALL INCLUDE THE REMOVAL OF A COMPLETE SIGN ASSEMBLY WHICH MAY INCLUDE MULTIPLE SIGNS, POSTS, FOOTINGS, AND ANY FOOTINGS ADJACENT TO THE SIGN ASSEMBLY. WHEN APPROVED BY THE ENGINEER, FOOTINGS MAY BE OBLITERATED TO A POINT BELOW GROUND LEVEL IN LIEU OF BEING COMPLETELY REMOVED. SEE GENERAL CONSTRUCTION NOTES FOR DISPOSAL OF OLD CONCRETE FOOTING MATERIAL.

(121) SEE SIGNING & STRIPING SHEETS FOR LOCATIONS OF SIGNS TO BE RESET.

(122) "REMOVAL OF GROUND MOUNTED SIGNS" SHALL INCLUDE THE REMOVAL OF A COMPLETE SIGN ASSEMBLY WHICH MAY INCLUDE MULTIPLE SIGNS, POSTS, FOOTINGS, AND ANY FOOTINGS ADJACENT TO THE SIGN ASSEMBLY. WHEN APPROVED BY THE RESIDENT ENGINEER, FOOTINGS MAY BE OBLITERATED TO A POINT BELOW GROUND LEVEL IN LIEU OF BEING COMPLETELY REMOVED. SEE GENERAL CONSTRUCTION NOTES FOR DISPOSAL OF OLD CONCRETE FOOTING MATERIAL. SIGNS AND POSTS TO BECOME PROPERTY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.

(124) RUMBLE STRIP TO BE FOG SEALED WITHIN 48 HOURS AND TO BE CONSTRUCTED PRIOR TO PLACEMENT OF PERMANENT TRAFFIC STRIPE.

(125) PORTABLE CHANGEABLE MESSAGE SIGNS TO BE PLACED 14 DAYS PRIOR TO THE START OF CONSTRUCTION.

(SP-1) PRICE BID TO INCLUDE ALL FLASHING LED SIGNS THAT ARE MUTCD COMPLIANT. IN ORDER TO BE APPROVED, THE DEVICE MUST MEET OR EXCEED THE FOLLOWING REQUIREMENTS:

1. SIGN -

A. SIGNS SHALL BE IN COMPLIANCE WITH MUTCD SIGN SPECIFICATIONS.

B. THE QUANTITY OF LED SIGNS SHALL CONSIST OF THE FOLLOWING: 4-STOP AHEAD SIGNS W3-1E(LED)(48"x48") WITH 8 (EIGHT) AMBER LEDS.

C. ALL SIGN BLANKS SHALL BE 0.080" (INCH) GAUGE ALUMINUM MINIMUM.

D. SHEETING USED SHALL BE FLUORESCENT YELLOW 3M DG3 DIAMOND GRADE OR SIMILAR PRISMATIC SHEETING, UNLESS REQUIRED WITH A LOWER GRADE OF REFLECTIVITY. SHEETING SHALL INCLUDE ANTI-GRAFITTI OVERLAY PROTECTION.

E. ALL SIGN ASSEMBLIES SHALL USE ANTI-VANDAL FASTENERS TO MOUNT COMPONENTS TO SIGN AND SIGN TO FIXTURE.

2. LEDS -

A. EACH SIGN ASSEMBLY SHALL CONSIST OF 8 (EIGHT) HIGH POWERED 1 (ONE) WATT LUXEON LEDS THAT PROVIDE A MAXIMUM LIGHT INTENSITY OF UP TO 600,000 MCD (MILLICANDELAS) WITH A VIEWING ANGLE 20 .

B. ALL LEDS SHALL MATCH THE COLOR SPECIFIED IN SECTION 2A.07 OF THE MUTCD.

C. EACH LED SHALL BE SEALED IN 7/8" DIAMETER, HEAT DISSIPATING PLASTIC ENCLOSURE TO PROVIDE RESISTANCE TO WEATHER AND VIBRATION.

D. ALL LED ENCLOSURES SHALL BE MOUNTED IN A 1" HOLE AND ULTRASONICALLY WELDED TO THE SIGN ASSEMBLY TO PROVIDE MAXIMUM STRENGTH AND RIGIDITY.

E. ALL LEDS SHALL BE WIRED IN STRINGS TO ACTIVATE SIMULTANEOUSLY PER MUTCD STANDARDS AND WIRED IN A MANNER (PARALLEL) THAT ALL LEDS CONTINUE TO FLASH IN THE EVENT OF FAILURE OF AN INDIVIDUAL LED.

F. ALL WIRE USED SHALL CONFORM TO MILITARY SPECIFICATIONS, MIL-W-16878D, TYPE D, VINYL NYLON JACKET.

TRAFFIC SIGNING PAY QUANTITY NOTES (CONTD.)

(SP-1) (CONTD.)

G. WIRING SHALL BE COVERED AND SECURED TO THE SIGN ASSEMBLY USING A 1" X 3/8" ALUMINUM EXTRUSION TO PROVIDE WEATHER RESISTANCE AND PROTECTION.

H. ALL LED CONNECTORS SHALL CONFORM TO INGRESS PROTECTION, IP-67 RATING, DUST PROOF, AND PROTECT FROM TEMPORARY IMMERSION IN WATER UP TO 1 METER DEEP FOR 30 MINUTES. CONNECTORS SHALL BE DEUTSCH DTM SERIES.

3. SOLAR PANEL -

A. ALL SOLAR PANELS SHALL BE UP TO 13.5" X 15" IN SIZE AND PROVIDE UP TO 13.5 WATTS PEAK TOTAL OUTPUT SIZED FOR ALL LOCATIONS.

B. ALL PANELS SHALL BE MOUNTED TO AN ALUMINUM PLATE AND BRACKET AT AN ANGLE OF 45 - 60 TO PROVIDE MAXIMUM OUTPUT. THE BRACKET SHALL BE SECURED TO A 2-3/8" (INCH) ALUMINUM TUBE. NOTE: COLLECTOR MUST FACE SOUTH.

C. ALL FASTENERS USED SHALL BE ANTI-VANDAL.

D. WIRE USED SHALL CONFORM TO MILITARY SPECIFICATIONS, MIL-W-16878D, TYPE D, VINYL NYLON JACKET.

E. THE SOLAR PANEL ASSEMBLY SHALL BE MOUNTED DIRECTLY TO THE BACK OF THE SIGN ASSEMBLY AND BE FULLY SELF CONTAINED ONTO A 2-3/8" (INCH)(O.D.) ROUND ALUMINUM HOUSING.

F. ALL SOLAR PANEL CONNECTORS SHALL CONFORM TO INGRESS PROTECTION, IP-67 RATING, DUST PROOF, AND PROTECTED FROM TEMPORARY IMMERSION IN WATER UP TO 1 METER DEEP FOR 30 MINUTES. CONNECTORS SHALL BE DEUTSCH DTM SERIES.

4. CONTROL CIRCUIT -

A. THE CONTROL CIRCUIT SHALL HAVE THE CAPABILITY OF INDEPENDENTLY FLASHING DUAL OUTPUTS. THE FLASHING OUTPUT CURRENT AND DUTY CYCLE SHALL BE PROGRAMMABLE.

B. THE FLASHING OUTPUT SHALL BE 50 TO 60 FLASHES PER MINUTE WITH 100 MSEC DURATION ON TIME. THE OUTPUTS SHALL REACH THE OUTPUT CURRENT AS PROGRAMMED FOR THE DURATION OF THE 100 MSEC PULSE.

C. THE OUTPUT CURRENT SHALL BE INDIVIDUALLY PROGRAMMABLE FOR DAY AND NIGHT TIME OPERATION. THE DAY AND NIGHT TIME MODE WILL AUTOMATICALLY BE DETERMINED BY SOLAR PANEL CHARGE INPUT AND ADJUSTED TO MATCH AMBIENT LIGHTING CONDITIONS.

D. THE CONTROLLER SHALL PROVIDE 6 (SIX) LEVELS OF BRIGHTNESS CONTROL DETERMINED BY AMBIENT CONDITIONS.

E. THE CONTROLLER SHALL MANAGE THE BATTERY CHARGE AND LED BRIGHTNESS LEVELS IN ORDER TO ACCOMMODATE 30 DAYS OF CONTINUOUS USE WITHOUT ANY CHARGE.

F. THE CONTROL CIRCUIT SHALL BE POTTED IN A CYLINDRICAL EPOXY RESIN HOUSING TO BE WATERPROOF AND HOUSED IN A 2-3/8" ALUMINUM TUBE.

G. THE CONTROL CIRCUIT SHALL OPERATE BETWEEN THE TEMPERATURES OF -40 C AND +80 C.

H. ALL CIRCUIT CONNECTORS SHALL CONFORM TO INGRESS PROTECTION, IP-67 RATING, DUST PROOF, AND PROTECTED FORM TEMPORARY IMMERSION IN WATER UP TO 1 METER DEEP FOR 30 MINUTES. CONNECTORS SHALL BE DEUTSCH DTM SERIES.

5. BATTERY -

A. BATTERY PACKS SHALL BE 4.8 VOLT 14000mAH NICKEL METAL HYDRIDE (NIMH).

B. ALL BATTERIES SHALL BE SEALED IN A PLASTIC FILM TO PROVIDE MOISTURE AND CORROSION RESISTANCE.

C. BATTERY DIMENSIONS SHALL BE 10.5" X 1.5" X 1.5" TO BE HOUSED IN 2-3/8" (INCH)(O.D.) ALUMINUM TUBE.

D. ALL BATTERIES SHALL OPERATE BETWEEN THE TEMPERATURES OF -40 C AND +80 C.

E. ALL BATTERIES SHALL HAVE FUSING BETWEEN EACH CELL AND SHALL BE PROTECTED FROM OVERHEATING USING A THERMOCOUPLE SENSOR.

F. ALL BATTERY CONNECTORS SHALL CONFORM TO INGRESS PROTECTION, IP-67 RATING, DUST PROOF, AND PROTECTED FROM TEMPORARY IMMERSION IN WATER UP TO 1 METER DEEP FOR 30 MINUTES. CONNECTORS SHALL BE DEUTSCH DTM SERIES.

TRAFFIC SIGNING AND STRIPING PAY ITEMS

0310 TRAFFIC SIGNING AND STRIPING

ITEM NO.	CODE NO.	ITEM DESCRIPTION	NOTES	UNIT	QUANTITY
413(A)	4210	RUMBLE STRIP - CENTERLINE HMA-CON	(124)	LF	26,959.00
413(B)	4310	RUMBLE STRIP - METHOD HMA-CYC	(124)	LF	51,081.00
804(A)	2200	STRUCTURAL CONCRETE		CY	1.84
804(B)	2300	REINFORCING STEEL		LB	256.00
805(A)	3248	(PL) REMOVAL OF EXISTING SIGNS	(TS-41)(121)	LSUM	1.00
805(D)	3536	(PL) REMOVE & RESET GROUND MOUNTED SIGN	(121)(122)	EA	1.00
850(A)	1200	SHEET ALUMINUM SIGNS	(TS-34)	SF	545.50
851(B)	2315	3" @ 7.58 GALV. STEEL PIPE POST	(TS-33)	LF	132.00
851(C)	2420	2 1/4" SQUARE TUBE POST	(TS-33)	LF	1,132.00
853	5125	DELINEATORS (TYPE 2, CODE 3)		EA	49.00
855(A)	7200	TRAFFIC STRIPE (PLASTIC) (4" WIDE)	(TS-19)	LF	110,910.00
855(A)	7216	TRAFFIC STRIPE (PLASTIC) (24" WIDE)	(TS-23)	LF	282.00
890	1100	(PL) TRAFFIC ITEMS	(SP-1)	LSUM	1.00

TRAFFIC SIGNING PAY QUANTITY NOTES (CONTD.)

(SP-1) (CONTD.)

WARRANTY -

MANUFACTURER SHALL OFFER A ONE YEAR UNCONDITIONAL WARRANTY AGAINST ALL DEFECTS IN MATERIAL AND WORKMANSHIP.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

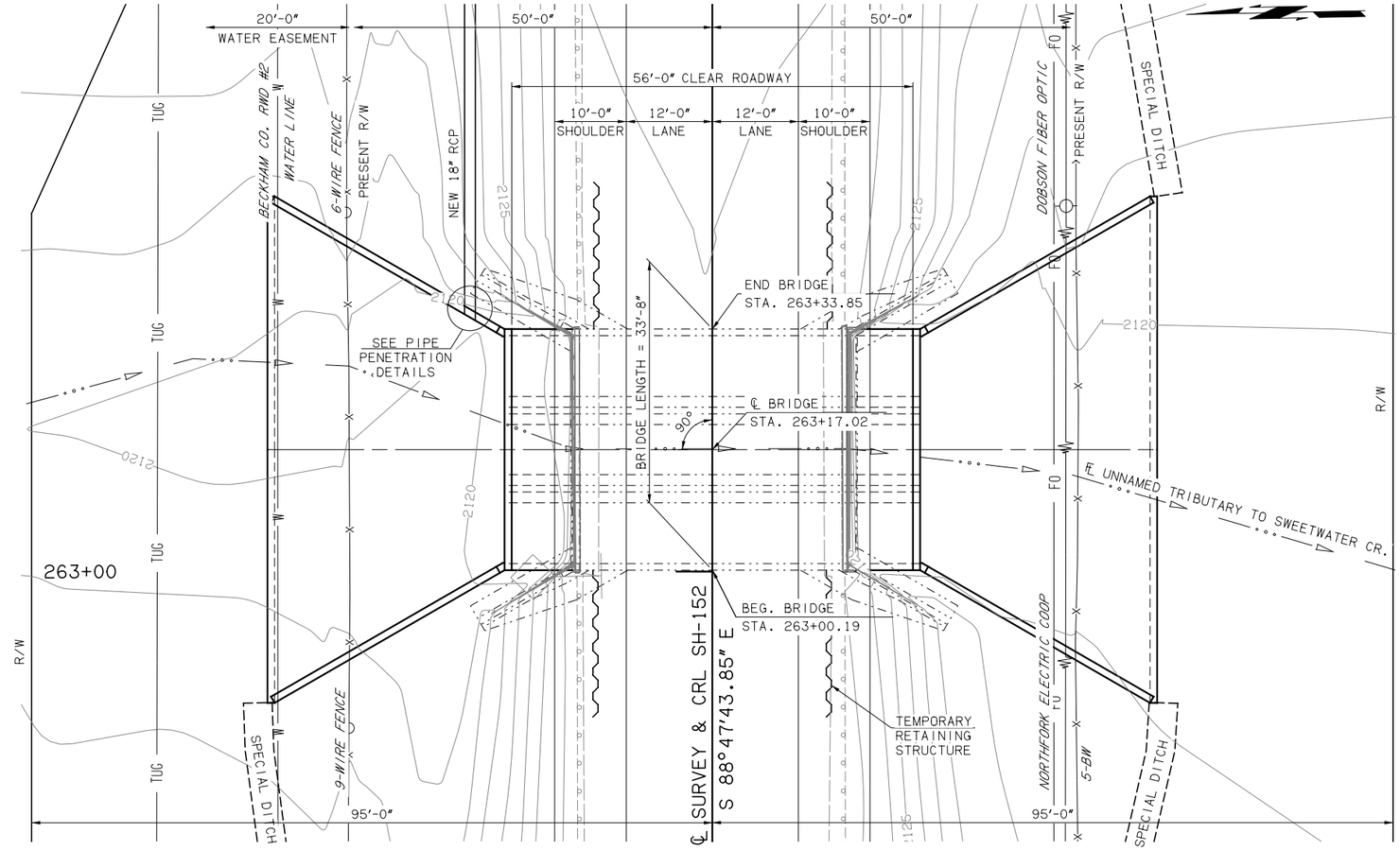
SH-152 BECKHAM & ROGER MILLS COUNTIES

PAY QUANTITIES AND NOTES (TRAFFIC)

(SHEET 2 OF 2)

State Job No. 29530(04) Sheet No. AT02

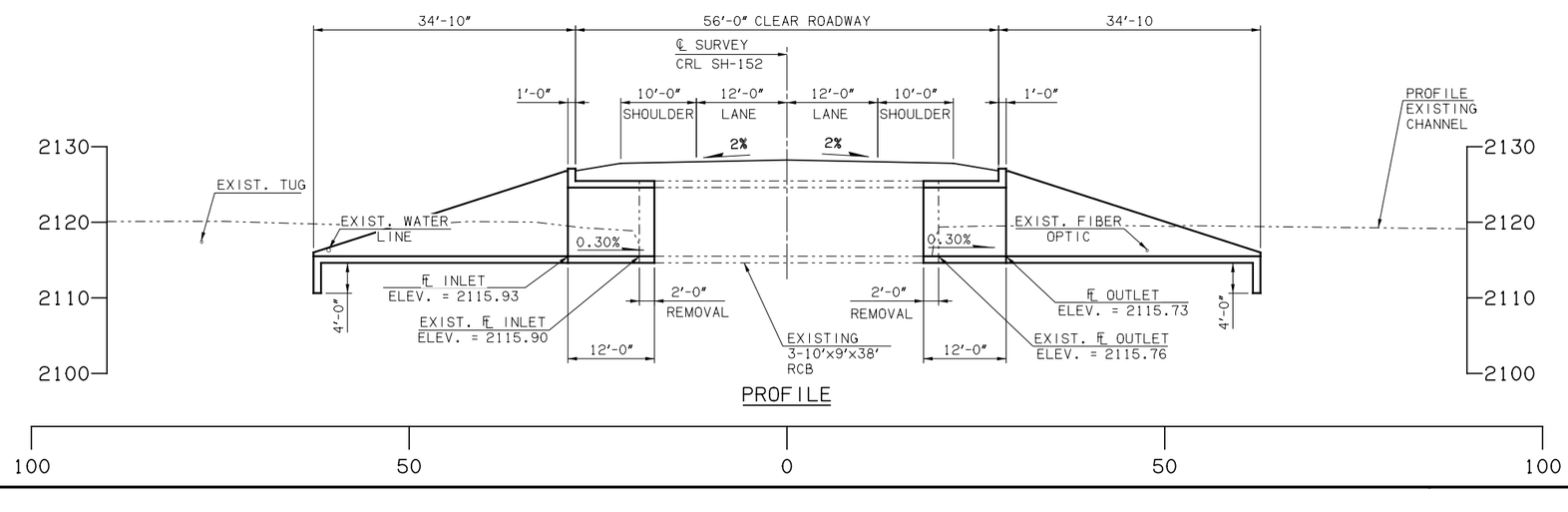
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
	OKLA	29530(04)	16		***



PLAN

BM#219 ELEV. = 2128.63 SET ¾" IRON BAR
ALIGNMENT A001 STA. 257+68, 49' RT.

BM#220 ELEV. = 2127.22 SET ¾" IRON BAR
ALIGNMENT A001 STA. 264+81, 49' RT.



PROFILE

INDEX OF SHEETS
BRIDGE 'A'

STANDARDS

SBI-5-2

NEW CONSTRUCTION DESIGN DATA

MATERIAL: CLASS AA CONCRETE f'c = 4 KSI
REINFORCING STEEL (GR. 60) fy = 60 KSI

LOADING: HL-93 AND ODOT OVERLOAD TRUCK.

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION.

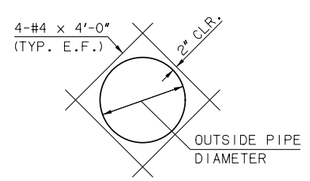
HYDRAULIC DATA

TOTAL DRAINAGE AREA = 1.43 SQ. MILES
TOTAL CONTROLLED DRAINAGE AREA = 0.00 SQ. MILES
EFFECTIVE DRAINAGE AREA = 1.43 SQ. MILES

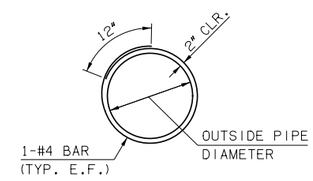
Q2	= 105 CFS	Q25	= 805 CFS
V2	= 0.71 FPS	V25	= 4.39 FPS
CHW2	= 2120.99 FT	CHW25	= 2122.48 FT
Q5	= 275 CFS	Q50	= 1091 CFS
V5	= 1.52 FPS	V50	= 5.90 FPS
CHW5	= 2122.00 FT	CHW50	= 2122.95 FT
Q10	= 465 CFS	Q100	= 1470 CFS
V10	= 2.56 FPS	V100	= 7.92 FPS
CHW10	= 2122.02 FT	CHW100	= 2124.26 FT

QOT > Q500

ALL IMPACTED UTILITIES SHOWN ARE SCHEDULED TO BE RELOCATED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL UTILITIES HAVE BEEN RELOCATED PRIOR TO CONSTRUCTION.



OPTIONAL PIPE PENETRATION DETAIL



TYPICAL PIPE PENETRATION DETAIL

NOTE: SEE SUMMARY OF DRAINAGE STRUCTURES FOR PIPE OUTLET ELEVATION

ITEMIZED QUANTITIES

ITEM	UNIT	INLET	OUTLET	TOTAL
UNCLASSIFIED EXCAVATION	CY	560.00	570.00	1130.00
STRUCTURAL EXCAVATION UNCLASSIFIED	CY	62.00	62.00	124.00
TEMPORARY EARTH RETAINAGE	LSUM			1.00
CLASS AA CONCRETE	CY	202.20	202.20	404.40
REINFORCING STEEL	LB	19980.00	19980.00	39960.00
REMOVAL OF BRIDGE ITEMS	LSUM			1.00

BRIDGE 'A'

Design		
Drawn		
Checked		
Approved		
Squad		

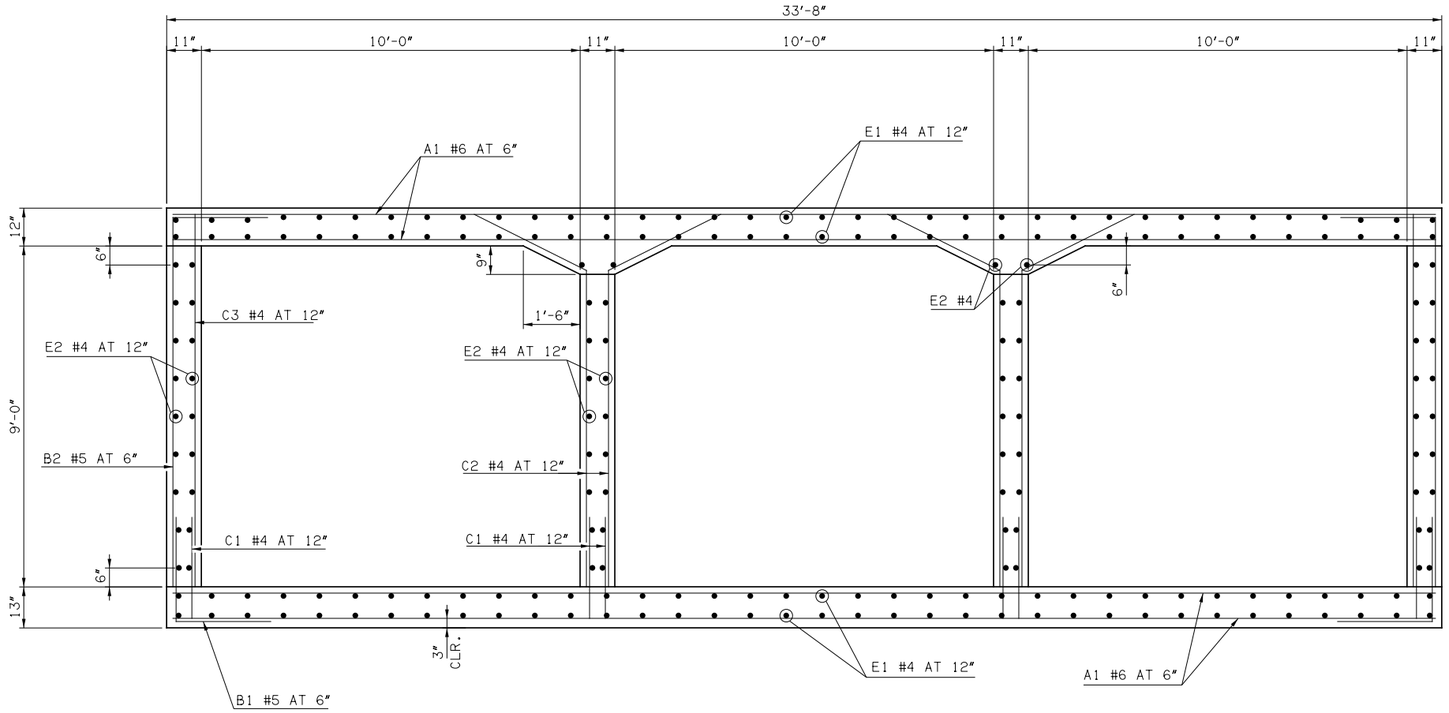
SH-152 BECKHAM & ROGER MILLS COUNTIES

PLAN AND PROFILE

℄ BRIDGE STA. 263+17.02
3 - 10' x 9' x 12.0' RCB UPSTREAM
3 - 10' x 9' x 12.0' RCB DOWNSTREAM

State Job No. 29530(04) Sheet No. B001

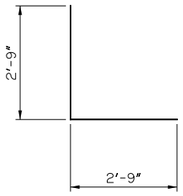
T/27/2022
5:37:42 PM
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\S\BRIDGE_A\BRA_GPE_01_29530.dgn



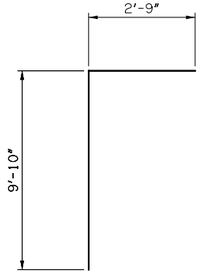
BARREL SECTION

BAR LIST - RCB BARREL
ONE SHOWN; TWO REQUIRED

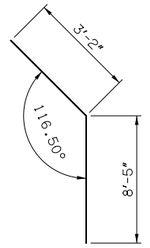
MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
A1	# 6	100	STR.	33'-3"	
B1	# 5	50	BNT.	5'-6"	
B2	# 5	50	BNT.	12'-7"	
C1	# 4	78	STR.	2'-9"	
C2	# 4	52	BNT.	11'-7"	
C3	# 4	26	STR.	9'-10"	
E1	# 4	140	STR.	11'-8"	
E2	# 4	72	STR.	11'-8"	



B1 #5 x 5'-6"



B2 #5 x 12'-7"



C2 #4 x 11'-7"

QUANTITIES - RCB BARREL

ITEM	UNIT	INLET	OUTLET
UNCLASSIFIED EXCAVATION	CY	560.00	570.00
STRUCTURAL EXCAVATION UNCLASSIFIED	CY	62.00	62.00
CLASS AA CONCRETE	CY	148.00	148.00
REINFORCING STEEL	LB	19980.00	19980.00

BRIDGE 'A'

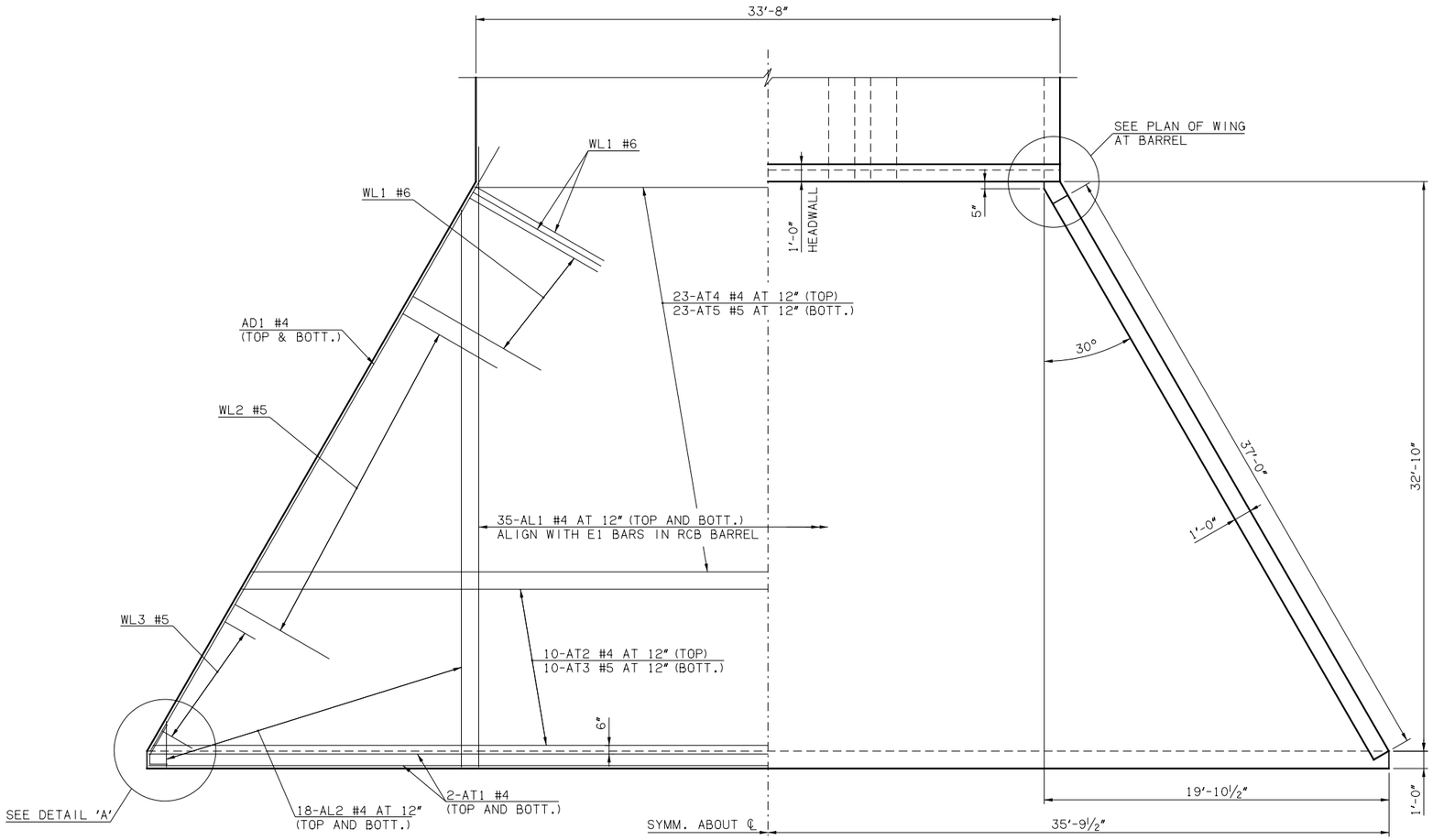
Design		
Drawn		
Checked		
Approved		
Squad		

SH-152 BECKHAM & ROGER MILLS COUNTIES

RCB DETAILS
(SHEET 1 OF 3)

State Job No. 29530(04) Sheet No. B002

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
	OKLA	29530(04)	16		***

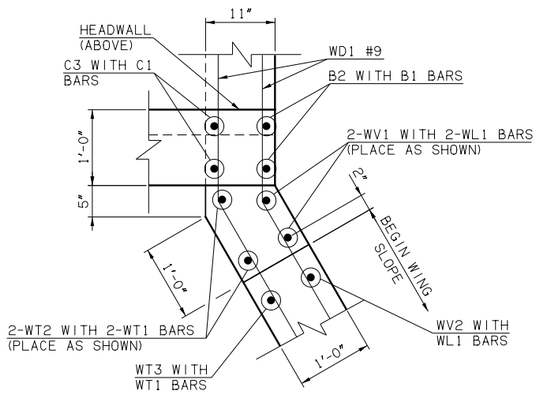


PLAN

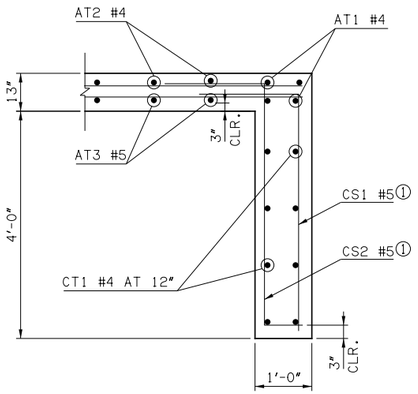
BAR LIST - APRON, CURTAIN, AND HEADWALL
ONE SHOWN; TWO REQUIRED

	MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
	AC	# 4	4	BNT.	3'-8"	
	AD1	# 4	4	STR.	39'-9"	
	AL1	# 4	70	STR.	35'-7"	
(2)	AL2	# 4	72	STR.	17'-2" AVG.	2'-6" TO 31'-10"
	AT1	# 4	4	STR.	73'-9"	
(1)	AT2	# 4	10	STR.	68'-2" AVG.	62'-11" TO 73'-4"
(1)	AT3	# 5	10	STR.	68'-2" AVG.	62'-11" TO 73'-4"
	AT4	# 4	23	STR.	46'-7" AVG.	33'-11" TO 59'-3"
	AT5	# 5	23	STR.	46'-7" AVG.	33'-11" TO 59'-3"
	CH	# 4	4	STR.	33'-4"	
	CL1	# 4	35	BNT.	4'-4"	
	CL2	# 4	35	BNT.	4'-3"	
	CS1	# 5	71	BNT.	5'-9"	
	CS2	# 5	71	BNT.	7'-1"	
	CS3	# 5	4	BNT.	6'-0"	
(1)	CT1	# 4	8	STR.	73'-9"	

(1) INCLUDES 2'-6" LAP
(2) 4-SETS OF 18-AL2 BARS REQUIRED

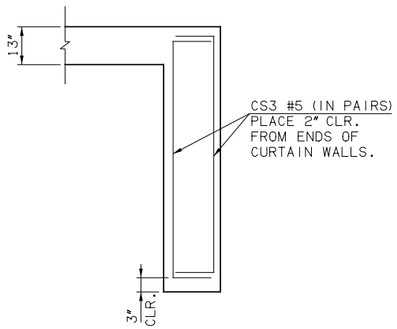


PLAN OF WING AT BARREL

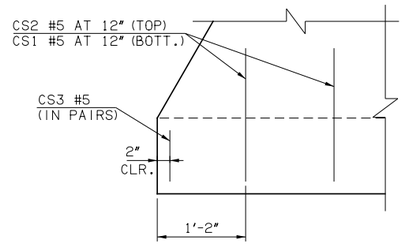


CURTAIN WALL DETAIL

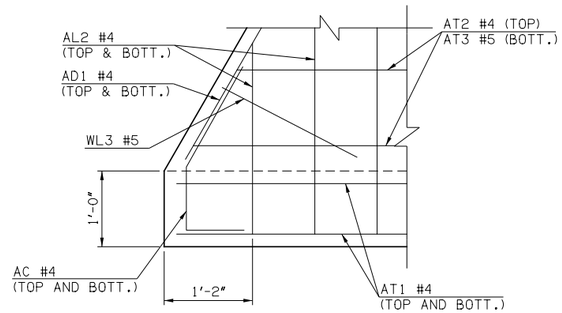
① CS1 AND CS2 BARS ALIGN WITH AL BARS IN APRON SLAB.



CURTAIN WALL END DETAIL



CURTAIN WALL - APRON PLAN



DETAIL 'A'

BRIDGE 'A'

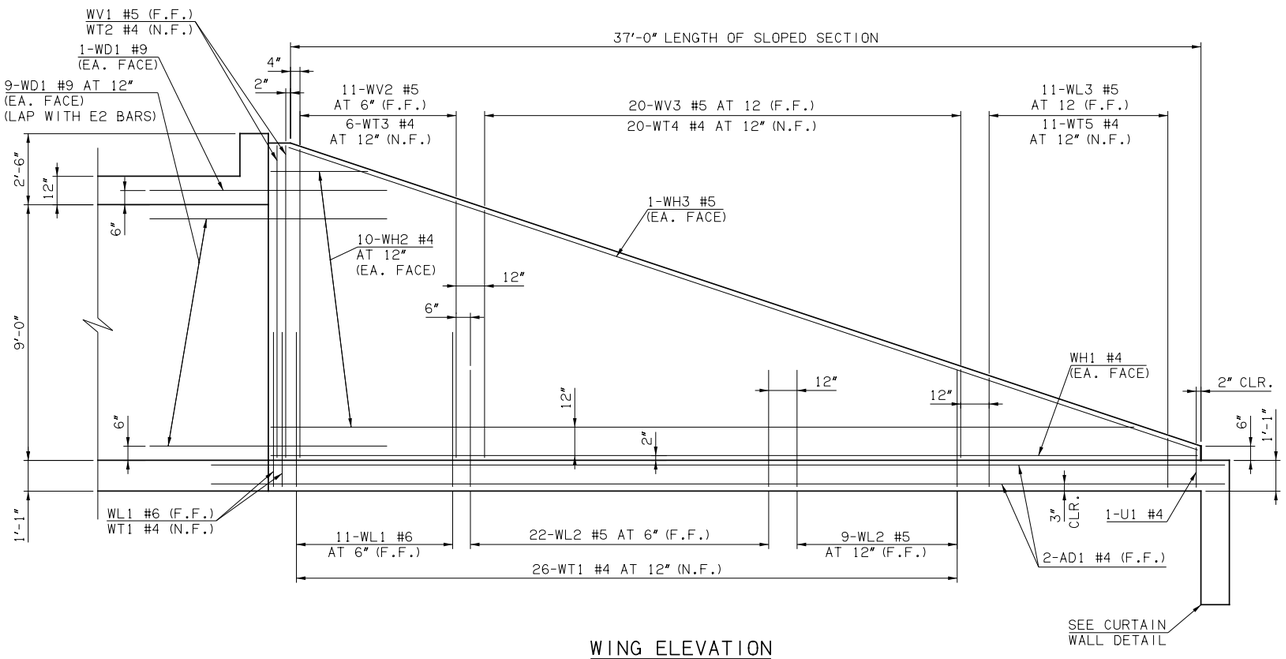
Design		
Drawn		
Checked		
Approved		
Squad		

SH-152 BECKHAM & ROGER MILLS COUNTIES

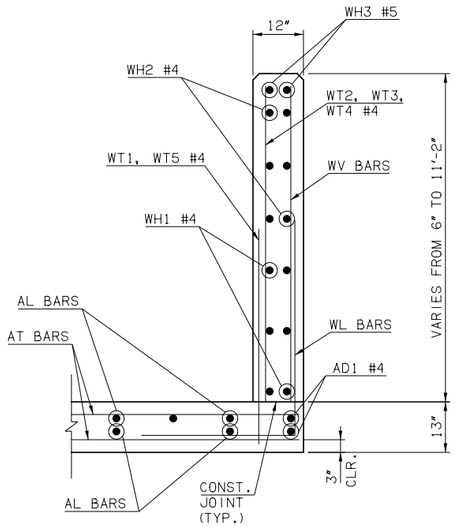
RCB DETAILS
(SHEET 2 OF 3)

State Job No. 29530(04) Sheet No. B003

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
	OKLA	29530(04)	16		***



WING ELEVATION



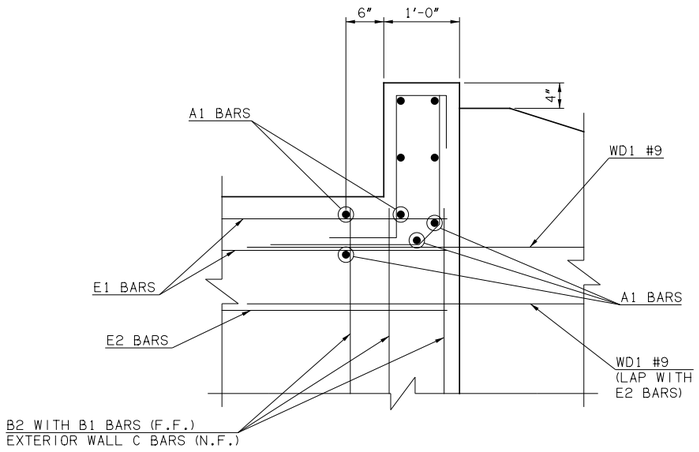
TYPICAL SECTION THRU WING

NOTE:
F.F. = FAR FACE
N.F. = NEAR FACE

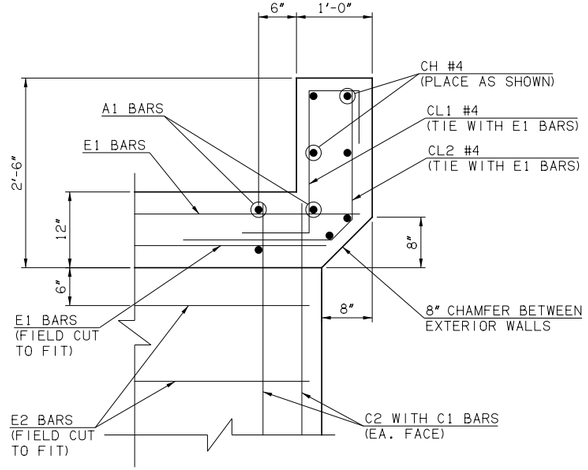
BAR LIST - WINGWALL
ONE SHOWN; FOUR REQUIRED

MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
WD1	# 9	20	BNT.	8'-4"	
WH1	# 4	2	STR.	37'-9"	
(1) WH2	# 4	20	STR.	19'-5" AVG.	3'-10" TO 35'-0"
WH3	# 5	2	STR.	38'-3"	
WL1	# 6	13	BNT.	13'-10"	
WL2	# 5	31	BNT.	10'-3"	
WL3	# 5	11	BNT.	4'-9" AVG.	3'-3" TO 6'-3"
WT1	# 4	28	STR.	2'-10"	
WT2	# 4	2	STR.	11'-0"	
WT3	# 4	6	STR.	10'-2" AVG.	9'-6" TO 10'-10"
WT4	# 4	20	STR.	6'-5" AVG.	3'-8" TO 9'-2"
WT5	# 4	11	STR.	2'-9" AVG.	1'-3" TO 4'-3"
WV1	# 5	2	STR.	11'-0"	
WV2	# 5	11	STR.	10'-2" AVG.	9'-6" TO 10'-10"
WV3	# 5	20	STR.	6'-5" AVG.	3'-8" TO 9'-2"
U1	# 4	1	BNT.	3'-0"	

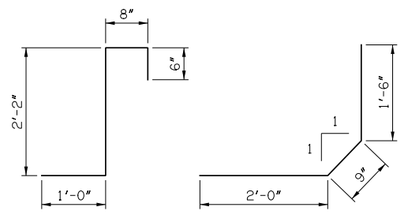
(1) 2-SETS OF 10-WH2 BARS REQUIRED

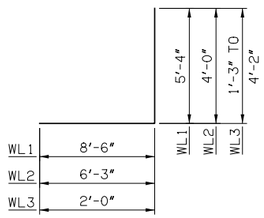


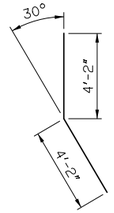
HEADWALL DETAIL
AT EXTERIOR WALL

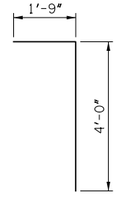


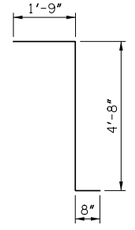
HEADWALL DETAIL
AT INTERIOR WALL

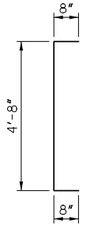


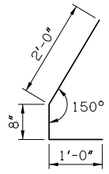


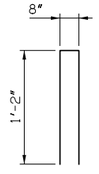












BRIDGE 'A'

Design		
Drawn		
Checked		
Approved		
Squad		

SH-152 BECKHAM & ROGER MILLS COUNTIES

RCB DETAILS
(SHEET 3 OF 3)

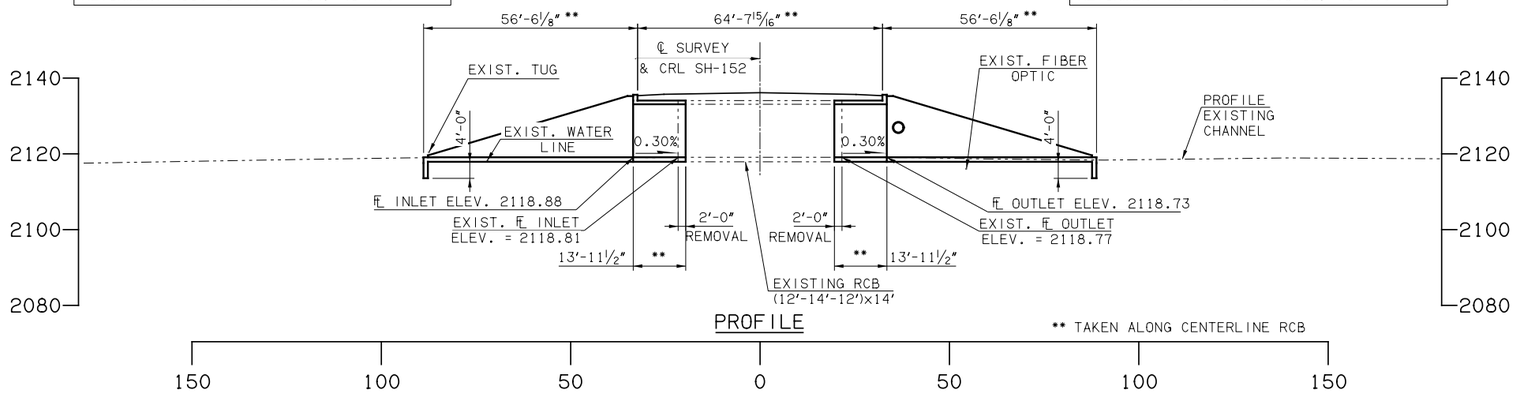
State Job No. 29530(04) Sheet No. B004

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
	OKLA	29530(04)	16		***

PLAN

BM#221 ELEV. = 2131.35 SET ¾" IRON BAR
ALIGNMENT A001 STA. 271+84, 49' RT.

BM#222 ELEV. = 2133.57 SET ¾" IRON BAR
ALIGNMENT A001 STA. 278+92, 49' RT.



PROFILE

** TAKEN ALONG CENTERLINE RCB

INDEX OF SHEETS
BRIDGE 'B'

STANDARDS

SBI-5-2

NEW CONSTRUCTION DESIGN DATA

MATERIAL: CLASS AA CONCRETE f'c = 4 KSI
REINFORCING STEEL (GR. 60) fy = 60 KSI

LOADING: HL-93 AND ODOT OVERLOAD TRUCK.

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION.

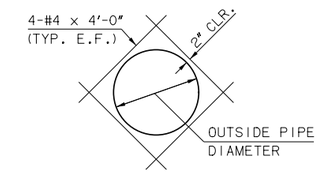
HYDRAULIC DATA

TOTAL DRAINAGE AREA = 5.39 SQ. MILES
TOTAL CONTROLLED DRAINAGE AREA = 0.00 SQ. MILES
EFFECTIVE DRAINAGE AREA = 5.39 SQ. MILES

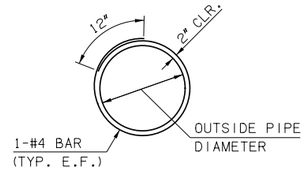
Q2	= 255 CFS	Q25	= 1930 CFS
V2	= 2.24 FPS	V25	= 8.30 FPS
CHW2	= 2122.89 FT	CHW25	= 2126.48 FT
Q5	= 660 CFS	Q50	= 2620 CFS
V5	= 3.80 FPS	V50	= 10.55 FPS
CHW5	= 2125.08 FT	CHW50	= 2127.53 FT
Q10	= 1120 CFS	Q100	= 3480 CFS
V10	= 5.53 FPS	V100	= 14.35 FPS
CHW10	= 2125.71 FT	CHW100	= 2129.51 FT

QOT > Q500

ALL IMPACTED UTILITIES SHOWN ARE SCHEDULED TO BE RELOCATED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL UTILITIES HAVE BEEN RELOCATED PRIOR TO CONSTRUCTION.



OPTIONAL PIPE PENETRATION DETAIL



TYPICAL PIPE PENETRATION DETAIL

NOTE: SEE SUMMARY OF DRAINAGE STRUCTURES FOR PIPE OUTLET ELEVATION

ITEMIZED QUANTITIES

ITEM	UNIT	INLET	OUTLET	TOTAL
UNCLASSIFIED EXCAVATION	CY	1240.00	1240.00	2480.00
STRUCTURAL EXCAVATION UNCLASSIFIED	CY	148.00	148.00	296.00
TEMPORARY EARTH RETAINAGE	LSUM			1.00
CLASS AA CONCRETE	CY	377.80	377.80	755.60
REINFORCING STEEL	LB	46880.00	46880.00	93760.00
REMOVAL OF BRIDGE ITEMS	LSUM			1.00

BRIDGE 'B'

Design		
Drawn		
Checked		
Approved		
Squad		

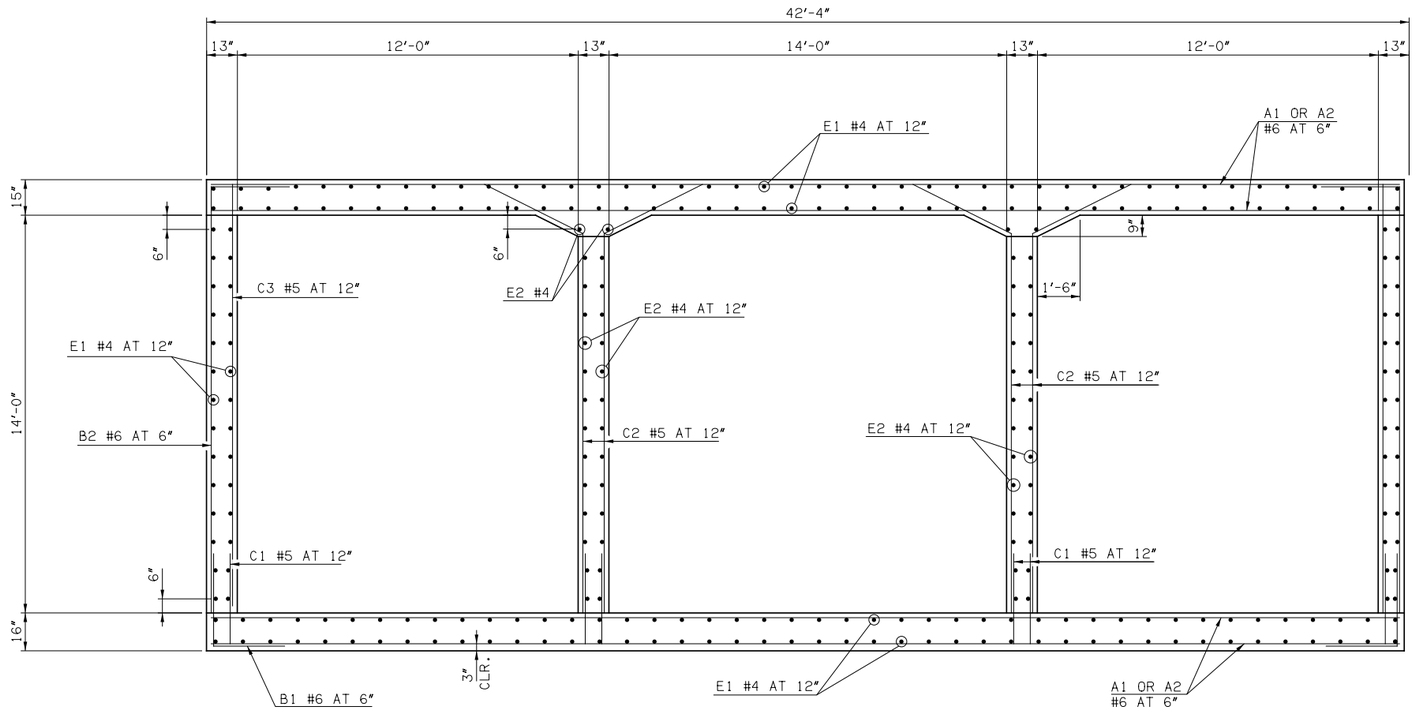
SH-152 BECKHAM & ROGER MILLS COUNTIES

PLAN AND PROFILE

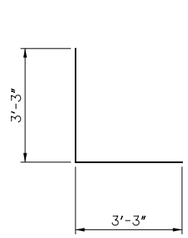
℄ BRIDGE STA. 276+23.43, SKEWED 30°L.F.
(12'-14'-12') x 14' x 13.95' RCB UPSTREAM
(12'-14'-12') x 14' x 13.95' RCB DOWNSTREAM

State Job No. 29530(04) Sheet No. B005

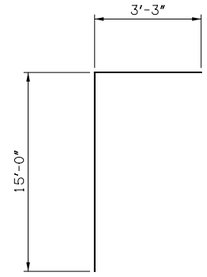
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
	OKLA	29530(04)	16		***



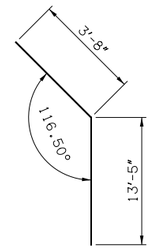
BARREL SECTION



B1 #6 x 6'-6"



B2 #6 x 18'-3"



C2 #5 x 17'-1"

BAR LIST - RCB BARREL
ONE SHOWN; TWO REQUIRED

MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
A1	# 6	208	STR.	11'-9" AVG.	1'-0" TO 22'-6"
A2	# 6	88	STR.	23'-6"	
B1	# 6	54	BNT.	6'-6"	
B2	# 6	54	BNT.	18'-3"	
C1	# 5	80	STR.	3'-3"	
C2	# 5	52	BNT.	17'-1"	
C3	# 5	28	STR.	15'-0"	
E1	# 4	236	STR.	13'-9"	
E2	# 4	60	STR.	12'-9"	

QUANTITIES - RCB BARREL

ITEM	UNIT	INLET	OUTLET
UNCLASSIFIED EXCAVATION	CY	1240.00	1240.00
STRUCTURAL EXCAVATION UNCLASSIFIED	CY	148.00	148.00
CLASS AA CONCRETE	CY	377.80	377.80
REINFORCING STEEL	LB	46880.00	46880.00

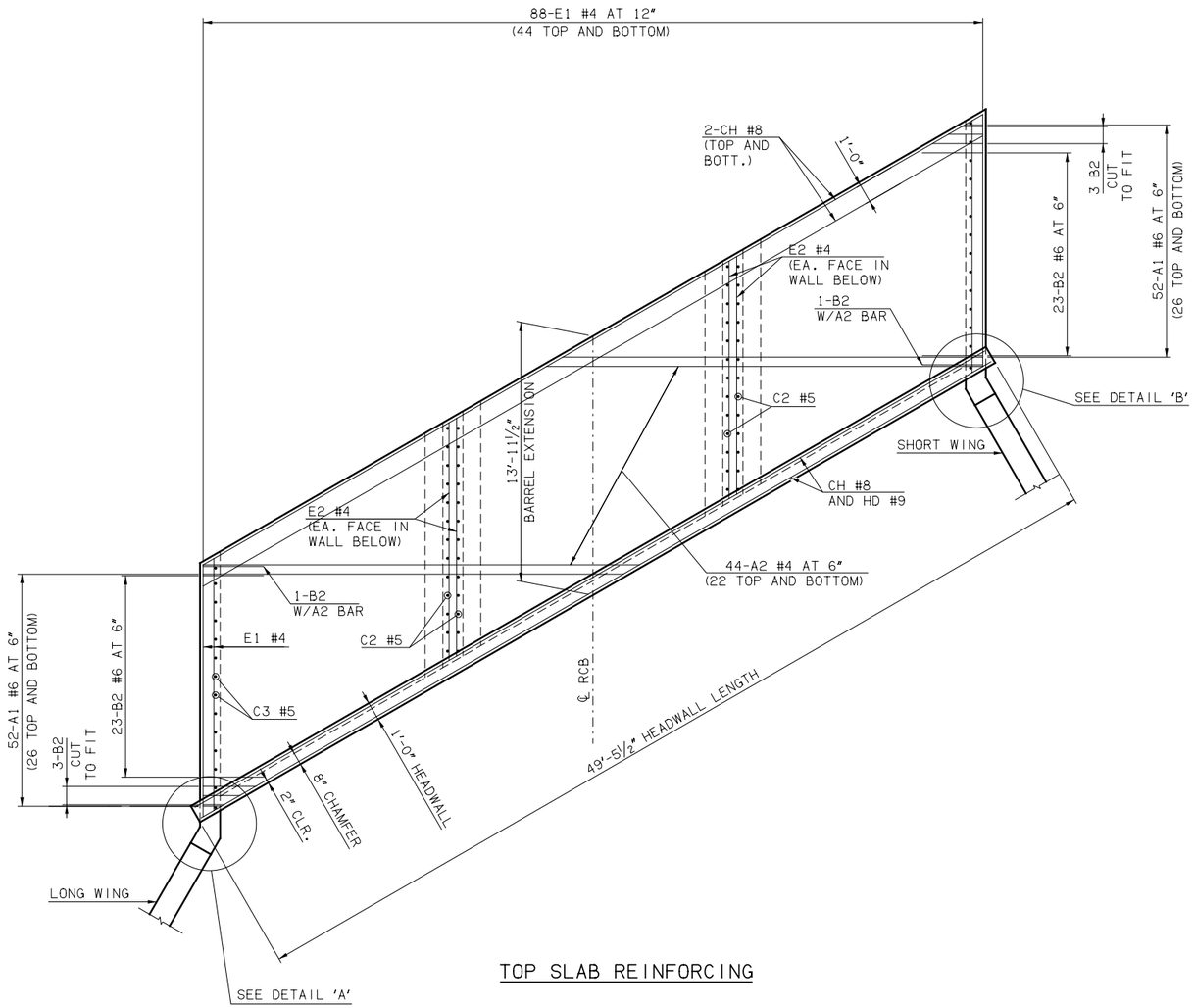
BRIDGE 'B'

Design		
Drawn		
Checked		
Approved		
Squad		

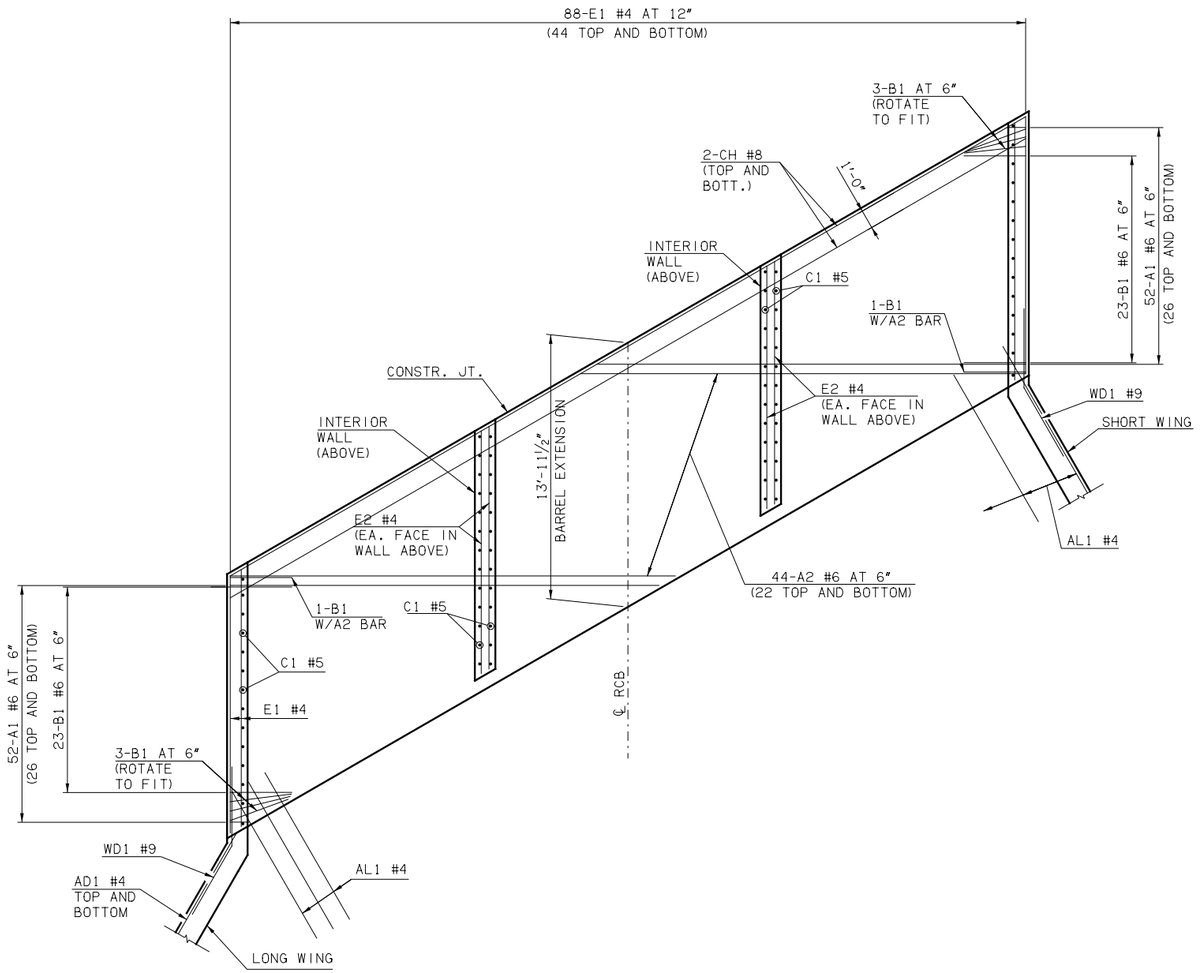
SH-152 BECKHAM & ROGER MILLS COUNTIES

RCB DETAILS
(SHEET 1 OF 6)

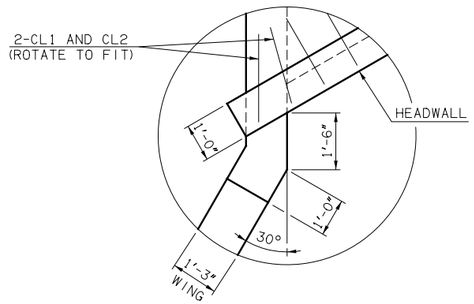
State Job No. 29530(04) Sheet No. B006



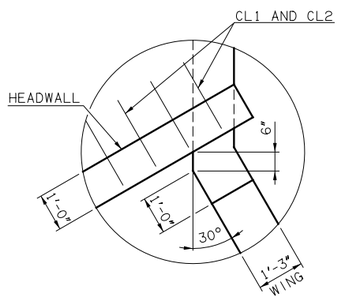
TOP SLAB REINFORCING



BOTTOM SLAB REINFORCING



DETAIL 'A'



DETAIL 'B'

BRIDGE 'B'

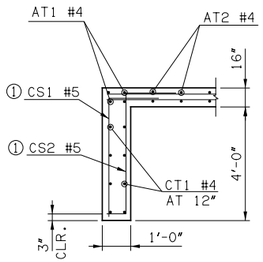
Design		
Drawn		
Checked		
Approved		
Squad		

SH-152 BECKHAM & ROGER MILLS COUNTIES

RCB DETAILS
(SHEET 2 OF 6)

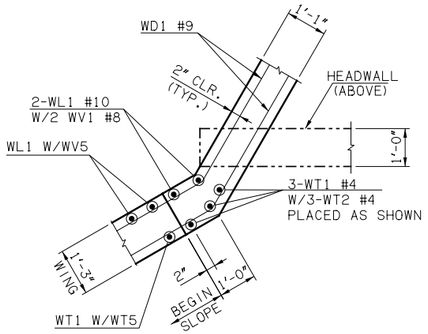
State Job No. 29530(04) Sheet No. B007

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
	OKLA	29530(04)	16		***



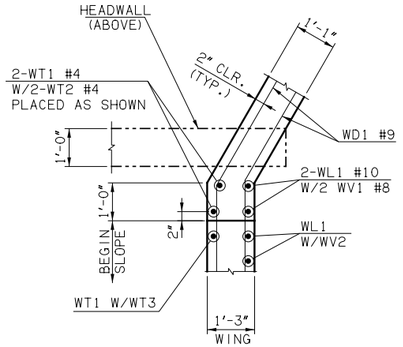
CURTAIN WALL DETAIL

① CS1 AND CS2 BARS ALIGN WITH AL BARS IN APRON SLAB.



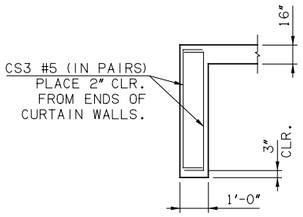
PLAN OF LONG WING AT BARREL

NOTE: BARREL REINFORCEMENT NOT SHOWN FOR CLARITY

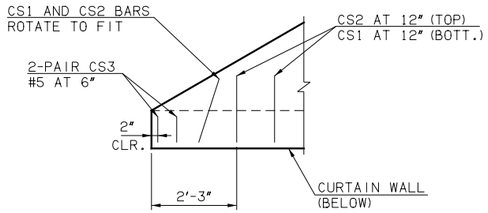


PLAN OF SHORT WING AT BARREL

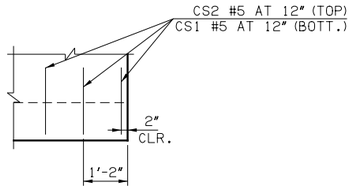
NOTE: BARREL REINFORCEMENT NOT SHOWN FOR CLARITY



CURTAIN WALL END DETAIL



CURTAIN WALL SKEWED APRON PLAN



CURTAIN WALL STRAIGHT APRON PLAN

END SECTION PLAN

BRIDGE 'B'

Design		
Drawn		
Checked		
Approved		
Squad		

SH-152 BECKHAM & ROGER MILLS COUNTIES

RCB DETAILS
(SHEET 3 OF 6)

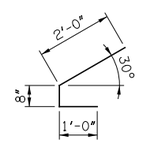
State Job No. 29530(04) Sheet No. B008

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
	OKLA	29530(04)	16		***

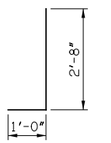
BAR LIST - APRON, CURTAIN, AND HEADWALL
ONE SHOWN; TWO REQUIRED

	MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
	AC1	# 4	2	BNT.	3'-8"	
	AC2	# 4	2	BNT.	3'-8"	
(1)	AD1	# 4	2	STR.	96'-0"	
	AL1	# 4	96	STR.	49'-9"	
	AL2	# 4	156	STR.	24'-8" AVG.	2'-6" TO 46'-10"
	AL3	# 4	4	STR.	47'-7"	
(2)	AT1	# 4	4	STR.	134'-4"	
(2)	AT2	# 4	7	STR.	128'-5" AVG.	123'-1" to 133'-9"
(2)	AT3	# 5	7	STR.	128'-5" AVG.	123'-1" to 133'-9"
(1)	AT4	# 4	33	STR.	91'-2" AVG.	63'-5" to 118'-11"
(1)	AT5	# 5	33	STR.	91'-2" AVG.	63'-5" to 118'-11"
	AT6	# 4	8	STR.	53'-8" AVG.	48'-1" to 59'-3"
	AT7	# 5	8	STR.	53'-8" AVG.	48'-1" to 59'-3"
	CH	# 8	4	STR.	49'-1"	
	CL1	# 5	51	BNT.	4'-4"	
	CL2	# 5	51	BNT.	4'-3"	
	CS1	# 5	130	BNT.	5'-9"	
	CS2	# 5	130	BNT.	7'-4"	
	CS3	# 5	4	BNT.	6'-3"	
(2)	CT1	# 4	8	STR.	134'-4"	
	HD	# 9	2	STR.	48'-6"	

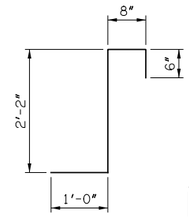
(1) INCLUDES 1 - 2'-6" LAP
(2) INCLUDES 2 - 2'-6" LAPS



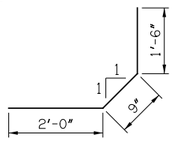
AC1 #4 x 3'-8"



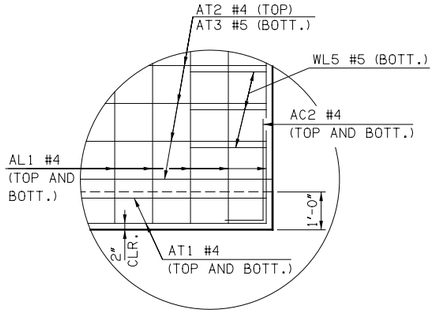
AC2 #4 X 3'-8"



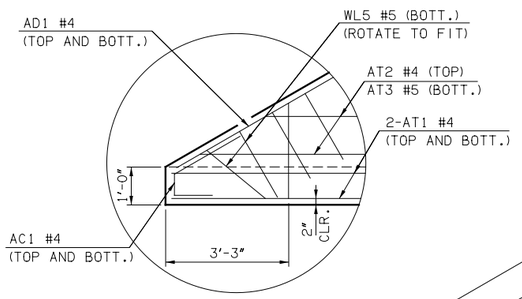
CL1 #5 X 4'-4"



CL2 #5 X 4'-3"



DETAIL 'B'



DETAIL 'A'

APRON REINFORCING PLAN

BRIDGE 'B'

Design		
Drawn		
Checked		
Approved		
Squad		

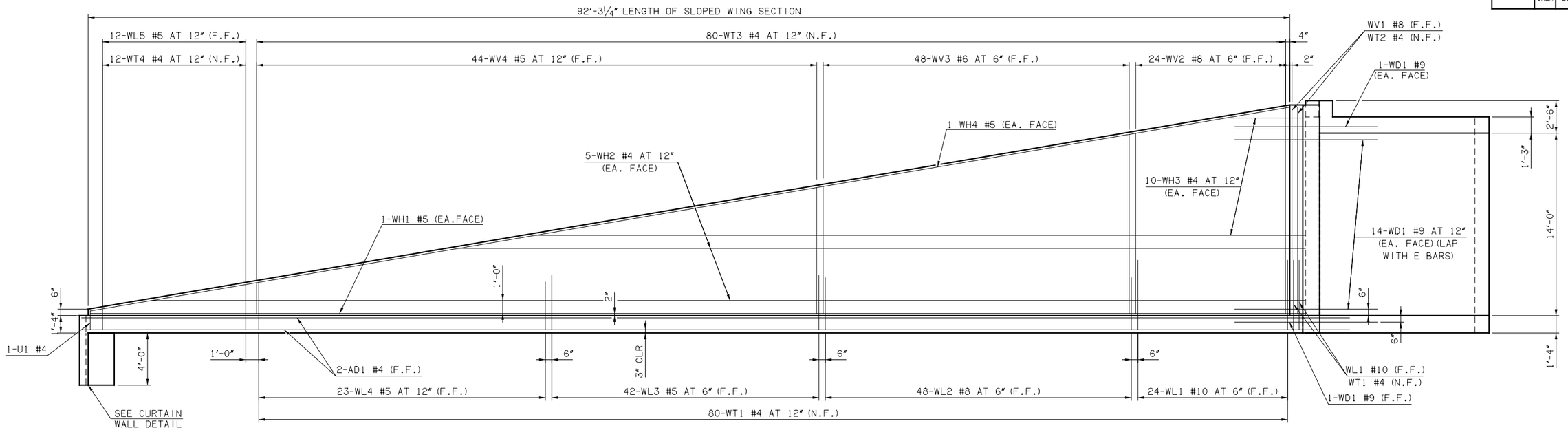
SH-152 BECKHAM & ROGER MILLS COUNTIES

RCB DETAILS
(SHEET 4 OF 6)

State Job No. 29530(04) Sheet No. B009

7/27/2022
4:03:30 PM
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\S\BRIDGE_B\BR_B_DET_04A_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
	OKLA	29530(04)	16		***

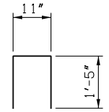


WING ELEVATION

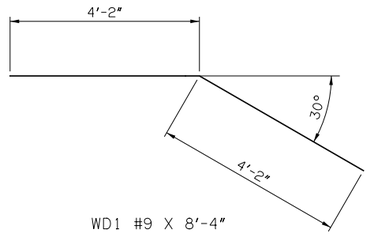
NOTE:
F.F. = FAR FACE
N.F. = NEAR FACE

WL1	15'-9"	WL1	WL2	WL3	WL4	WL5
WL2	13'-6"	5'-4"	4'-0"	4'-2"	3'-8"	1'-7" TO 3'-5"
WL3	7'-6"					
WL4	2'-0"					
WL5	2'-0"					

WL1 #10 X 21'-1"
WL2 #8 X 17'-6"
WL3 #5 X 11'-8"
WL4 #5 X 5'-8"
WL5 #5 X 4'-6" AVG.

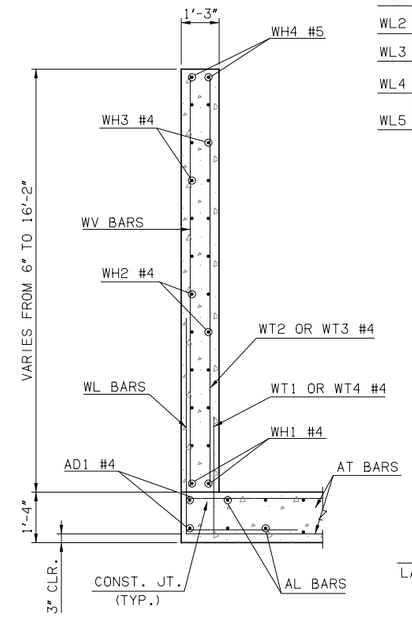


U1 #4 X 3'-9"

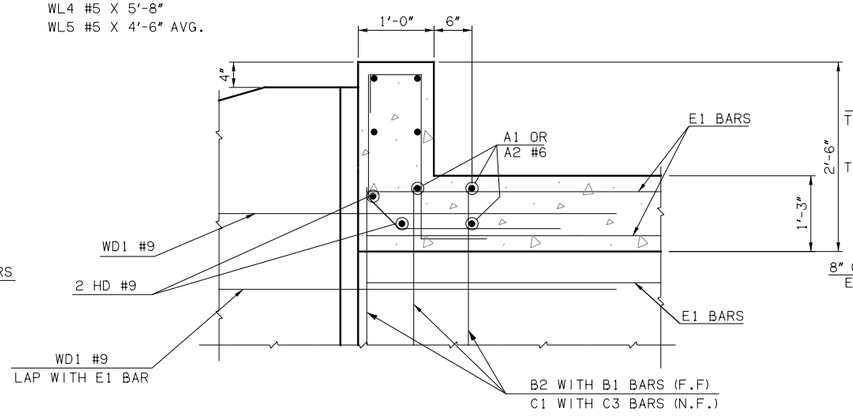


WD1 #9 X 8'-4"

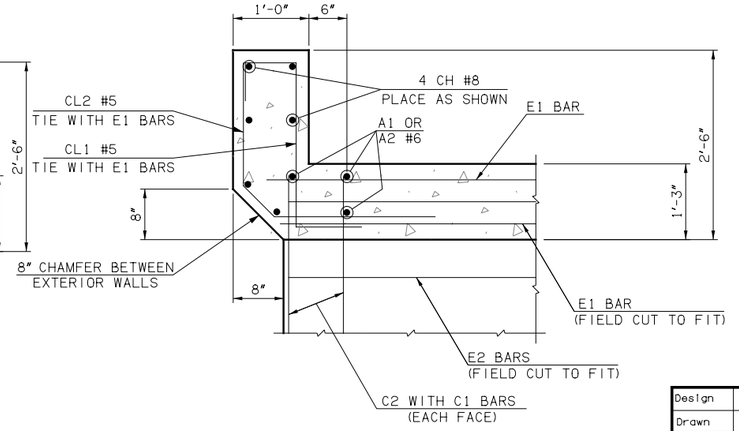
BAR BENDS



TYPICAL SECTION THRU WING



HEADWALL DETAIL AT EXTERIOR WALL



HEADWALL DETAIL AT INTERIOR WALL

BAR LIST - LONG WINGWALL
ONE SHOWN; TWO REQUIRED

MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
WD1	# 9	31	BNT.	8'-4"	
(1) WH1	# 5	2	STR.	96'-0"	
(1) WH2	# 4	10	STR.	79'-3" AVG.	67'-5" TO 91'-1"
WH3	# 4	20	STR.	32'-7" AVG.	6'-1" TO 59'-1"
(1) WH4	# 5	2	STR.	95'-11"	
WL1	# 10	26	BNT.	21'-1"	
WL2	# 8	48	BNT.	17'-6"	
WL3	# 5	42	BNT.	11'-8"	
WL4	# 5	23	BNT.	5'-8"	
WL5	# 5	12	BNT.	4'-6" AVG.	3'-7" TO 5'-5"
WT1	# 4	83	STR.	3'-6"	
WT2	# 4	3	STR.	15'-10"	
WT3	# 4	80	STR.	9'-0" AVG.	2'-4" TO 15'-8"
WT4	# 4	12	STR.	2'-6" AVG.	1'-6" TO 3'-6"
WV1	# 8	2	STR.	15'-10"	
WV2	# 8	24	STR.	14'-9" AVG.	13'-9" TO 15'-9"
WV3	# 6	48	STR.	11'-8" AVG.	9'-8" TO 13'-8"
WV4	# 5	44	STR.	5'-11" AVG.	2'-3" TO 9'-7"
U1	# 4	1	BNT.	3'-9"	

(1) INCLUDES 2'-6" LAP

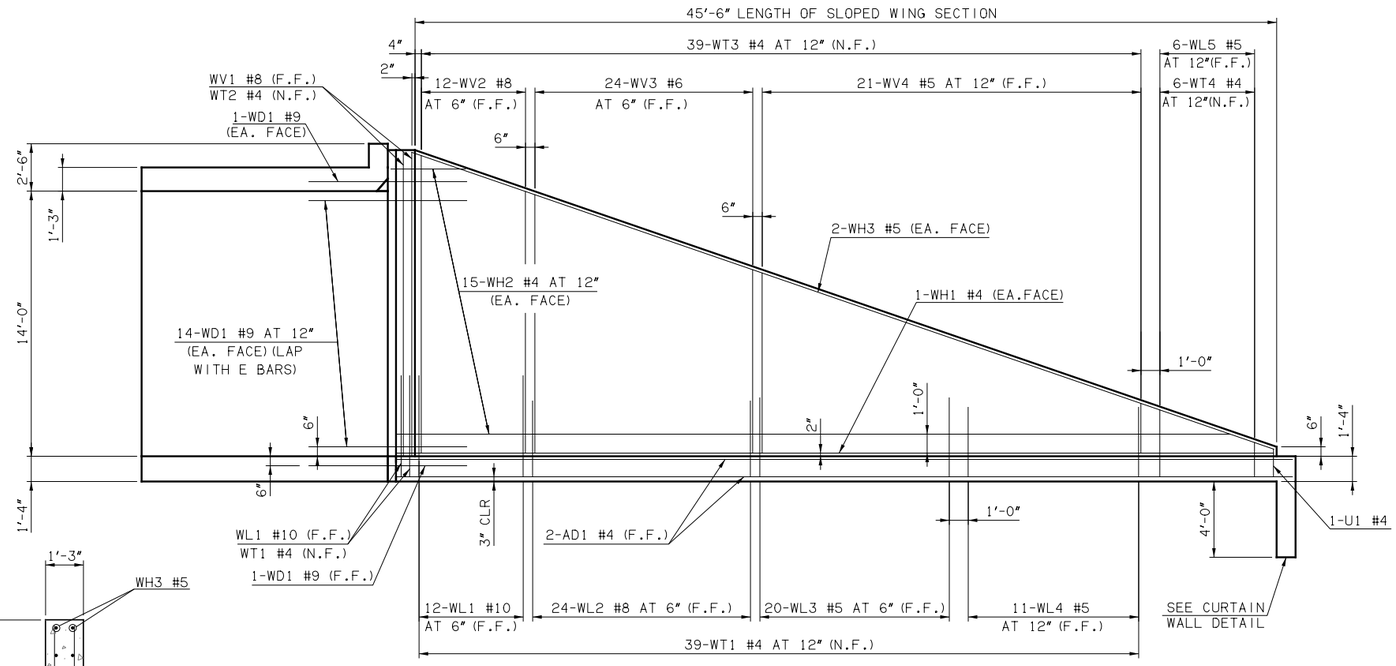
BRIDGE 'B'

Design		
Drawn		
Checked		
Approved		
Squad		

SH-152 BECKHAM & ROGER MILLS COUNTIES

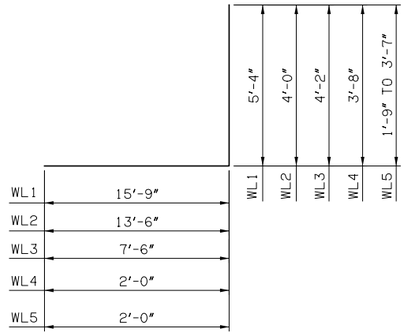
RCB DETAILS
(SHEET 5 OF 6)

State Job No. 29530(04) Sheet No. B010

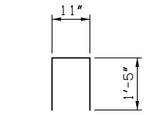


WING ELEVATION

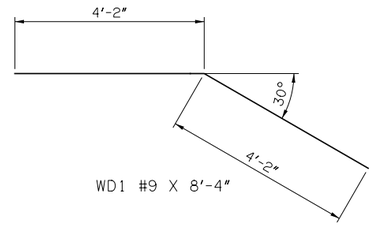
NOTE:
F.F. = FAR FACE
N.F. = NEAR FACE



WL1 #10 X 21'-1"
WL2 #8 X 17'-6"
WL3 #5 X 11'-8"
WL4 #5 X 5'-8"
WL5 #5 X 4'-8" AVG.

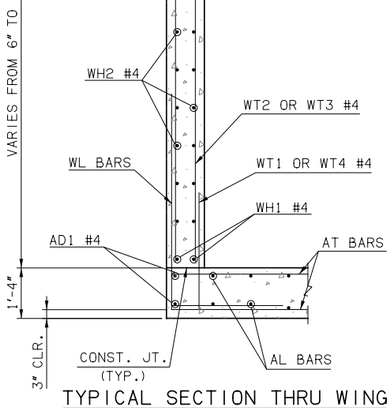


U1 #4 X 3'-9"

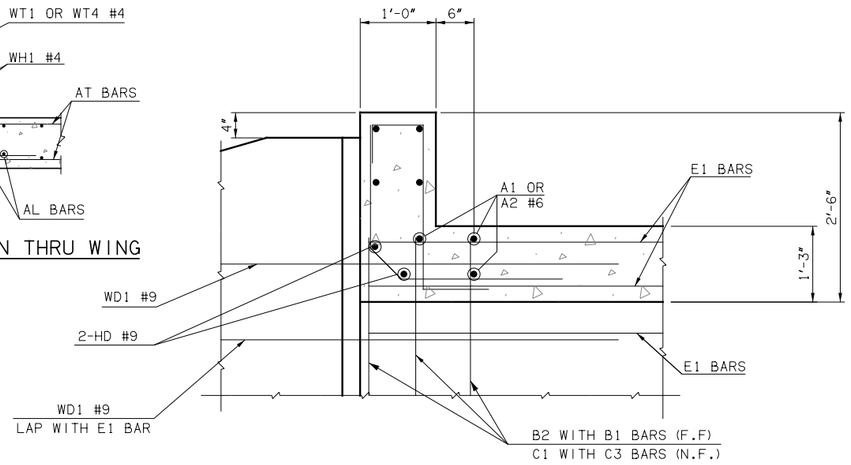


WD1 #9 X 8'-4"

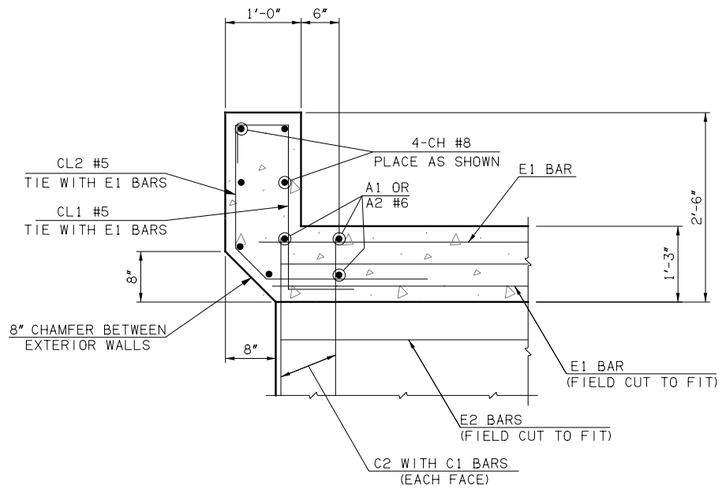
BAR BENDS



TYPICAL SECTION THRU WING



HEADWALL DETAIL AT EXTERIOR WALL



HEADWALL DETAIL AT INTERIOR WALL

BAR LIST - SHORT WINGWALL
ONE SHOWN; TWO REQUIRED

MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
WD1	# 9	31	BNT.	8'-4"	
WH1	# 4	2	STR.	46'-4"	
WH2	# 4	30	STR.	23'-11" AVG.	3'-10" TO 44'-0"
WH3	# 5	2	STR.	48'-1"	
WL1	# 10	14	BNT.	21'-1"	
WL2	# 8	24	BNT.	17'-6"	
WL3	# 5	20	BNT.	11'-8"	
WL4	# 5	11	BNT.	5'-8"	
WL5	# 5	6	BNT.	4'-8" AVG.	3'-9" TO 5'-7"
WT1	# 4	41	STR.	3'-6"	
WT2	# 4	2	STR.	15'-10"	
WT3	# 4	39	STR.	9'-1" AVG.	2'-6" TO 15'-8"
WT4	# 4	6	STR.	2'-7" AVG.	1'-9" TO 3'-5"
WV1	# 8	2	STR.	15'-10"	
WV2	# 8	12	STR.	14'-8" AVG.	13'-8" TO 15'-8"
WV3	# 6	24	STR.	11'-8" AVG.	9'-8" TO 13'-8"
WV4	# 5	21	STR.	6'-0" AVG.	2'-6" TO 5'-6"
U1	# 4	1	BNT.	3'-9"	

BRIDGE 'B'

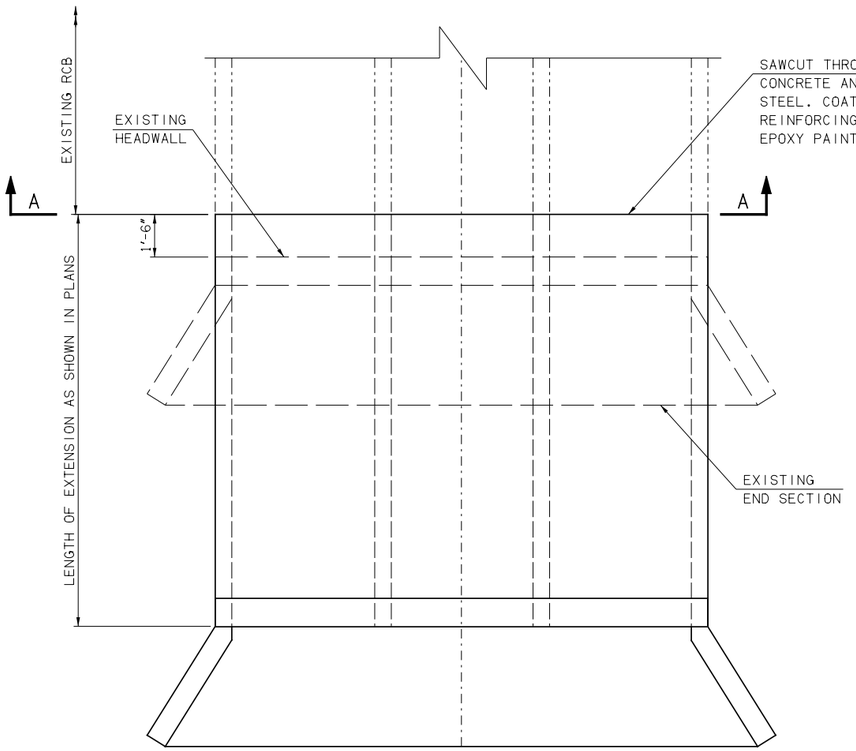
Design		
Drawn		
Checked		
Approved		
Squad		

SH-152 BECKHAM & ROGER MILLS COUNTIES

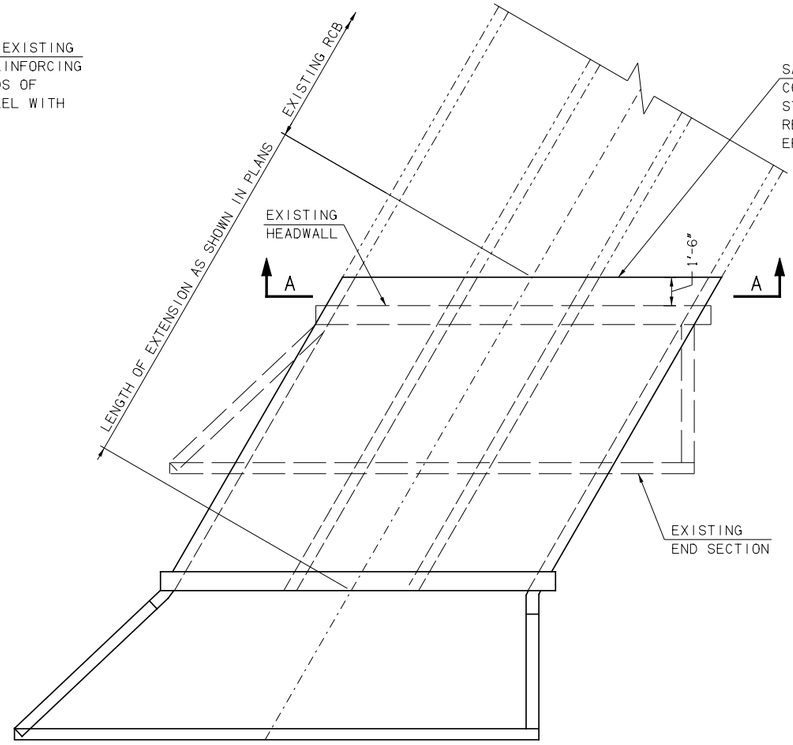
RCB DETAILS
(SHEET 6 OF 6)

State Job No. 29530(04) Sheet No. B011

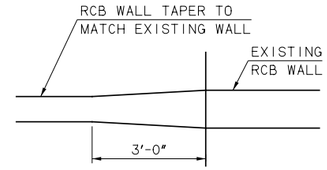
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
	OKLA	29530(04)	16		***



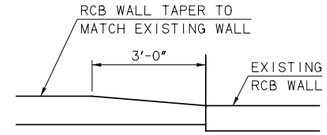
NON-SKEWED DETAIL
OF END SECTION REMOVAL



SKEWED DETAIL
OF END SECTION REMOVAL

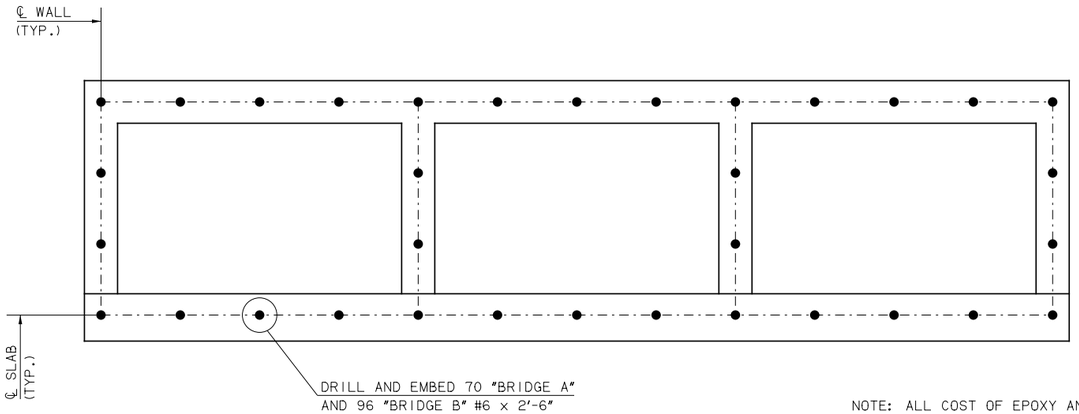


AT INTERIOR WALL



AT EXTERIOR WALL

WALL TRANSITION DETAILS



SECTION A-A

NOTE: ALL COST OF EPOXY ANCHORAGE SYSTEM, DRILLING, 262.85 LB. "BRIDGE A" DOWELS AND 360.48 LB. "BRIDGE B" DOWELS, AND INCIDENTALS NECESSARY TO ANCHOR DOWELS INTO EXISTING RCB WILL BE INCLUDED IN OTHER ITEMS OF WORK.

Design		
Drawn		
Checked		
Approved		
Squad		

SH-152 BECKHAM & ROGER MILLS COUNTIES

TYPICAL REMOVAL AND EXTENSION DETAILS

TRIPLE CELL RCB

State Job No. 29530(04) Sheet No. B012

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

REVISIONS	
DESCRIPTION	DATE

404 PERMIT INFORMATION

NATIONWIDE PERMIT NO. _____

☐ 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. _____

SPECIAL CONDITIONS

☐ NAVIGABLE WATER OF THE U.S.

☐ ON-SITE MITIGATION

☐ ENDANGERED SPECIES PRESENT

☐ HISTORIC PROPERTIES PRESENT

☐ DESIGNATED CRITICAL RESOURCE WATERS

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, WORKPADS, ETC..) WORK, AND DISCHARGES, INCLUDING COFFERDAMS, ARE NECESSARY FOR CONSTRUCTION ACTIVITIES, ACCESS FILLS, OR DEWATERING 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 CHANNELIZATION 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 RIVER CHANNEL (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.

SHEET NUMBERS: _____

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 REPORTEDTO 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

DESIGN		
DRAWN	G.M.	
CHECKED		
APPROVED		
SQUAD		

OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

SECTION 404 PERMIT COMPLIANCE

COUNTY BECKHAM & ROGER MILLS HIGHWAY SH-152 STATE JOB NO. JP29530(04) SHEET NO. E001

REVISED 04 / 01 / 2015

STORM WATER MANAGEMENT PLAN

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

SITE DESCRIPTION

PROJECT LIMITS: SH-152 BEGINNING AT THE TEXAS STATE LINE AND EXTEND EAST TO THE SH-30 JUNCTION.

PROJECT DESCRIPTION: GRADE, DRAIN, SURFACE AND BRIDGE PLANS, APPROXIMATELY 5.2 MILES OF ROADWAY (ASPHALT), T.B.S.C. AND SOLID SLAB SODDING.

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: HUMUS-POOR SAND AND LOAM

TOTAL AREA OF THE CONSTRUCTION SITE: 89.45 ACRES

ESTIMATED AREA TO BE DISTURBED: 30.12 ACRES

OFFSITE AREA TO BE DISTURBED: (FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 17.35 ACRES

TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 27.28 ACRES

POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: .53

LATITUDE & LONGITUDE OF CENTER OF PROJECT: 35°25'20.41"N, 99°57'23.68"W

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: SWEETWATER CREEK AND TRIBUTARIES TO SWEETWATER CREEK

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

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

IF YES, LIST IMPAIRMENT: ENTEROCOCCUS, E COLI

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

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.

REVISED 08 / 18 / 2017

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

- [ ] TEMPORARY SEEDING
- [X] PERMANENT SODDING, SPRIGGING OR SEEDING
- [X] VEGETATIVE MULCHING
- [ ] SOIL RETENTION BLANKET
- [X] 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 DRAIN
- [X] PAVED DITCH W/ DITCH LINER PROTECTION
- [ ] TEMPORARY DIVERSION CHANNELS
- [ ] TEMPORARY SEDIMENT BASINS
- [ ] TEMPORARY SEDIMENT TRAPS
- [ ] 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:

- [ ] 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 2019 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.

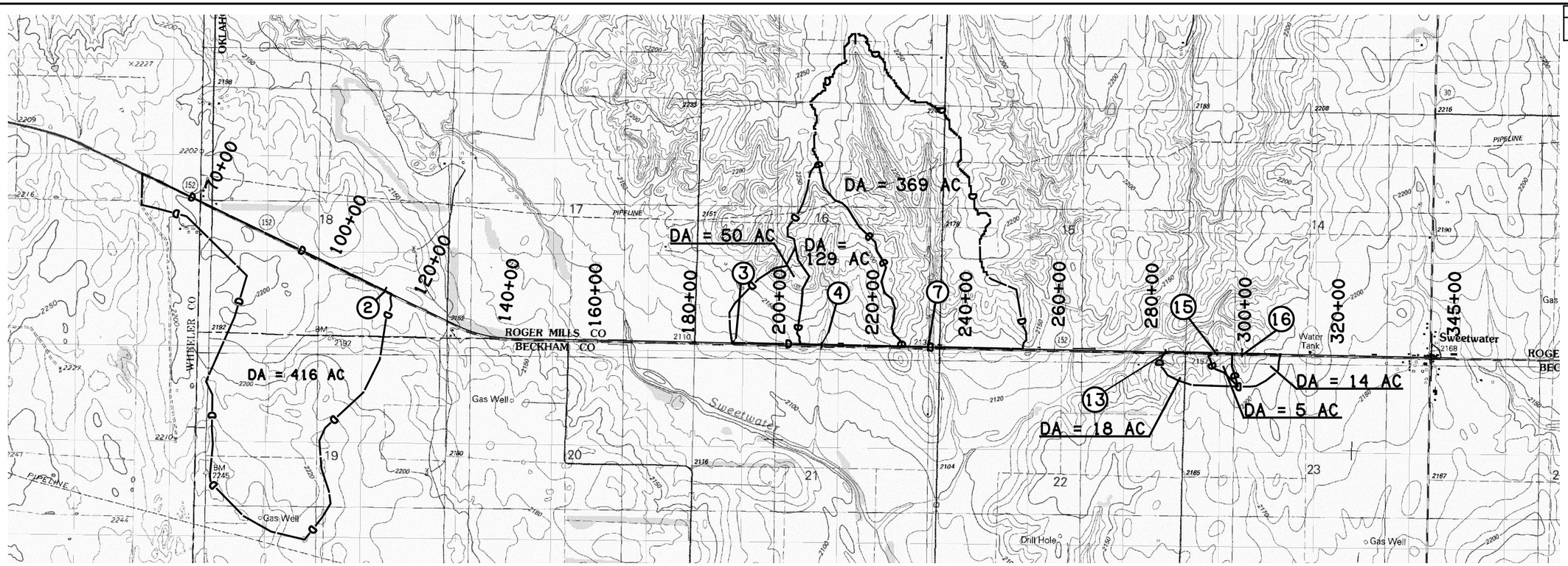
Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

STORM WATER MANAGEMENT PLAN

State Job No. 29530(04) Sheet No. R001

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***



DRAINAGE STRUCTURE DESIGN RECORD

STRUCTURE NO.	DESIGN YEAR	CENTER LINE STATION	STRUCTURE SIZE & TYPE	DRAINAGE AREA	ANTICIPATED LAND USE	AVG. SLOPE OF WATERSHED	"C" RUNOFF COEFFECIENT WEIGHTED	LENGTH OF OVERLAND FLOW	LENGTH OF CHANNEL FLOW	SLOPE OF CHANNEL	"Tc" TIME OF CONCENTRATION	INTENSITY OF DESIGN YEAR RAINFALL					DESIGN YEAR DISCHARGE					TW. DESIGN TAILWATER	FLOW LINE GRATE	FLOW LINE RIGHT	FLOW LINE LEFT	STRUCTURE SLOPE	MAXIMUM ALLOWABLE HEADWATER	FLOW VELOCITY	CONTROLLING HEADWATER	TYPE OF HYDRAULIC CONTROL	REMARKS
												5	10	25	50	100	5	10	25	50	100							V50			
				AC		FT/FT	.	FT	FT	FT/FT	MIN	IN/HR	IN/HR	IN/HR	IN/HR	IN/HR	CFS	CFS	CFS	CFS	CFS	FT	ELEV.	ELEV.	ELEV.	FT/FT	ELEV.	FT/S	ELEV.		
2	25	STA. 113+32.83 CRL SH-152	REM. HDWLS & EXTEND EXISTING 36" RCP 7.90' LT. & 9.90' RT W/PCES'S	416	PASTURE	0.006	0.16	4400.0	3200.0	0.008	94.60			2.04					136			0.82		2163.66	2162.49	0.0150	2169.86	12.29	2168.71	INLET	18" TYPE I PLAIN RIP RAP SEE SUMMARY OF RIP RAP
3	25	STA. 190+36.51 CRL SH-152	EXTEND EXISTING 6'X3' RCB 13.25 LF. LT. & 13.5 LF RT W/ SPL DES. END SECTIONS	50	PASTURE	0.047	0.36	2375.0	356.0	0.013	37.00			3.80					40			0.56		2109.02	2109.29	0.0050	2112.89	6.50	2110.99	INLET	
4	25	STA. 209+32.78 CRL SH-152	EXTEND EXISTING 8'X6' RCB 12.00 LF. LT. & 13.75 LF RT W/ SPL DES. END SECTIONS AND 4' CURTAINWALLS	129	PASTURE	0.013	0.36	378.0	3758.0	0.036	39.70			3.65					167			1.35		2122.40	2123.95	0.0240	2130.93	13.78	2127.60	INLET	18" TYPE I PLAIN RIP-RAP SEE SUMMARY OF RIP RAP
7	25	STA. 232+19.71 CRL SH-152	EXTEND EXISTING 10'X9 RCB 18.5 LF. LT. & 19.0 LF RT W/ SPL DES. END SECTIONS AND 4' CURTAINWALLS	369	PASTURE	0.012	0.16	205.0	7485.0	0.050	54.30			2.99					177			2.14		2122.95	2123.84	0.0106	2138.80	11.36	2127.15	INLET	18" TYPE I PLAIN RIP-RAP SEE SUMMARY OF RIP RAP
13	25	STA. 283+21.23 CRL SH-152	REMOVE HDWL. LT. & RT. EXTEND EXISTING 30" RCP 13.75' LT. & 13.75' RT. W/PCES'S	18	PASTURE	0.065	0.40	523.0	917.0	0.041	27.20			4.53					36			0.59		2139.08	2137.77	0.0204	2141.00	9.59	2141.22	INLET	18" TYPE I PLAIN RIP-RAP SEE SUMMARY OF RIP RAP
15	25	STA. 294+24.88 CRL SH-152	REMOVE HEADWALLS AND EXTEND EXISTING 24" RCP 5.50' LT & 9.50' RT W/ PCES'S	5	PASTURE	0.038	0.40	855.0	N/A	N/A	24.30			4.80					9			0.37		2172.81	2168.65	0.0433	2175.83	10.85	2174.30	INLET	18" TYPE I PLAIN RIP-RAP SEE SUMMARY OF RIP RAP
16	25	STA. 299+63.17 CRL SH-152	REMOVE EX. DROP INLET RT EXTEND 36" RCP 26' TO SMD TYPE 2B 63' RT; REMOVE HEADWALL LT EXTEND 36" RCP 24' LT W/PCES TO OUTLET FL=2167.17	14	PASTURE	0.052	0.26	90.0	575.0	0.052	13.30			6.32					23			0.31	2175.05	2170.85	2167.17	0.0290	2184.76	12.52	2176.65	INLET	18" TYPE I PLAIN RIP-RAP SEE SUMMARY OF RIP RAP

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DRAINAGE STRUCTURE DESIGN RECORD

State Job No. 29530(04) Sheet No. R002

SUMMARY OF DRAINAGE STRUCTURES

STR. NO.	STATION	DESCRIPTION	DESIGN	FILL HEIGHT	ELEV. TOP GRATE OR TOP OF STRUCTURE	FLOWLINE IN	FLOWLINE OUT	FLOWLINE IN AT DOWNSTREAM STRUCTURE OR DITCH	UNCLASSIFIED EXCAVATION	STRUCTURAL EXCAVATION UNCLASSIFIED	CLASS AA CONCRETE	REINFORCING STEEL	INLET (SMD-TYPE 1)	INLET (SMD-TYPE 2)	INLET (SMD-TYPE 2A)	ADD'L DEPTH IN INLET (SMD TYPE 1)	18" R.C. PIPE CLASS III	24" R.C. PIPE CLASS III	30" R.C. PIPE CLASS III	36" R.C. PIPE CLASS III	42" R.C. PIPE CLASS III	22"X13" R.C. PIPE ARCH CLASS A-III	36"X22" R.C. PIPE ARCH CLASS A-III	21" X 15" CORR. GALV. STEEL PIPE ARCH	28" X 20" CORR. GALV. STEEL PIPE ARCH	35" X 24" CORR. GALV. STEEL PIPE ARCH	42" X 29" CORR. GALV. STEEL PIPE ARCH	24" PREFAB. CULVERT END SECTION	36" PREFAB. CULVERT END SECTION, ROUND	TYPE A4 CULVERT END TREATMENT	TYPE B4 CULVERT END TREATMENT	TYPE C4 CULVERT END TREATMENT	TYPE BB4 CULVERT END TREATMENT	TYPE DD4 CULVERT END TREATMENT	STANDARD BEDDING MATERIAL	TRENCH EXCAVATION	REMOVAL OF HEADWALL
									202(A)	501(A)	509(A)	511(A)	611(G)	611(G)	611(G)	611(H)	613(A)	613(A)	613(A)	613(A)	613(A)	613(A)	613(A)	613(B)	613(B)	613(B)	613(B)	613(B)	613(L)	613(M)	613(M)	613(M)	613(M)	613(M)			619(B)
				FT	FT	FT	FT	FT	CY	CY	CY	LB	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	CY	CY	EA
1	STA. 96+36.05 CRL SH-152	CONST. 42"X29"X106' CGSPA SD W/CET'S (ASNG) 41' RT	CET4S-4-1,SPI-5-1,FPI-4-1,SPB-2-1, FHTMPP-2-0	2.00																							106				2					
2	STA. 113+32.83 CRL SH-152	REM. HDWLS & EXTEND EXISTING 36" RCP 7.90' LT. & 9.90' RT W/PCES'S	PCES-5-0,SPI-5-1,SPB-2-1,FHTCP-4-0	3.67		2163.66 S	2162.49 N													26									2						19.53	29.71	
3	STA. 190+36.51 CRL SH-152	EXTEND EXISTING 6'X3' RCB 13.25 LF. LT. & 13.5 LF RT W/ SPL DES. END SECTIONS	SBI-5-1,SPL DES.	1.00		2109.29 N	2109.02 S		97.63	11.11	24.86	3952.70																										2
4	STA. 209+32.78 CRL SH-152	EXTEND EXISTING 8'X6' RCB 12.00 LF. LT. & 13.75 LF RT W/ SPL DES. END SECTIONS AND 4' CURTAINWALLS	SBI-5-1,RCB-C1-8(2-14), SPL DES.	1.90		2123.95 N	2122.40 S		209.74	17.82	48.30	5539.32																										2
5	STA 213+38.37 CRL SH152	CONST. 2-28"X20"X102' CGSPA SD W/CET'S (ASNG) 37.83' LT	CET4D-4-1,SPI-5-1,FPI-4-1,SPB-2-1,FHTMPP-2-0	2.00																					204							2				
6	STA 213+41.65 CRL SH152	CONST. 21"X15"X114' CGSPA SD W/CET'S (ASNG) 36.58' RT	CET4S-4-1,SPI-5-1,FPI-4-1, SPB-2-1,FHTMPP-2-0	1.75																					114						2					
7	STA. 232+19.71 CRL SH-152	EXTEND EXISTING 10'X9' RCB 18.5 LF. LT. & 19.0 LF RT W/ SPL DES. END SECTIONS AND 4' CURTAINWALLS	SBI-5-1,RCB-C1-10(2-14)	7.00		2123.84 N	2122.95 S		239.58	35.28	99.63	13717.87																										2
8	STA. 234+68.98 CRL SH-152	CONST. 2-42"X70' RCP SD W/CET'S (RSNG) 46.82' LT	CET4D-4-1,SPI-5-1SPB-2-1,FHTCP-4-0	1.00																	140															
9	STA 255+97.99 CRL SH152	CONST. 21"X15"X44' CGSPA SD W/CET'S (ASNG) 38' LT	CET4S-4-1,SPI-5-1,FPI-4-1,SPB-2-1,FHTMPP-2-0	1.50																					44						2					
10	STA 266+41..00 CRL SH152	CONST. 21"X15"X104' CGSPA SD W/CET'S (ASGR) 34' RT	CET4S-4-1,SPI-5-1,FPI-4-1,SPB-2-1,FHTMPP-2-0	1.12																					104						2					
11	STA 268+00.00 CRL SH152	CONST. SMD TYPE 2 33.67' LT WITH 464 LF 18" RCP TO NORTHEAST WING BRIDGE A	SMD-4-1,SPI-5-1SPB-2-1,FHTCP-4-0	1.00	2130.43	2127.86	2121.78							1				464																	127.14	272.39	
12	STA. 278+40.00 CRL SH-152	CONST. SMD TYPE 2A 43' RT WITH 210 LF 30" RCP TO SOUTHEAST WING BRIDGE B	SMD-4-1,SPI-5-1,SPB-2-1,FHTCP-4-0	1.00	2130.00	2126.35	2125.30								1				210																	99.54	142.49	
13	STA 283+21.23 CRL SH-152	REM HDWLS LT & RT AND EXTEND EX. 30" RCP 13.75' LT & 13.75' RT W/PCES'S	PCES-5-0,SPI-5-1,SPB-2-1,FHTCP-4-0	3.50		2139.08	2137.77												36																	164.88	18.32	
14	STA 287+63.44 CRL SH-152	CONST. 35"x24"X62' CGSPA SD W/CET'S (ASGR) 34.00' RT	CET4S-4-1,SPI-5-1,FPI-4-1,SPB-2-1,FHTMPP-2-0	1.00																							62				2					
15	STA 294+24.88 CRL SH-152	REMOVE HEADWALLS AND EXTEND EXISTING 24" RCP 5.50' LT & 9.50' RT W/ PCES'S	PCES-5-0,SPI-5-1,SPB-2-1,FHTCP-4-0	4.50		2172.81 S	2168.65 N												20											2						7.72	7.41	
16	STA 299+63.17 CRL SH-152	REMOVE EX. DROP INLET RT EXTEND 36" RCP 26' TO SMD TYPE 2B 63' RT; REMOVE HEADWALL LT EXTEND 36" RCP 24' LT W/PCES TO OUTLET FL=2167.17	PCES-5-0,SMD-4-1,SPI-5-1,SPB-2-1,FHTCP-4-0	9.50	2175.05	2170.85 S	2170.27	2167.17 N													54										1						45.36	65.83	
17	STA 328+01.97 CRL SH-152	CONST. 2-28"X20"X82' CGSPA SD W/CET'S (ASGR) 36' LT W/CET'S	CET4D-4-1,SPI-5-1,FPI-4-1,SPB-2-1,FHTMPP-2-0	1.00																						164							2				
18	STA 336+52.91 CRL SH-152	CONST. 2-36"X22"X52' RCPA SD W/CET'S (ASGR) 36' LT	CET4D-4-1,SPI-5-1,FPI-4-1,SPB-2-1,FHTMPP-2-0	0.30																													2				
19	STA 340+06.00 CRL SH-152	CONST. 5'X2'X241' RCB 30.43' LT 235' PARALLEL TO SH152 W/ 6' SKEWED AT 30° ON WEST AND/ SPL DES. END SECTIONS W/2' CURTAINWALLS	RCB-C1-3&4&5(2-20),SBI-5-1-, SPECIAL DESIGN	1.75	2169.81 INLET W	2169.75 338+91.46	2167.24 340+06	2165.60 OUTFALL E	1443.34	45.66	111.39	15283.44																										
20	STA 340+05.20 CRL SH-152	CONST. SMD TYPE 1 76' LT W/18"X26' RCP TO STR. # 21	PCES-5-0,SMD-4-1,SPI-5-1,SPB-2-1,FHTCP-4-0	1.25	2171.25		2168.68	2168.18					1				26																				
21	STA 340+05.20 CRL SH-152	CONST. SMD TYPE 1 47' LT W/22"X13"x 14' RCPA TO STR. # 19	PCES-5-0,SMD-4-1,SPI-5-1,SPB-2-1,FHTCP-4-0	2.15	2171.25	2168.18 N	2168.18 S	2167.74					1			0.50					14																
22	STA 339+95.00 CRL SH-152	CONST. SMD TYPE 1 44' RT W/22"X13"x98' RCPA TO STR. # 23	PCES-5-0,SMD-4-1,SPI-5-1,SPB-2-1,FHTCP-4-0	2.40	2170.83	2167.44		2166.44					1			0.50					98																
23	STA 340+95.00 CRL SH-152	CONST. SMD TYPE 1 34' RT W/24"x70' RCP TO STR. # 24	PCES-5-0,SMD-4-1,SPI-5-1,SPB-2-1,FHTCP-4-0	1.67	2170.20	2166.44 W	2165.89 E	2165.09					1			1.21		70																				
24	STA 341+68.00 CRL SH-152	CONST. SMD TYPE 1 32' RT W/24"x38' RCP & PCES TO OUTFALL	PCES-5-0,SMD-4-1,SPI-5-1,SPB-2-1,FHTCP-4-0	1.40	2169.15	2165.09 W	2165.09 E	2164.59					1			0.96		33												1								
		TOTALS							1990.29	109.87	284.18	38493.33	5	1	1	3.17	490	128	246	80	140	112	104	262	368	62	106	3	3	6	2	2	6	2	464.17 *	536.11 *	6

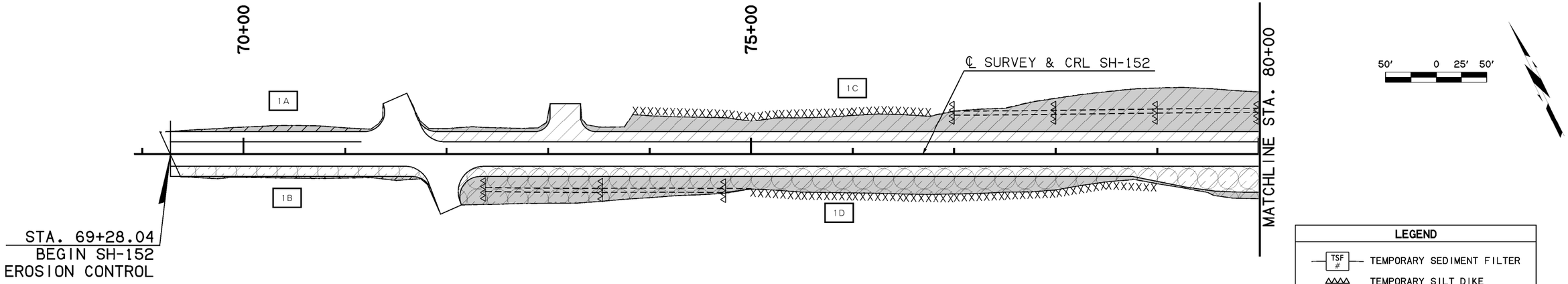
* FOR INFORMATIONAL PURPOSES ONLY - ALL COST OF TRENCHING AND STANDARD BEDDING MATERIAL TO BE INCLUDED IN PRICE BID FOR RCP

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

SUMMARY OF DRAINAGE STRUCTURES

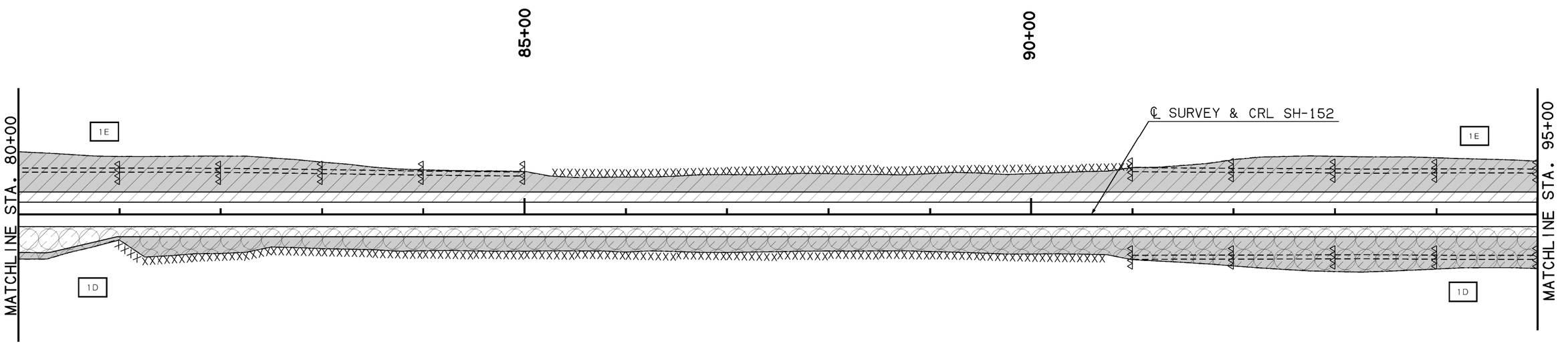
State Job No. 29530(04) Sheet No. R003



DA 1 = 5.76 AC.

LEGEND

- TSF # — TEMPORARY SEDIMENT FILTER
- TEMPORARY SILT DIKE
- XXXXX — TEMPORARY SILT FENCE
- XX — DISTURBED AREA #
- RFD # — ROCK FILTER DAM
- RIP RAP
- SOLID SLAB SODDING
- XX — OUTFALL #
- DIRECTION OF FLOW
- DISTURBED AREA & VEGETATIVE MULCH



Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

EROSION CONTROL
(SHEET 1 OF 10)

State Job No. 29530(04) Sheet No. R004

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

50' 0 25' 50'

MATCHLINE STA. 95+00

100+00

105+00

MATCHLINE STA. 110+00

℄ SURVEY & CRL SH-152

1F

1D

S64°11'53.9617" E
6408.66'

LEGEND

- TSF # — TEMPORARY SEDIMENT FILTER
- TEMPORARY SILT DIKE
- XXXXX TEMPORARY SILT FENCE
- XX DISTURBED AREA #
- RFD # — ROCK FILTER DAM
- RIP RAP
- SOLID SLAB SODDING
- XX OUTFALL #
- DIRECTION OF FLOW
- DISTURBED AREA & VEGETATIVE MULCH

DA 2 = 0.54 AC.

MATCHLINE STA. 110+00

115+00

120+00

MATCHLINE STA. 125+00

2

1G

2A

2B

℄ SURVEY & CRL SH-152

S64°11'53.9617" E
6408.66'

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

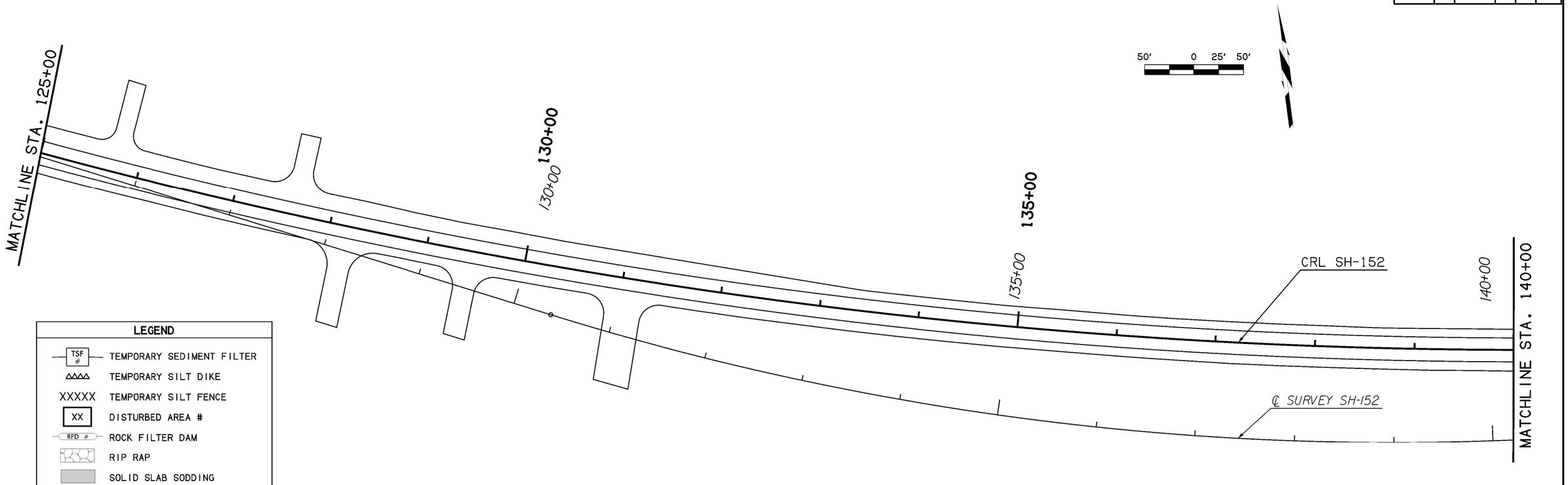
SH-152 BECKHAM & ROGER MILLS COUNTIES

EROSION CONTROL
(SHEET 2 OF 10)

State Job No. 29530(04) Sheet No. R005

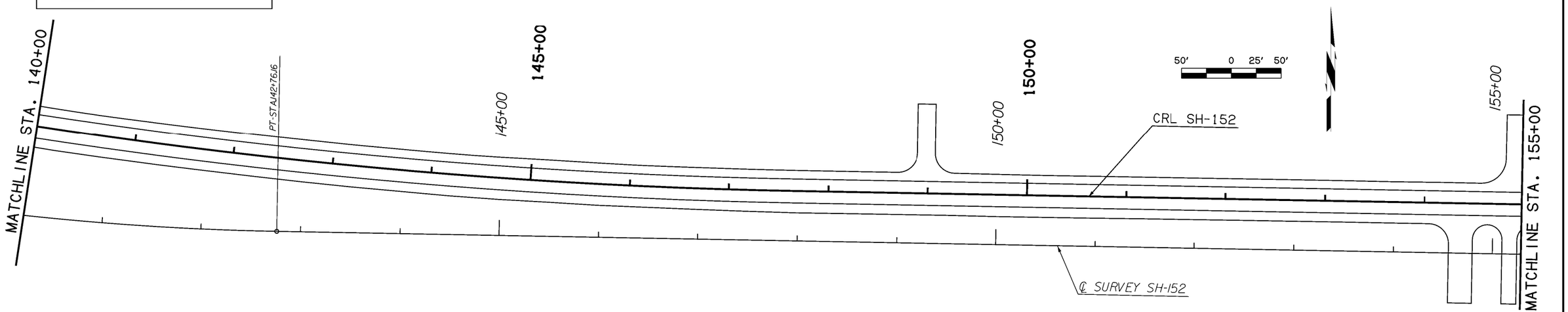
7/27/2022 9:40:20 AM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\EROSION02_29530.dgn

FED ROAD DIST NO	STATE	JP/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***



LEGEND

- TSF # — TEMPORARY SEDIMENT FILTER
- TEMPORARY SILT DIKE
- XXXXX — TEMPORARY SILT FENCE
- XX — DISTURBED AREA #
- RFD # — ROCK FILTER DAM
- RIP RAP
- SOLID SLAB SODDING
- XX — OUTFALL #
- DIRECTION OF FLOW
- DISTURBED AREA & VEGETATIVE MULCH



Design		
Drawn		
Checked		
Approved		
Squad	olsson	

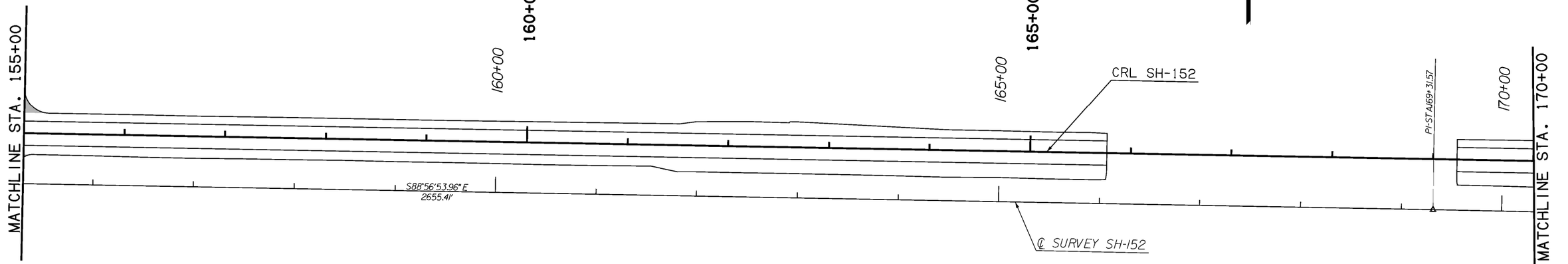
SH-152 BECKHAM & ROGER MILLS COUNTIES

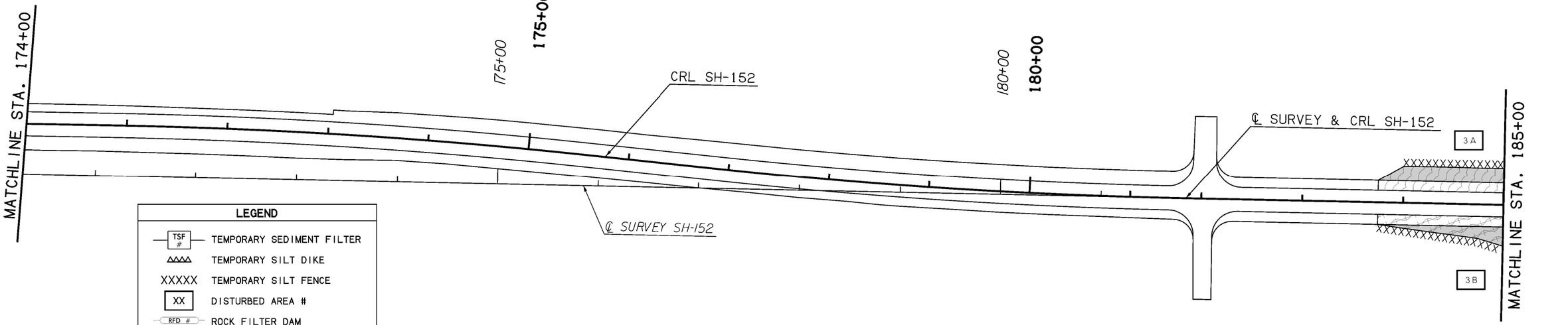
EROSION CONTROL
(SHEET 3 OF 10)

State Job No. 29530(04) Sheet No. R006

FED ROAD DIST NO	STATE	JP/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

50′ 0 25′ 50′





LEGEND

- TSF # — TEMPORARY SEDIMENT FILTER
- TEMPORARY SILT DIKE
- XXXXX — TEMPORARY SILT FENCE
- XX — DISTURBED AREA #
- RFD # — ROCK FILTER DAM
- RIP RAP
- SOLID SLAB SODDING
- XX — OUTFALL #
- DIRECTION OF FLOW
- DISTURBED AREA & VEGETATIVE MULCH

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

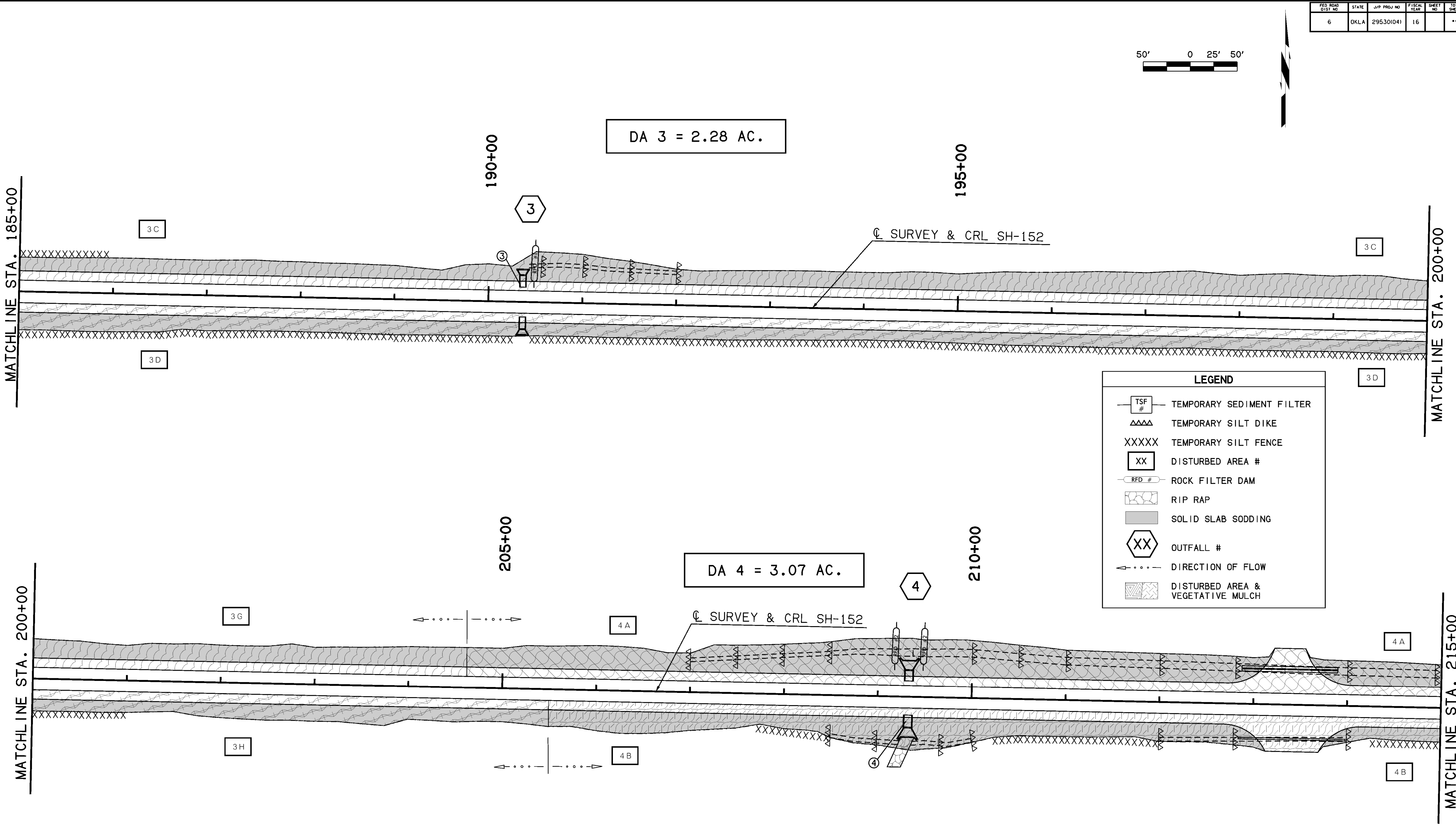
EROSION CONTROL

(SHEET 4 OF 10)

State Job No. 29530(04) Sheet No. R007

7/27/2022 9:10:41 AM F:\Projects\015-0552-40-Design\Mforestation\SH-152\DGN\C-EROSION04_29530.dgn

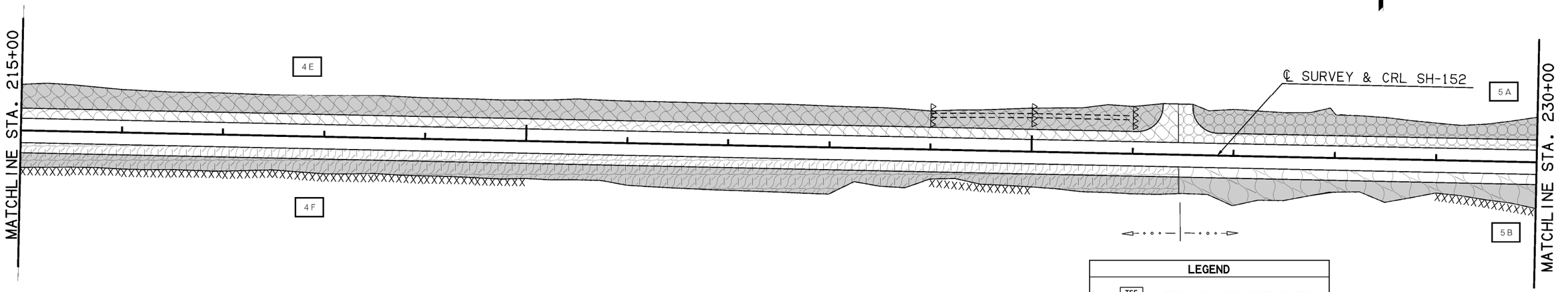
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



Design			SH-152	BECKHAM & ROGER MILLS COUNTIES
Drawn			EROSION CONTROL (SHEET 5 OF 10)	
Checked				
Approved				
Squad		olsson	State Job No. 29530(04)	Sheet No. R008

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

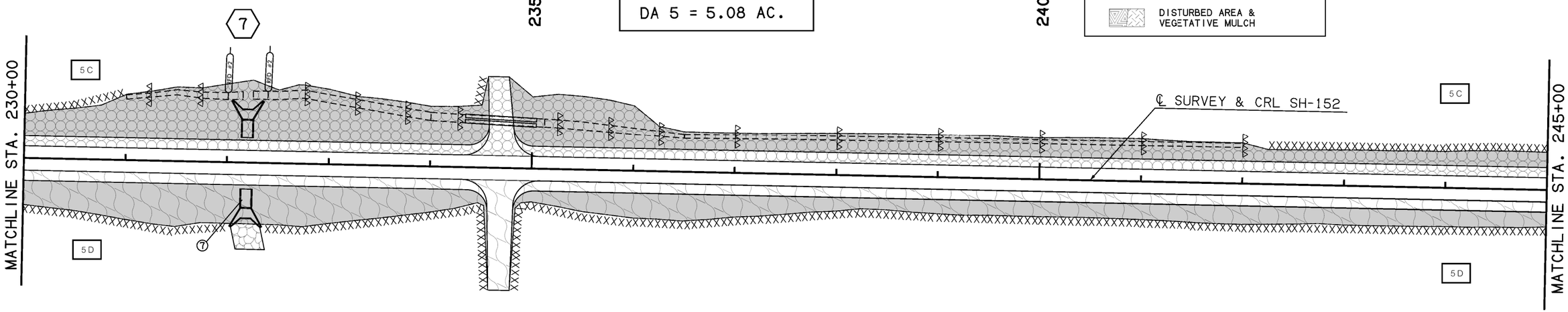
50' 0 25' 50'



LEGEND

- TSF # — TEMPORARY SEDIMENT FILTER
- TEMPORARY SILT DIKE
- XXXXX — TEMPORARY SILT FENCE
- XX — DISTURBED AREA #
- RFD # — ROCK FILTER DAM
- RIP RAP
- SOLID SLAB SODDING
- XX — OUTFALL #
- DIRECTION OF FLOW
- DISTURBED AREA & VEGETATIVE MULCH

DA 5 = 5.08 AC.



Design		
Drawn		
Checked		
Approved		
Squad		olsson

SH-152 BECKHAM & ROGER MILLS COUNTIES

EROSION CONTROL
(SHEET 6 OF 10)

State Job No. 29530(04) Sheet No. R009

7/27/2022 9:11:10 AM F:\Projects\015-0552\40-Design\Mfarostation\SH-152\DGN\C-EROSION06_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

50' 0 25' 50'

250+00

255+00

MATCHLINE STA. 245+00

5E

5F

6A

6B

℄ SURVEY & CRL SH-152

MATCHLINE STA. 260+00

LEGEND

- TSF # — TEMPORARY SEDIMENT FILTER
- TEMPORARY SILT DIKE
- XXXXX TEMPORARY SILT FENCE
- XX DISTURBED AREA #
- RFD # ROCK FILTER DAM
- RIP RAP
- SOLID SLAB SODDING
- XX OUTFALL #
- DIRECTION OF FLOW
- DISTURBED AREA & VEGETATIVE MULCH

DA 6 = 2.67 AC.

265+00

270+00

DA 7 = 2.54 AC.

MATCHLINE STA. 260+00

6C

6D

BRIDGE A

RFD #3

℄ SURVEY & CRL SH-152

7A

7B

6D

MATCHLINE STA. 275+00

RFD #1

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

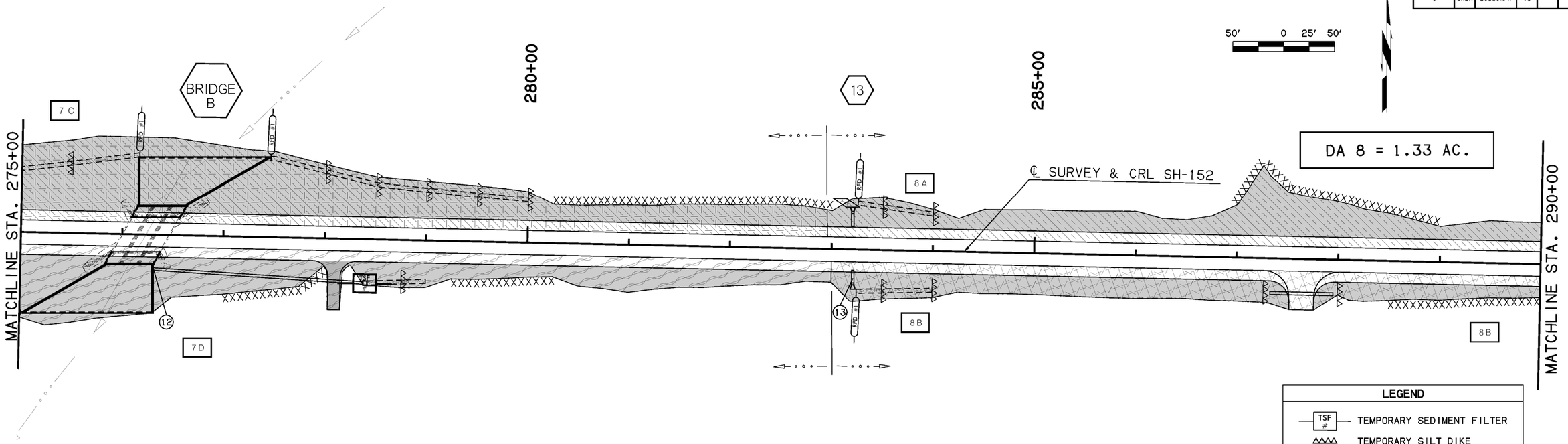
EROSION CONTROL
(SHEET 7 OF 10)

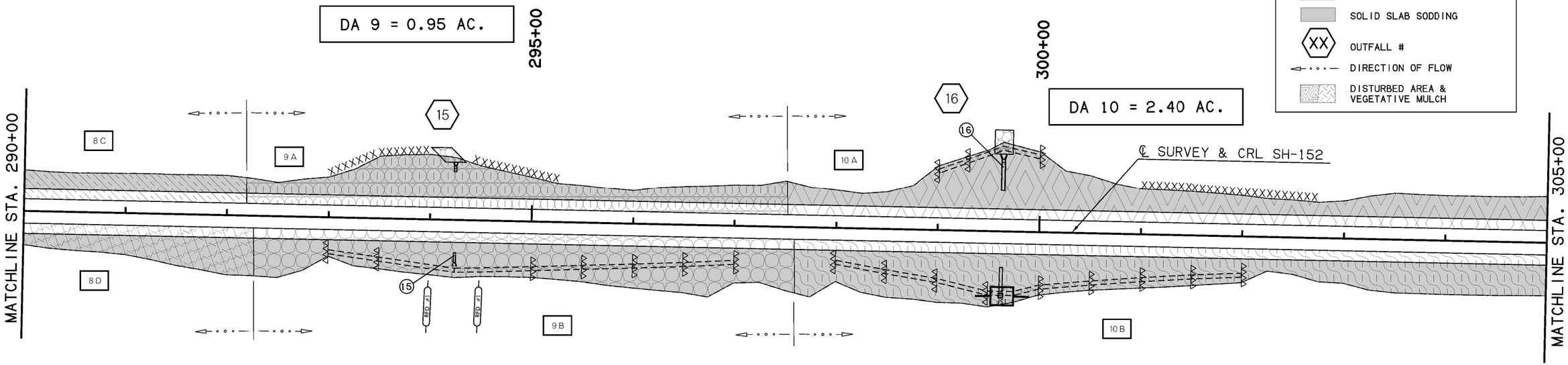
State Job No. 29530(04) Sheet No. R010

7/27/2022 9:11:26 AM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C-EROSION07_29530.dgn

FED ROAD DIST NO	STATE	JP PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

50' 0 25' 50'





LEGEND

- TSF # — TEMPORARY SEDIMENT FILTER
- △△△△ — TEMPORARY SILT DIKE
- XXXXX — TEMPORARY SILT FENCE
- XX — DISTURBED AREA #
- RFD # — ROCK FILTER DAM
- RIP RAP
- SOLID SLAB SODDING
- XX — OUTFALL #
- DIRECTION OF FLOW
- DISTURBED AREA & VEGETATIVE MULCH

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

EROSION CONTROL
(SHEET 8 OF 10)

State Job No. 29530(04) Sheet No. R011

FED ROAD DIST NO	STATE	JP/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		...

310+00

315+00

50' 0 25' 50'

10 C

11 A

℄ SURVEY & CRL SH-152

MATCHLINE STA. 305+00

MATCHLINE STA. 320+00

10 D

10 E

11 B

DA 11 = 3.24 AC.

325+00

330+00

11 C

11 E

℄ SURVEY & CRL SH-152

MATCHLINE STA. 320+00

MATCHLINE STA. 335+00

11 D

11 D

340+00

19

20

21

TSF

℄ SURVEY & CRL SH-152

11 F

12 A

MATCHLINE STA. 335+00

11 G

22

23

24

12 B

STA. 342+28.56
END SH-152
EROSION CONTROL

℄ SURVEY & CRL SH-30

DA 12 = 0.26 AC.

LEGEND

- TSF # — TEMPORARY SEDIMENT FILTER
- TEMPORARY SILT DIKE
- XXXXX — TEMPORARY SILT FENCE
- XX — DISTURBED AREA #
- RFD # — ROCK FILTER DAM
- RIP RAP
- SOLID SLAB SODDING
- XX — OUTFALL #
- DIRECTION OF FLOW
- DISTURBED AREA & VEGETATIVE MULCH

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

EROSION CONTROL
(SHEET 9 OF 10)

State Job No. 29530(04) Sheet No. R012

7/27/2022

9:42:03 AM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C-EROSION09.29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

SUMMARY OF DISTURBED AREAS (FOR INFORMATION ONLY)

EROSION CONTROL AREA NO.	BASE LINE	DRAINAGE STATION EXTENTS STATION	TO	STATION	OUTFALL	PHASE 1 AREA AC.	SEDIMENT CONTROL MEASURES	STANDARDS
1 B	SH-152	69+28.04	TO	71+94.22	STR. 2, STA. 113+32.83	0.06	SOLID SLAB SODDING	SSS-2-0
1 D	SH-152	72+11.77	TO	115+00.00	STR. 2, STA. 113+32.83	2.89	SOLID SLAB SODDING, SILT DIKES, SILT FENCE, ROCK FILTER DAMS	SSS-2-0, TSC2-4-0, TSD-3-0,TRFD-2-0
2B	SH-152	115+00.00	TO	120+00.00		0.27	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
3 B	SH-152	183+75.15	TO	185+00.00	STR. 3, STA. 190+36.51	0.05	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
3D	SH-152	185+00.00	TO	200+00.00	STR. 3, STA. 190+36.51	0.83	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
3 H	SH-152	200+00.00	TO	205+50.18	STR. 3, STA. 190+36.51	0.03	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
4 B	SH-152	205+49.95	TO	215+00.00	STR. 4, STA. 209+32.78	0.66	SOLID SLAB SODDING, SILT DIKES, SILT FENCE	SSS-2-0, TSC2-4-0, TSD-3-0
4 F	SH-152	215+00.00	TO	226+47.53	STR. 4, STA. 209+32.78	0.67	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
5 B	SH-152	226+48.71	TO	245+00.00	STR. 7, STA. 232+19.71	1.35	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
5 D	SH-152	230+00.00		245+00.00	STR. 7, STA. 232+19.71	1.13	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
5 F	SH-152	245+00.00	TO	253+02.57	STR. 7, STA. 232+19.71	0.54	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
6B	SH-152	253+02.57	TO	260+00.00	BRIDGE A	0.46	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
6 D	SH-152	260+00.00	TO	269+52.27	BRIDGE A	0.79	SOLID SLAB SODDING, SILT DIKES, SILT FENCE, ROCK FILTER DAMS	SSS-2-0, TSC2-4-0, TSD-3-0,TRFD-2-0
7 B	SH-152	269+54.29	TO	275+00.00	BRIDGE B	0.41	SOLID SLAB SODDING, SILT DIKES, SILT FENCE, ROCK FILTER DAMS	SSS-2-0, TSC2-4-0, TSD-3-0,TRFD-2-0
7 D	SH-152	275+00.00	T0	283+03.30	BRIDGE B	0.70	SOLID SLAB SODDING, SILT DIKES, SILT FENCE, TEMP. SEDIMENT FILTER	SSS-2-0, TSC2-4-0, TSD-3-0
8 B	SH-152	283+03.30	TO	290+00.00	STR. 13, STA. 283+21.23	0.47	SOLID SLAB SODDING, SILT DIKES, SILT FENCE, ROCK FILTER DAMS	SSS-2-0, TSC2-4-0, TSD-3-0,TRFD-2-0
8 D	SH-152	290+00.00	TO	292+21.19	STR. 13, STA. 283+21.23	0.17	SOLID SLAB SODDING	SSS-2-0
9 B	SH-152	292+21.19	TO	297+60.20	STR. 15, STA. 294+24.88	0.55	SOLID SLAB SODDING, SILT DIKES, ROCK FILTER DAMS	SSS-2-0, TSD-3-0, TRFD 2-0
10 B	SH-152	297+60.20	TO	305+00.00	STR. 16, STA. 299+63.17	0.73	SOLID SLAB SODDING, SILT DIKES, TEMP. SEDIMENT FILTER	SSS-2-0, TSC2-4-0, TSD-3-0
10 D	SH-152	305+00.00	TO	307+72.91	STR. 16, STA. 299+63.17	0.21	SOLID SLAB SODDING	SSS-2-0
10 E	SH-152	307+72.91	T0	314+19.05		0.35	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
11 B	SH-152	314+19.05	TO	320+00.00		0.41	SOLID SLAB SODDING	SSS-2-0
11 D	SH-152	320+00.00	TO	335+00.00		0.70	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
11 G	SH-152	335+00.00	TO	340+21.96		0.21	SOLID SLAB SODDING, SILT FENCE, TEMP. SEDIMENT FILTER	SSS-2-0, TSC2-4-0
12 B	SH-152	340+46.35	TO	342+28.66		0.12	SOLID SLAB SODDING, TEMP. SEDIMENT FILTER	SSS-2-0, TSC2-4-0
					TOTAL DISTURBED AREA PHASE 1	14.76	ACRE	

EROSION CONTROL AREA NO.	BASE LINE	DRAINAGE STATION EXTENTS STATION	TO	STATION	OUTFALL	PHASE 2 AREA AC.	SEDIMENT CONTROL MEASURES	STANDARDS
1 E	SH-152	80+00.00	TO	95+00.00	STR. 2, STA. 113+32.83	1.23	SOLID SLAB SODDING, SILT DIKES, SILT FENCE	SSS-2-0, TSC2-4-0, TSD-3-0
1 F	SH-152	95+00.00	TO	110+00.00	STR. 2, STA. 113+32.83	1.11	SOLID SLAB SODDING, SILT DIKES, SILT FENCE	SSS-2-0, TSC2-4-0, TSD-3-0
1 G	SH-152	110+00.00	TO	115+00.00	STR. 2, STA. 113+32.83	0.47	SOLID SLAB SODDING, SILT DIKES, SILT FENCE	SSS-2-0, TSC2-4-0, TSD-3-0
2 A	SH-152	115+00.00	TO	120+00.00		0.27	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
3 A	SH-152	183+75.06	TO	185+00.00	STR. 3, STA. 190+36.51	0.07	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
3 C	SH-152	185+00.00	TO	200+00.00	STR. 3, STA. 190+36.51	1.00	SOLID SLAB SODDING, SILT DIKES, SILT FENCE, ROCK FILTER DAMS	SSS-2-0, TSC2-4-0, TSD-3-0,TRFD-2-0
3G	SH-152	200+00.00	TO	204+61.85	STR. 3, STA. 190+36.51	0.30	SOLID SLAB SODDING	SSS-2-0
4 A	SH-152	204+61.85	TO	215+00.00	STR. 4, STA. 209+32.78	0.95	SOLID SLAB SODDING, SILT DIKES, SILT FENCE	SSS-2-0, TSC2-4-0, TSD-3-0
4 E	SH-152	215+00.00	TO	226+44.36	STR. 4, STA. 209+32.78	0.79	SOLID SLAB SODDING, SILT DIKES	SSS-2-0, TSD-3-0
5A	SH-152	226+44.36	TO	230+00.00	STR. 7, STA. 232+19.71	0.24	SOLID SLAB SODDING	SSS-2-0
5C	SH-152	230+00.00	TO	245+00.00	STR. 7, STA. 232+19.71	1.35	SOLID SLAB SODDING, SILT DIKES, SILT FENCE, ROCK FILTER DAMS	SSS-2-0, TSC2-4-0, TSD-3-0,TRFD-2-0
5E	SH-152	245+00.00	TO	253+00.00	STR. 7, STA. 232+19.71	0.47	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
6A	SH-152	253+00.00	TO	260+00.00	BRIDGE A	0.46	SOLID SLAB SODDING, SILT DIKES, SILT FENCE	SSS-2-0, TSC2-4-0, TSD-3-0
6C	SH-152	260+00.00	TO	273+00.00	BRIDGE A	0.96	SOLID SLAB SODDING, SILT DIKES	SSS-2-0, TSD-3-0
7A	SH-152	269+52.27	TO	275+00.00	BRIDGE B	0.48	SOLID SLAB SODDING, SILT DIKES	SSS-2-0, TSD-3-0
7C	SH-152	275+00.00	TO	282+94.64	BRIDGE B	0.95	SOLID SLAB SODDING, SILT DIKES, SILT FENCE, ROCK FILTER DAMS	SSS-2-0, TSC2-4-0, TSD-3-0,TRFD-2-0
8A	SH-152	282+94.64	TO	290+00.00	STR. 13, STA 283+21.23	0.55	SOLID SLAB SODDING, SILT DIKES, SILT FENCE, ROCK FILTER DAMS	SSS-2-0, TSC2-4-0, TSD-3-0,TRFD-2-0
8C	SH-152	290+00.00	TO	292+18.86	STR. 13, STA 283+21.23	0.14	SOLID SLAB SODDING	SSS-2-0
9A	SH-152	292+18.86	TO	297+52.07	STR. 15, STA. 294+24.88	0.40	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
10A	SH-152	297+52.07	TO	305+00.00	STR. 16, STA. 299+63.17	0.63	SOLID SLAB SODDING, SILT DIKES, SILT FENCE	SSS-2-0, TSC2-4-0, TSD-3-0
10 C	SH-152	305+00.00	TO	313+37.86	STR. 16, STA. 299+63.17	0.48	SOLID SLAB SODDING, SILT FENCE	SSS-2-0, TSC2-4-0
11 A	SH-152	313+37.86	TO	320+00.00		0.45	SOLID SLAB SODDING	SSS-2-0
11 C	SH-152	320+00.00	TO	328+01.06		0.51	SOLID SLAB SODDING	SSS-2-0
11 E	SH-152	328+01.06	TO	335+00.00		0.56	SOLID SLAB SODDING	SSS-2-0
11 F	SH-152	335+00.00	TO	340+21.41	STR. 19, STA 340+06.00	0.40	SOLID SLAB SODDING, SILT DIKES, TEMP. SEDIMENT FILTER	SSS-2-0, TSC2-4-0, TSD-3-0
12 A	SH-152	340+44.95	TO	342+28.66		0.14	SOLID SLAB SODDING, SILT DIKES	SSS-2-0, TSD-3-0
					TOTAL DISTURBED AREA PHASE 2	15.36	ACRE	

TOTAL DISTURBED AREA 30.12 ACRE

Design		SH-152 BECKHAM & ROGER MILLS COUNTIES
Drawn		EROSION CONTROL (SHEET 10 OF 10)
Checked		
Approved		
Squad	olsson	State Job No. 29530(04) Sheet No. R013

7/27/2022 9:21:13 AM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\EROSION\0_29530.dgn

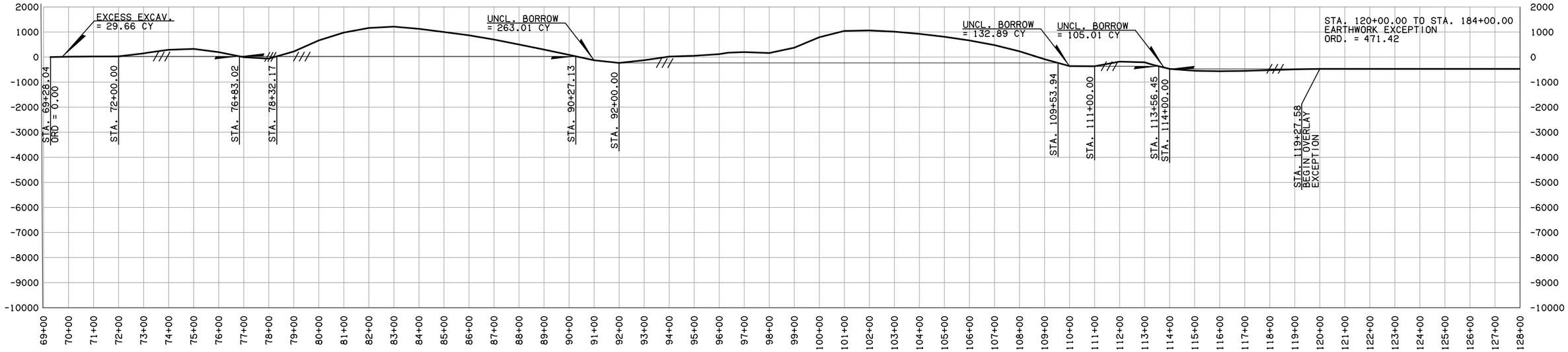
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

MASS LINE DIRECTION

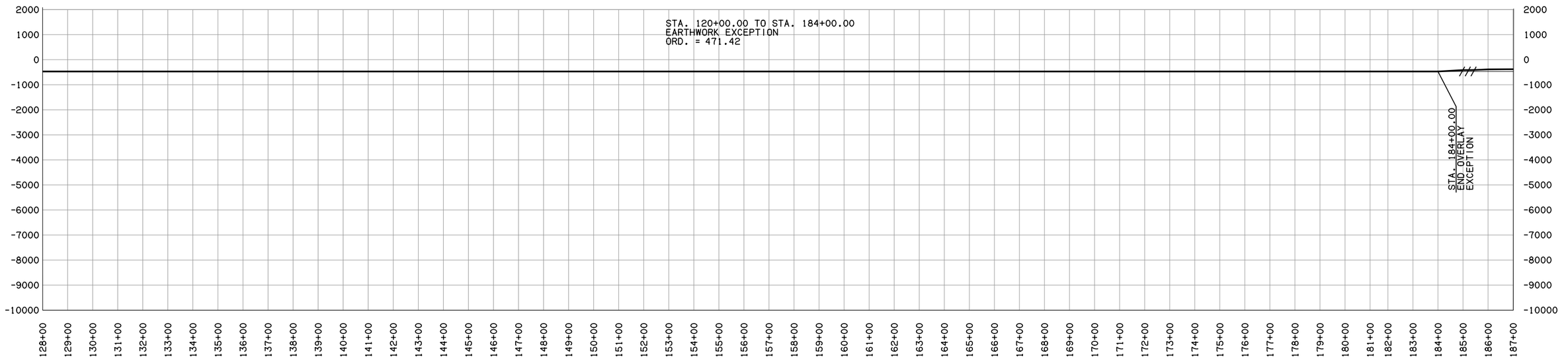
EXCAVATION / CUT

EMBANKMENT / FILL

SH-152 CONSTRUCTION EARTHWORK ESTIMATE - 69+28.04 TO 128+00



SH-152 CONSTRUCTION EARTHWORK ESTIMATE - 128+00 TO 187+00



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.

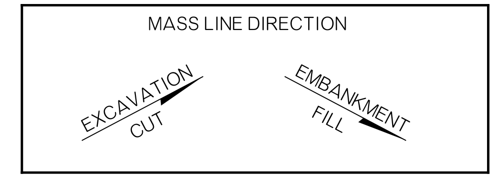
Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

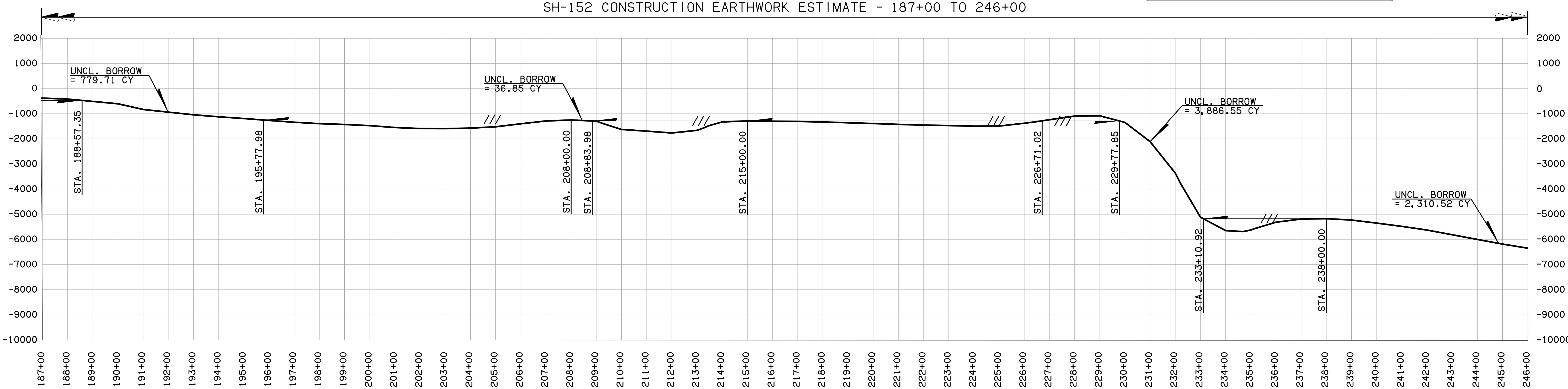
MASS DIAGRAM
(SHEET 1 OF 3)

State Job No. 29530(04) Sheet No. R014

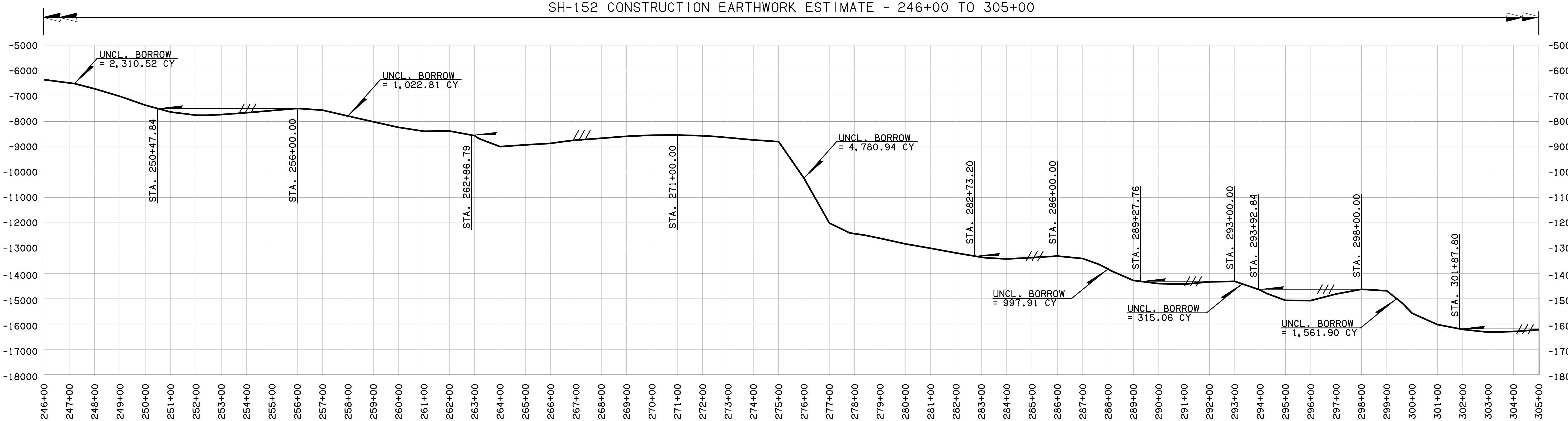
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



SH-152 CONSTRUCTION EARTHWORK ESTIMATE - 187+00 TO 246+00



SH-152 CONSTRUCTION EARTHWORK ESTIMATE - 246+00 TO 305+00



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.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

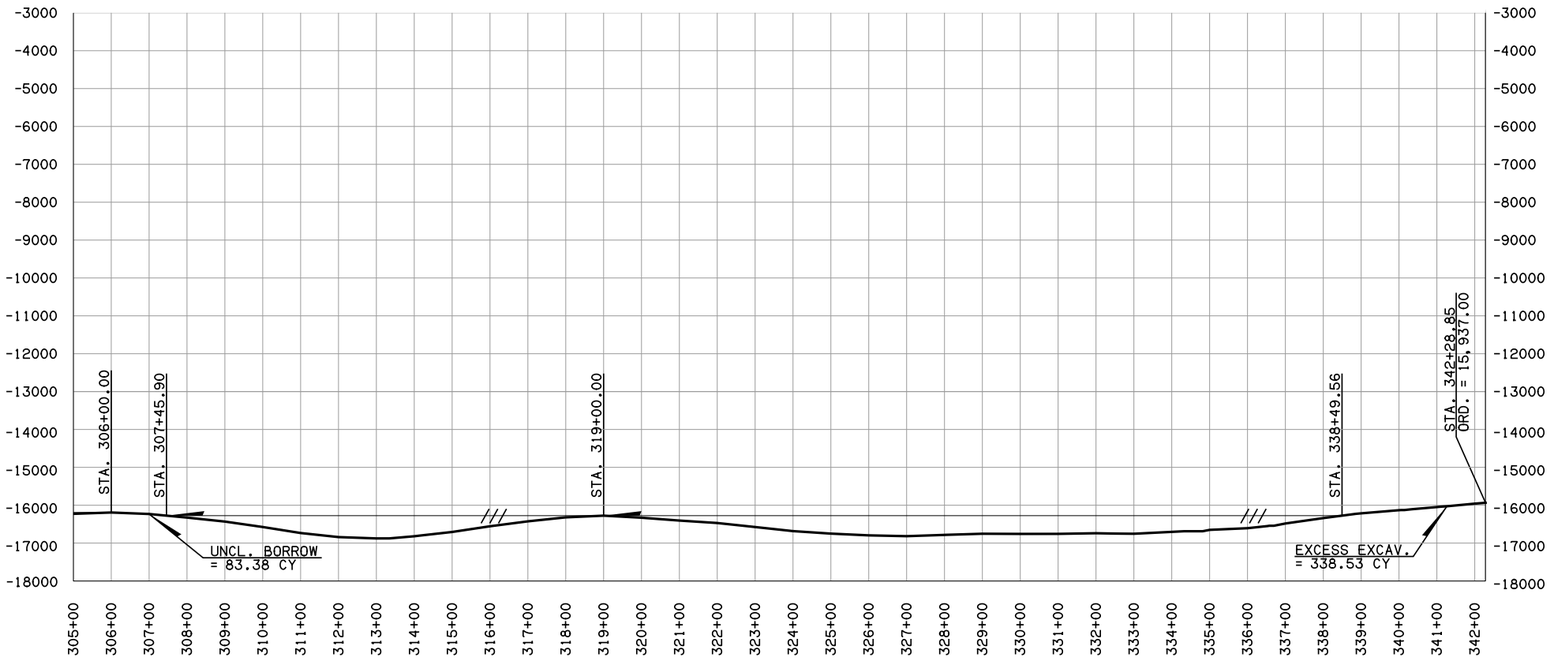
MASS DIAGRAM
(SHEET 2 OF 3)

State Job No. 29530(04) Sheet No. R015

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\MASS_HAUL02_29530.dgn 10:43:35 AM 7/27/2022

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

SH-152 CONSTRUCTION EARTHWORK ESTIMATE - 305+00 TO 342+28.56



MASS LINE DIRECTION

EXCAVATION CUT

EMBANKMENT FILL

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.

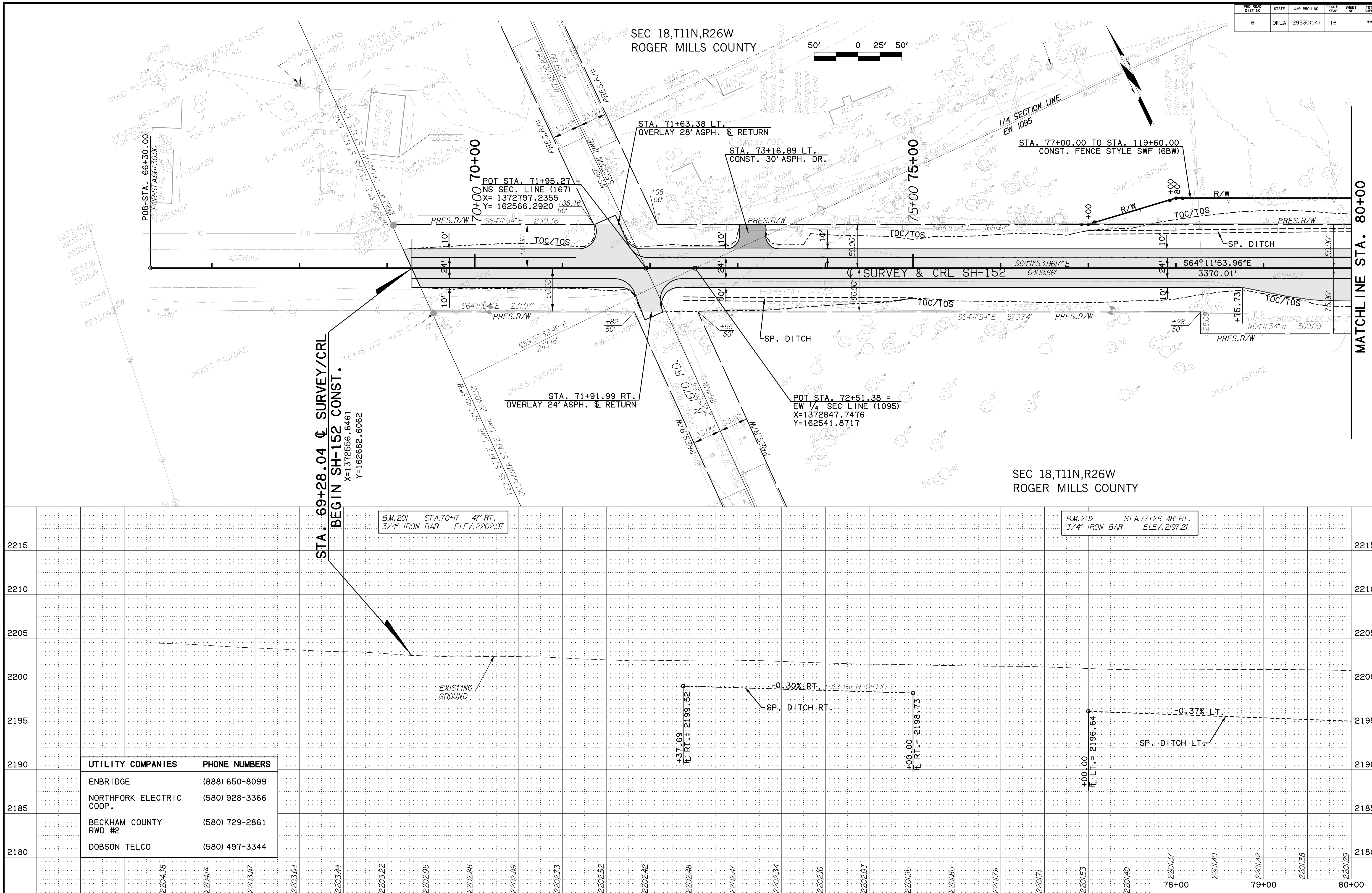
FOR 'SUMMARY OF EARTHWORK', SEE 'SUMMARY OF SHEET ESTIMATES (2)'.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

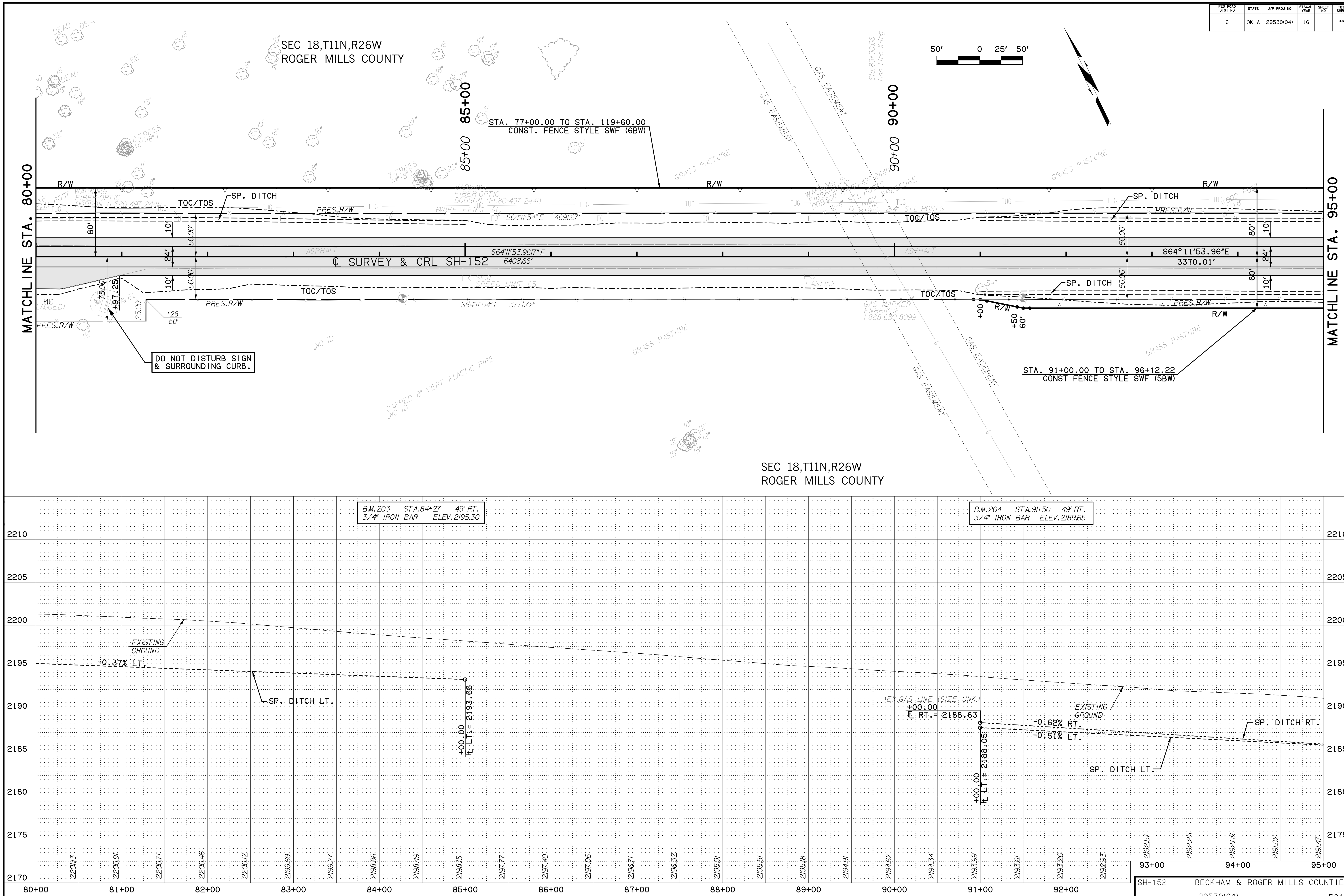
MASS DIAGRAM
(SHEET 3 OF 3)

State Job No. 29530(04) Sheet No. R016

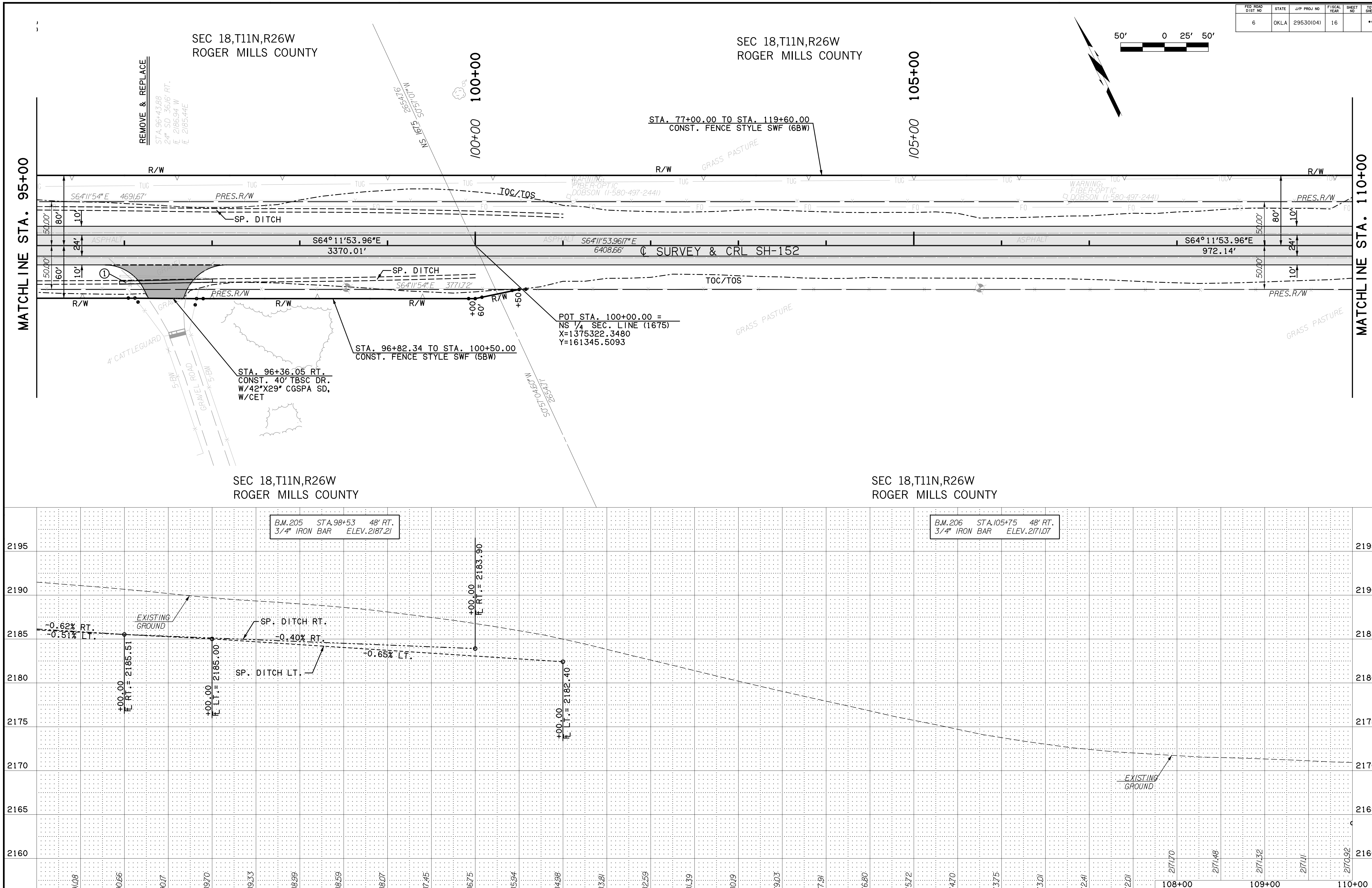


UTILITY COMPANIES	PHONE NUMBERS
ENBRIDGE	(888) 650-8099
NORTHFORK ELECTRIC COOP.	(580) 928-3366
BECKHAM COUNTY RWD #2	(580) 729-2861
DOBSON TELCO	(580) 497-3344

7/27/2022 11:45:23 AM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\PP01_29530.dgn



FED ROAD DIST NO 6 | STATE OKLA | J/P PROJ NO 29530(04) | FISCAL YEAR 16 | SHEET NO | TOTAL SHEETS •••
SEC 18,T11N,R26W
ROGER MILLS COUNTY
50' 0 25' 50'
MATCHLINE STA. 80+00
MATCHLINE STA. 95+00
85+00
90+00
STA. 77+00.00 TO STA. 119+60.00
CONST. FENCE STYLE SWF (6BW)
GAS EASEMENT
GRASS PASTURE
R/W
TOC/TOS
SP. DITCH
PRES.R/W
S64°11'54"E 4691.67'
S64°11'53.96" E
6408.66'
S64°11'53.96"E
3370.01'
℄ SURVEY & CRL SH-152
ASPHALT
SPEED LIMIT 65
S64°11'54"E 3771.72'
GAS MARKER
ENBRIDGE
1-888-650-8099
80'
10'
24'
50.00'
60'
75.00'
25.00'
+97.25
+28
50'
+00
+50
60'
DO NOT DISTURB SIGN
& SURROUNDING CURB.
STA. 91+00.00 TO STA. 96+12.22
CONST FENCE STYLE SWF (5BW)
CAPPED 8" VERT PLASTIC PIPE
NO ID
SEC 18,T11N,R26W
ROGER MILLS COUNTY
B.M.203 STA.84+27 49' RT.
3/4" IRON BAR ELEV.2195.30
B.M.204 STA.91+50 49' RT.
3/4" IRON BAR ELEV.2189.65
2210
2205
2200
2195
2190
2185
2180
2175
2170
EXISTING
GROUND
-0.37% LT.
SP. DITCH LT.
+00.00
℄ LT.= 2193.66
EX.GAS LINE (SIZE UNK)
+00.00
℄ RT.= 2188.63
-0.62% RT.
-0.51% LT.
SP. DITCH RT.
SP. DITCH LT.
+00.00
℄ LT.= 2188.05
2201.13
2200.91
2200.71
2200.46
2200.12
2199.69
2199.27
2198.86
2198.49
2198.15
2197.77
2197.40
2197.06
2196.71
2196.32
2195.91
2195.51
2195.18
2194.91
2194.62
2194.34
2193.99
2193.61
2193.26
2192.93
2192.57
2192.25
2192.06
2191.82
2191.47
80+00
81+00
82+00
83+00
84+00
85+00
86+00
87+00
88+00
89+00
90+00
91+00
92+00
93+00
94+00
95+00
SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. R018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R019

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

SEC 18,T11N,R26W
ROGER MILLS COUNTY

50′ 0 25′ 50′

EXTEND
STA.113+32.83 ℄
36" RCP X-ING
℄ 2162.61 N
℄ 2163.46 S

MATCHLINE STA. 110+00

MATCHLINE STA. 125+00

115+00

120+00

STA. 77+00.00 TO STA. 119+60.00
CONST. FENCE STYLE SWF (6BW)

CONST. 54.2 TONS TYPE 1 PLAIN RIPRAP
SEE SUMMARY OF RIP RAP FOR DIMENSIONS

GRASS PASTURE

R/W

TOC/TOS

SP. DITCH

6" WOOD POST

FO

WARNING:
FIBER-OPTIC
DOBSON (1-580-497-2441)

PRES.R/W S64°11′54″E 469.67′

3-REFLECTORS

ASPHALT

S64°11′53.96″E
1000.32′

S64°11′53.96″E
6408.66′

℄ SURVEY & CRL SH-152

S64°11′53.96″E
318.22′

PC-STA. 122+90.68 ℄ SURVEY =
STA. 122+90.68 CRL SH-152

PRES.R/W S64°11′54″E 749.13′

WARNING:
FIBER-OPTIC
DOBSON (1-580-497-2441)

N89°14′12″E
111.80′

5-4" STL POSTS

3-4" STL POSTS
BROKEN UP ASPH

LEFT TURN ARROW

S49°37′27″E
103.32′

PRES.R/W S64°11′54″E 827.53′

PRES.R/W S64°11′54″E 377.72′

PAVED SP. DITCH

STA. 112+50.00 TO STA. 114+50.00
CONST. FENCE STYLE SWF (5BW)

GRASS PASTURE

B.M.207 STA.112+83 49′ RT.
3/4" IRON BAR ELEV.2166.54

B.M.208 STA.119+93 74′ RT
3/4" IRON BAR ELEV.2164.36

EXISTING GROUND

+00.00
℄ RT.= 2167.60

-2.97% RT.

-0.45% LT.

SP. DITCH RT.

SP. DITCH LT.

+32.83
℄ RT.= 2163.66

+32.83
℄ LT.= 2162.49

STA. 113+32.83
REMOVE HDWL LT. & RT.
EXTEND EXISTING 36" RCP
7.90′ LT. & 9.90′ RT.
W/PCES
℄ RT. = 2163.66
℄ LT. = 2162.49

+00.00
℄ LT.= 2164.00

+00.00
℄ RT.= 2167.25

2.15% RT.

STA. 121+71.85
BEGIN RUNOUT

MATCH EXIST.
SUPERELEVATION

EXISTING GROUND

2180 2175 2170 2165 2160 2155 2150 2145 2140

2170.77 2170.68 2170.63 2170.43 2170.23 2170.05 2169.80 2169.52 2169.15 2168.83 2168.43 2167.98 2167.53 2167.05 2166.58 2166.16 2165.74 2165.31 2164.86 2164.40 2163.92 2163.46 2163.00 2162.52 2161.99 2161.49 2160.94 2160.31 2159.64 2158.88

110+00 111+00 112+00 113+00 114+00 115+00 116+00 117+00 118+00 119+00 120+00 121+00 122+00 123+00 124+00 125+00

SH-152 BECKHAM & ROGER MILLS COUNTIES

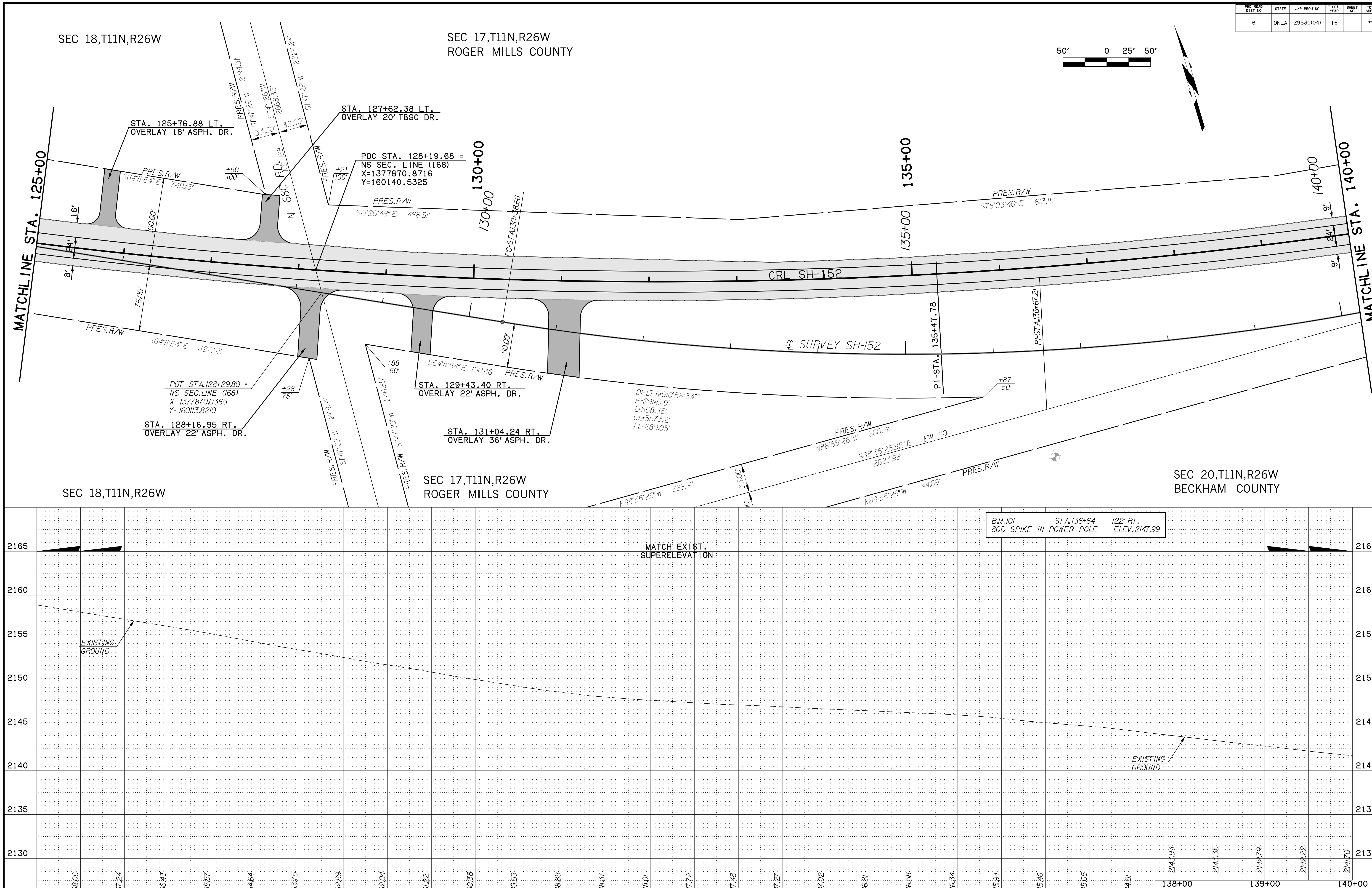
State Job No. 29530(04) Sheet No. R020

7/27/2022

11:45:27 AM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\PP04_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R021

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

SEC 17,T11N,R26W
ROGER MILLS COUNTY

50′ 0 25′ 50′

MATCHLINE STA. 140+00

PRES.R/W
S83°18'11"E 482.32′

PT-STA. 142+78.16

140.00′

145+00

PT-STA. 147+65.68

PRES.R/W
S88°56'54"E 2221.88′

STA. 148+98.00 LT.
OVERLAY 18′ TBSC DR.

150+00

STA. 154+91.01 LT.
OVERLAY 18′ TBSC DR.

155+00
N 1°56'40.49" E
2652.99′

NS 1685

PRES.R/W

140.00′

9′
24′
9′

S88°56'53.95"E
2319.88′

CRL SH-152

℄ SURVEY SH-152

S88°55'25.82"E
2623.96′

EW-110

S88°56'53.96"E
2655.41′

50.00′

DELTA=004°53'43"
R=2914.79′
L=249.03′
CL=248.96′
TL=124.59′

S88°56'54"E 1164.76′ PRES.R/W

MATCHLINE STA. 155+00

+41
50′

POT STA. 155+06.57 =
NS 1/4 SEC LINE (1685)
X=1380482.6130
Y=159715.2111

STA. 154+37.19 RT.
OVERLAY 24′ ASPH. SL RETURN

PRES.R/W

S0°39'04.55"W
2637.97′

STA. 154+86.47 RT.
OVERLAY 15′ TBSC DR.

SEC 20,T11N,R26W
BECKHAM COUNTY

B.M.103 STA.149+49 56′ RT.
80D SPIKE IN POWER POLE ELEV.2135.88

MATCH EXIST.
SUPERELEVATION

STA. 148+84.51
END RUNOUT

EXISTING GROUND

EXISTING GROUND

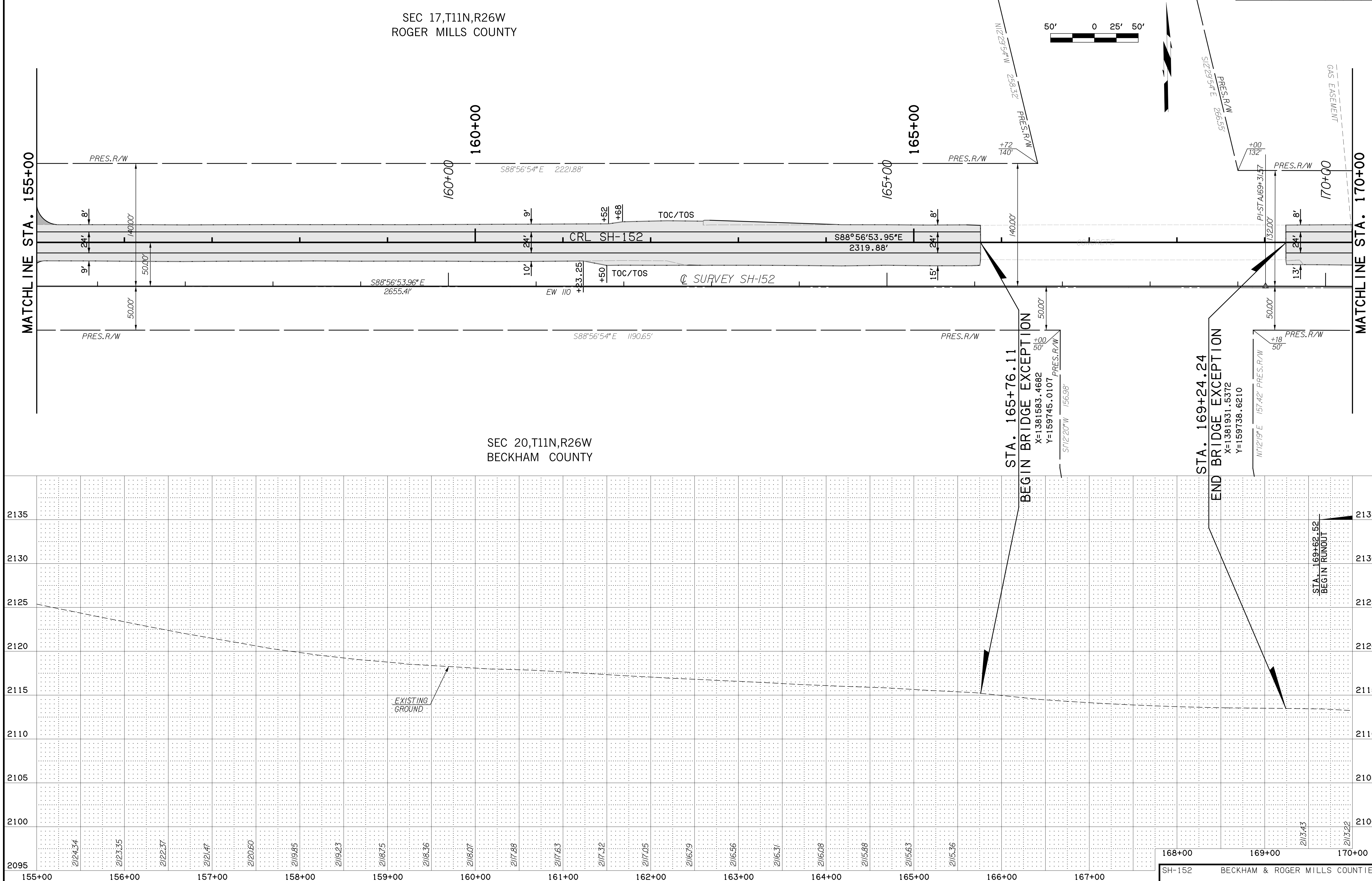
	140+00	141+00	142+00	143+00	144+00	145+00	146+00	147+00	148+00	149+00	150+00	151+00	152+00	153+00	154+00	155+00
2150																
2145																
2140																
2135																
2130																
2125																
2120																
2115																
2110	2141.23	2140.71	2140.30	2140.09	2139.98	2139.95	2139.96	2139.87	2139.73	2139.66	2139.62	2139.58	2139.51	2139.34	2139.05	2138.51	2137.91	2137.25	2136.48	2135.55	2134.59	2133.58	2132.49	2131.46	2130.44	2129.45	2128.44	2127.39	2126.37	2125.36

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. R022

7/27/2022 11:45:30 AM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CVPP06_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

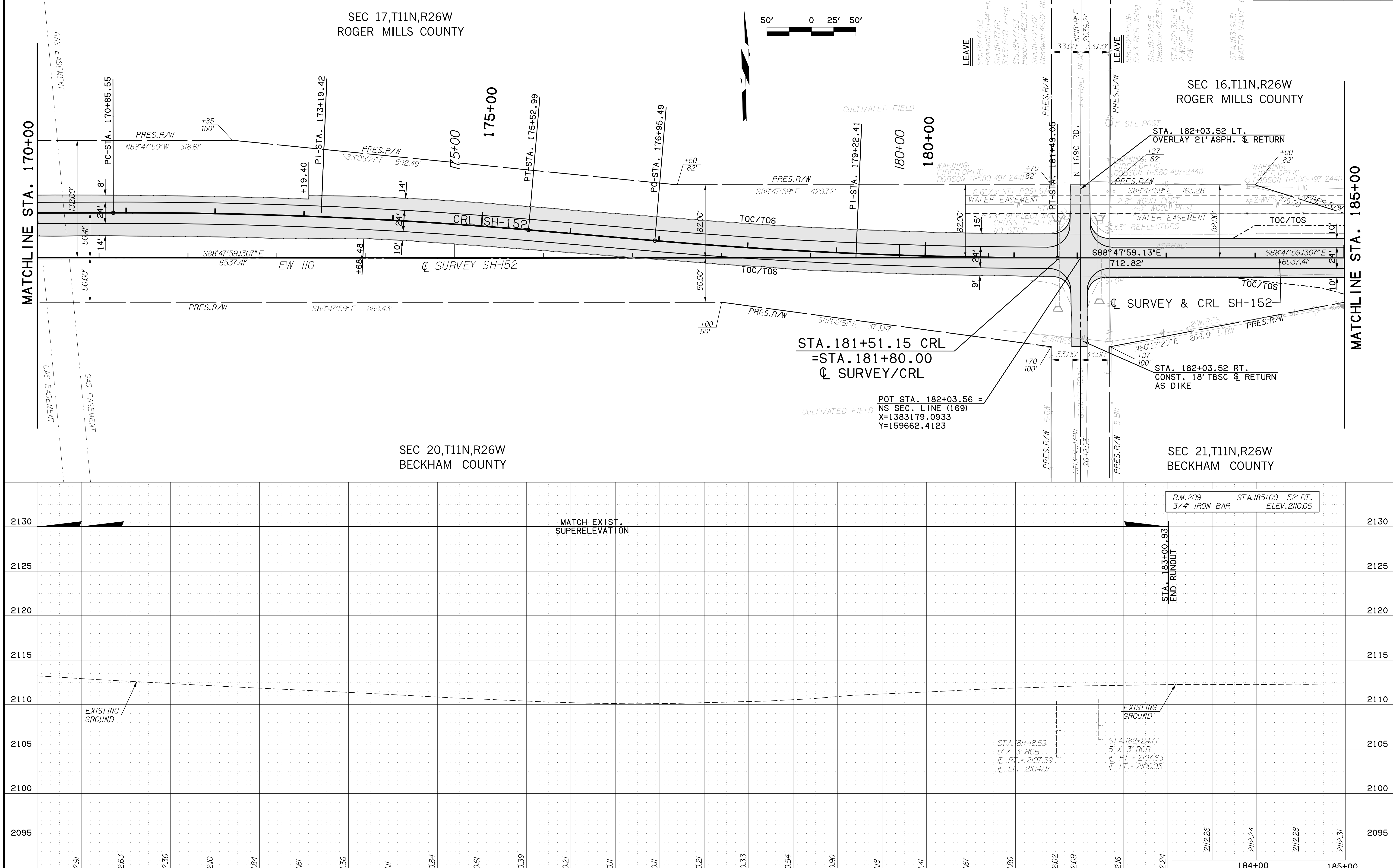


SEC 17,T11N,R26W
ROGER MILLS COUNTY
SEC 20,T11N,R26W
BECKHAM COUNTY
50' 0 25' 50'
MATCHLINE STA. 155+00
MATCHLINE STA. 170+00
160+00
165+00
170+00
PRES.R/W
S88°56'54"E 2221.88'
S88°56'54"E 1190.65'
S88°56'53.96"E
2655.41'
S88°56'53.95"E
2319.88'
CRL SH-152
℄ SURVEY SH-152
TOC/TOS
EW 110
+23.25
+50
+52
+68
140.00'
50.00'
132.00'
8'
9'
10'
13'
15'
24'
+72
140'
+00
132'
+00
50'
+18
50'
N1°29'54"W 258.32'
S1°29'54"E 266.55'
S1°12'20"W 156.98'
N1°12'19"E 157.42'
GAS EASEMENT
PI STA 169+31.57
STA. 165+76.11
BEGIN BRIDGE EXCEPTION
X=1381583.4682
Y=159745.0107
STA. 169+24.24
END BRIDGE EXCEPTION
X=1381931.5372
Y=159738.6210
STA. 169+62.52
BEGIN RUNOUT
EXISTING
GROUND
2135
2130
2125
2120
2115
2110
2105
2100
2095
2124.34
2123.35
2122.37
2121.47
2120.60
2119.85
2119.23
2118.75
2118.36
2118.07
2117.88
2117.63
2117.32
2117.05
2116.79
2116.56
2116.31
2116.08
2115.88
2115.63
2115.36
2113.43
2113.22
155+00
156+00
157+00
158+00
159+00
160+00
161+00
162+00
163+00
164+00
165+00
166+00
167+00
168+00
169+00
170+00

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R023

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



SH-152	BECKHAM & ROGER MILLS COUNTIES	
State Job No. 29530(04)		Sheet No. R024

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

SEC 16,T11N,R26W
ROGER MILLS COUNTY

50′ 0 25′ 50′

STA.185+35.61℄ BURIED FIBER OPTIC X-ING

EXTEND STA.190+36.37 HEADWALL 17.56′ LT.

STA.190+36.51℄ 6′X3′ RCB X-ING

STA.190+36.70 HEADWALL 18.19′ RT.

MATCHLINE STA. 185+00

GRASS PASTURE

WATER EASEMENT

WARNING FIBER-OPTIC DOBSON (1-580-497-2441)

PRES.R/W

N88°47′59″W 4935.86′

TOC/TOS

10′ 24′ 10′ 50.00′

S88°47′59.13″E 712.82′

S88°47′59″E 4936.10′

2-DOBSON BURIED FIBER-OPTIC SIGNS

GRASS PASTURE

PT-STA. 189+16.34

190+00

STA. 188+50.00 TO STA. 192+00.00
CONST. FENCE STYLE SWF (5BW)

SP. DITCH

R/W +50 +00 65′

CROSS TRAFFIC 3″X3″ REFLECTORS

S88°47′59.13″E EW 110 6537.41′

INTERSECTION AHEAD

℄ SURVEY & CRL SH-152

S88°47′59.13″E 715.66′

2-WIRES 5-BW

DOBSON BURIED FIBER-OPTIC

195+00

DOBSON BURIED FIBER OPTIC (1-580-497-8441)

PT-STA. 196+32.00

(SEC.LINE)S88°45′53.78″E 2632.15′

APPROX.W/L LOCATION PER BECKHAM COUNTY RWD#2 MANAGER

WATER EASEMENT

PRES.R/W

WELD WIRE FENCE 8″X7′

ARROW

S88°47′59.13″E 3836.98′

2-WIRES SWITCH W/ EDC & EMT

BURIED FIBER-OPTIC DOBSON (1-580-497-8441)

MATCHLINE STA. 200+00

SEC 21,T11N,R26W
BECKHAM COUNTY

B.M.107 STA.190+32 18′ RT.
SW COR.OF S.HDWL ELEV.2112.64

B.M.210 STA.191+99 49′ RT.
3/4″ IRON BAR ELEV.2111.24

B.M.211 STA.199+00 51′ RT.
3/4″ IRON BAR ELEV.2120.00

EX.FIBER OPTIC

EXISTING GROUND

STA. 190+36.51
EXTEND EXISTING 6′X3′ RCB
13.25′ LT. & 13.50′ RT.
W/ SP. DES. END SECTIONS
F. RT. = 2109.02
F. LT. = 2109.29

1.69% LT.

SP. DITCH LT.

+39.53
℄ LT.= 2109.29

+00.00
℄ LT.= 2112.00

EXISTING GROUND

2135 2130 2125 2120 2115 2110 2105 2100 2095

2112.31 2112.35 2112.51 2112.67 2112.71 2112.88 2113.03 2113.25 2113.56 2113.71 2113.98 2114.18 2114.41 2114.74 2115.12 2115.55 2115.96 2116.48 2116.99 2117.53 2118.00 2118.61 2119.23 2119.93 2120.65 2122.52 2122.50 2123.51 2124.53 2126.57

185+00 186+00 187+00 188+00 189+00 190+00 191+00 192+00 193+00 194+00 195+00 196+00 197+00 198+00 199+00 200+00

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R025

7/21/2022 11:45:33 AM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\PP09_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

SEC 16,T11N,R26W
ROGER MILLS COUNTY

50' 0 25' 50'

MATCHLINE STA. 200+00

205+00

STA. 206+50.00 TO STA. 213+00.00
CONST. FENCE STYLE SWF (5BW)

POT STA. 208+35.71 =
NS 1/4 SEC. LINE (1695)
X=1385810.6661
Y=159607.2776

NS 1695 2622.85' S11°11'27"W

EXTEND
STA.209+33.10
HEADWALL 19.16' LT.
STA.209+32.78 ℄
8'X6' RCB X-ING
STA.209+32.59
HEADWALL 22.98' RT.

210+00

APPROX.W/L LOCATION PER
BECKHAM COUNTY RWD#2 MAP

REMOVE & REPLACE
STA.213+45.42
18" CMP 30.57' LT.
FL 2129.61 W
2.38' E

REMOVE & REPLACE
STA.213+45.55
24" CMP 36.47' RT
FL 2128.40 W
2.41' E

GRAVEL DRIVE

TOP OF GRAVEL
CATTLE GUARD
3-4" STL POSTS

STA. 213+38.37 LT.
CONST. 33' TBSC DR.
W/2-28"X20" CGSPA SD,
W/CET

STA. 213+41.65 RT.
CONST. 56' TBSC DR.
W/21"X15" CGSPA SD,
W/CET

WATER EASEMENT

GRASS PASTURE

WOOD POST, UTILITY PED 7'X8'

PRES.R/W

N88°47'59"W 4935.86'

TOC/TOS

SP. DITCH

PAVED SP. DITCH

23X3 REFLECTORS

ASPHALT

S88°47'59.1307"E
EW 110 6537.41'

℄ SURVEY & CRL SH-152

S88°47'59.13"E
3836.98'

S88°47'59"E 4936.10'

2-WIRES

5-BW

BURIED FIBER-OPTIC
DOBSON (1-580-497-8441)

CONSTRUCT 42.1 TONS TYPE 1 PLAIN RIPRAP
SEE SUMMARY OF RIP RAP FOR DIMENSIONS

GRAVEL

6 RAIL PIPE FENCE (5' TALL)

CATTLE GUARD

CULTIVATED FIELD

SEC 21,T11N,R26W
BECKHAM COUNTY

S10°46.67"W 2637.74' 5-BW

MATCHLINE STA. 215+00

B.M.212 STA.206+00 49' LT.
3/4" IRON BAR ELEV.2133.07

B.M.213 STA.212+94 51' RT.
3/4" IRON BAR ELEV.2130.07

EXISTING GROUND

+50.00 ℄ RT.= 2126.00

1.99% LT.

4.57% RT.

4.90% RT.

2.06% LT.

0.66% LT.

0.75% RT.

SP. DITCH LT.

SP. DITCH RT.

+00.00 ℄ LT.= 2128.50

+28.78 ℄ RT.= 2122.40

+28.78 ℄ LT.= 2123.95

+36.78 ℄ LT.= 2123.95

+36.78 ℄ RT.= 2122.40

+00.00 ℄ RT.= 2125.50

+00.00 ℄ LT.= 2127.31

+00.00 ℄ RT.= 2127.50

+00.00 ℄ RT.= 2129.00

+00.00 ℄ LT.= 2129.96

④ STA. 209+32.78
EXTEND EXISTING 8'X6' RCB
12' LT. & 13.75' RT.
W/ SP. DES. END SECTIONS
℄ RT. = 2122.40
℄ LT. = 2123.95

2145 2140 2135 2130 2125 2120 2115 2110 2105

2126.71 2127.85 2128.81 2129.51 2130.00 2130.40 2130.72 2130.92 2131.13 2131.29 2131.31 2131.18 2131.16 2131.30 2131.41 2131.57 2131.64 2131.80 2132.02 2131.81 2131.73 2131.78 2131.87 2131.97 2132.02 2132.07 2132.06 2132.19 2132.38 2132.48

200+00 201+00 202+00 203+00 204+00 205+00 206+00 207+00 208+00 209+00 210+00 211+00 212+00 213+00 214+00 215+00

SH-152 BECKHAM & ROGER MILLS COUNTIES

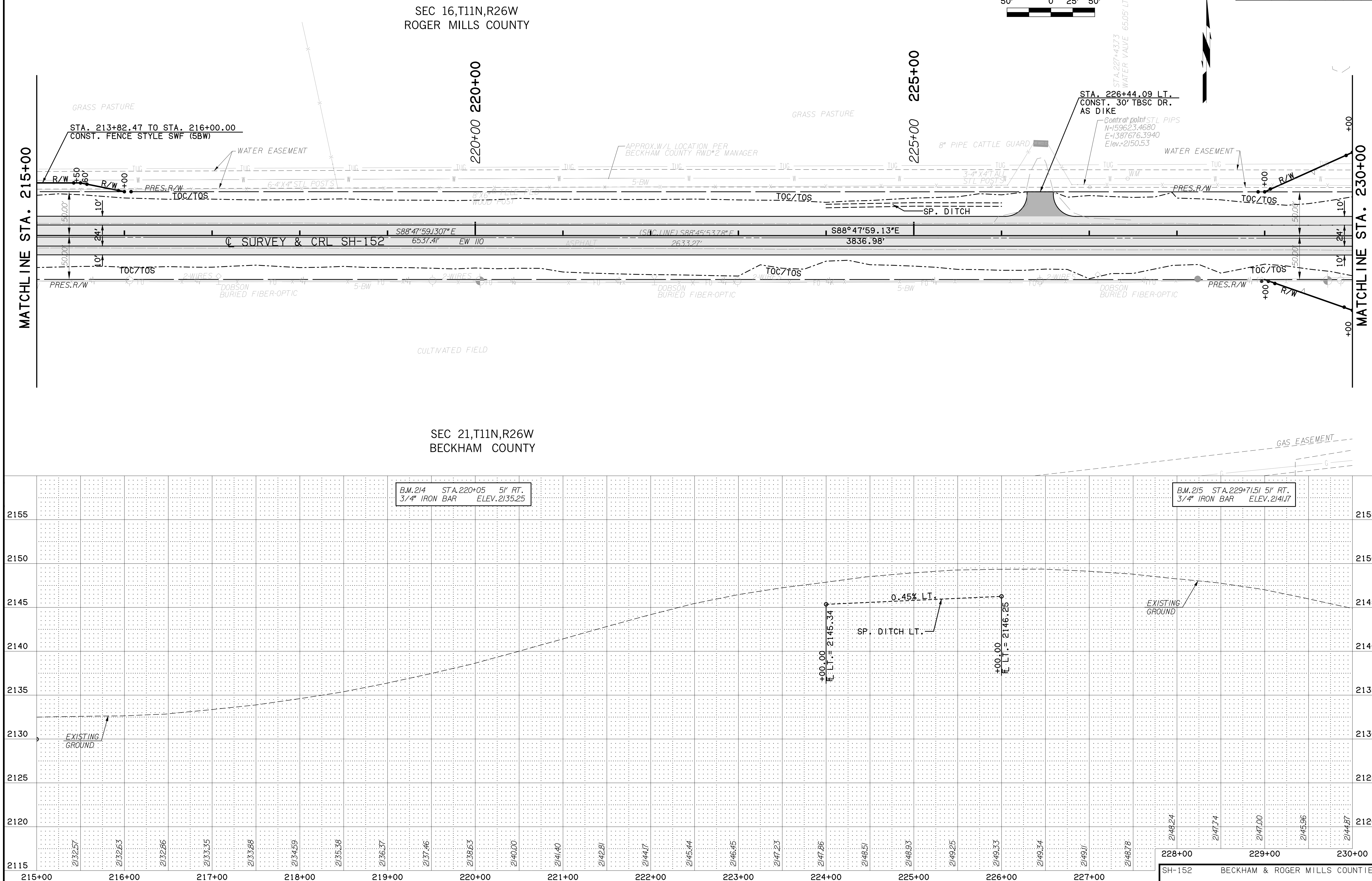
State Job No. 29530(04) Sheet No. R026

7/27/2022

11:45:35 AM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\PPI0_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***



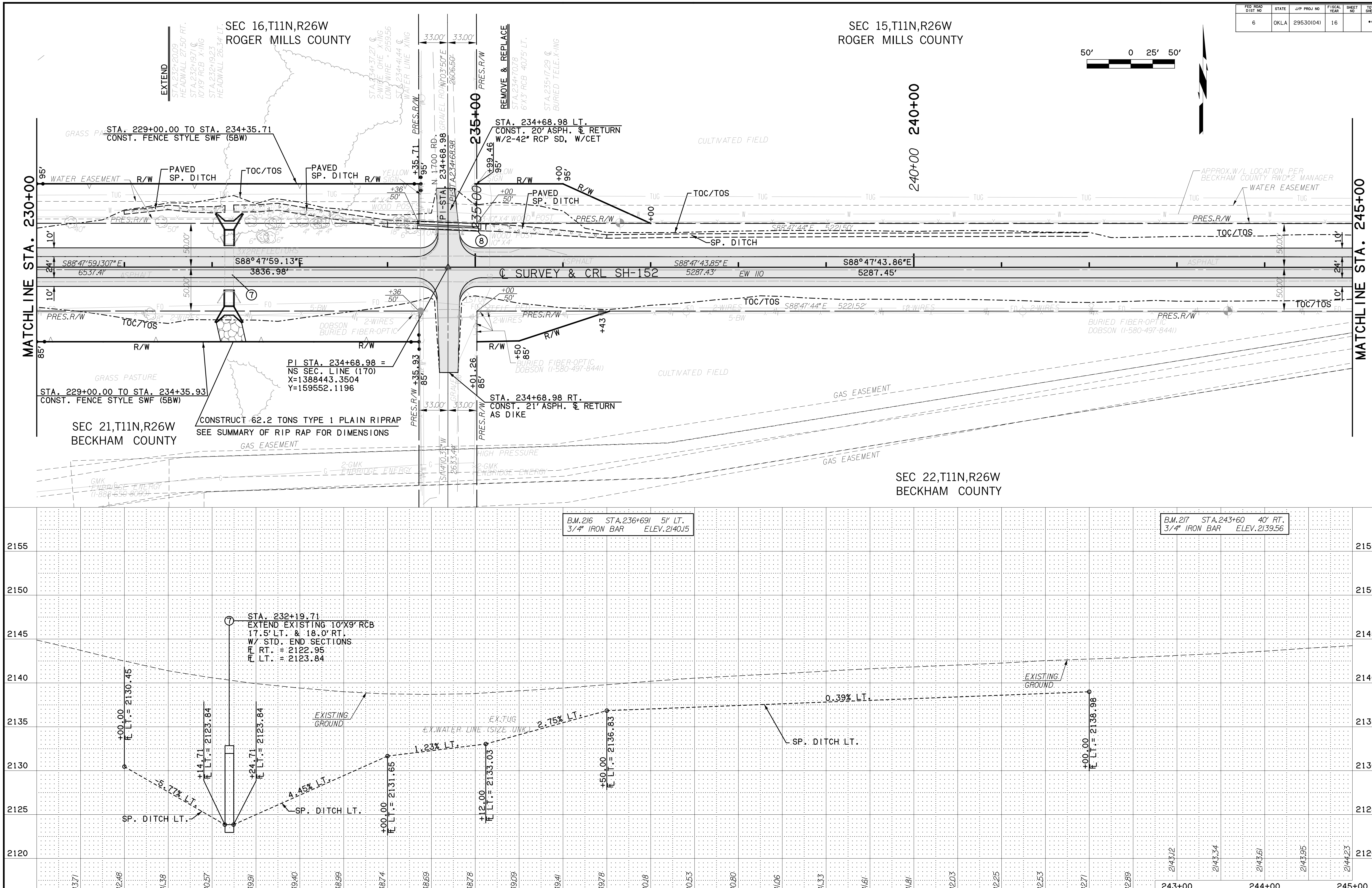
SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R027

7/27/2022 11:45:36 AM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\PPII_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***



SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. R028

7/21/2022

11:45:38 AM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\PP13_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

SEC 15,T11N,R26W
ROGER MILLS COUNTY

50' 0 25' 50'

MATCHLINE STA. 245+00

MATCHLINE STA. 260+00

250+00 250+00

255+00 255+00

GAS EASEMENT

GAS EASEMENT

GRAVEL ROAD

CULTIVATED FIELD

STA.246+95.57 ℄ GAS LINE X-ING

STA.246+96.05 HIGH PRESSURE G. 54.9' RT.

STA.247+13.92 HIGH PRESSURE G. 55.40' LT.

STA.247+20.98 ℄ GAS LINE X-ING

STA.247+21.65 HIGH PRESSURE G. 56.42' RT.

WATER EASEMENT

WARNING:NATURAL GAS PIPELINE ENBRIDGE ENERGY(1-888-650-8099)

HIGH PRESSURE YELLOW X WOOD POST

3-4'X8" STL POSTS

2-4'X8" STL POSTS

PRES.R/W

S88°47'44"E 5221.50'

TOC/TOS

ASPHALT

S88°49'48.69"E 2643.72'

S88°47'43.85"E 5287.43'

S88°47'43.86"E 5287.45'

℄ SURVEY & CRL SH-152

EW 110

24'

10'

50.00'

BURIED FIBER-OPTIC DOBSON (1-580-497-8441)

2-WIRES

5-BW

ROW MARKER

3' HIGH PIPE FENCE W/GAS VALVES ENBRIDGE ENERGY NATURAL GAS PIPELINE (1-888-650-8099)

R/W +00 +50 65'

CULTIVATED FIELD

3-4'X8" STL POSTS

CATTLE GUARD

STA. 252+40.43 LT.
CONST. 51' TBSC DR.
AS DIKE

PAVED SP. DITCH

4'X8' WOOD WING

4'X10' WOOD POST

9-WIRE FENCE

STA. 255+97.99 LT.
CONST. 18' TBSC DR.
W/21"X15" CGSPA SD,
W/CET

REMOVE

STA.255+51.84
18" CMP
℄ 2137.91 W
℄ 2136.63 E

STA.258+78.63
BURIED TELE.79.64' L

STA.258+70.33
BURIED FIBER OPTIC
47.72' RT.

+50 R/W

SEC 22,T11N,R26W
BECKHAM COUNTY

B.M.218 STA.250+65 43' RT.
3/4" IRON BAR ELEV.2140.07

B.M.219 STA.257+68 49' RT.
3/4" IRON BAR ELEV.2128.63

EXISTING GROUND

EX.GAS LINE (SIZE UNK.)

+00.00 ℄ LT.= 2142.79'

3.51% LT.

SP. DITCH LT.

+00.00 ℄ LT.= 2132.25'

2155 2150 2145 2140 2135 2130 2125 2120 2115

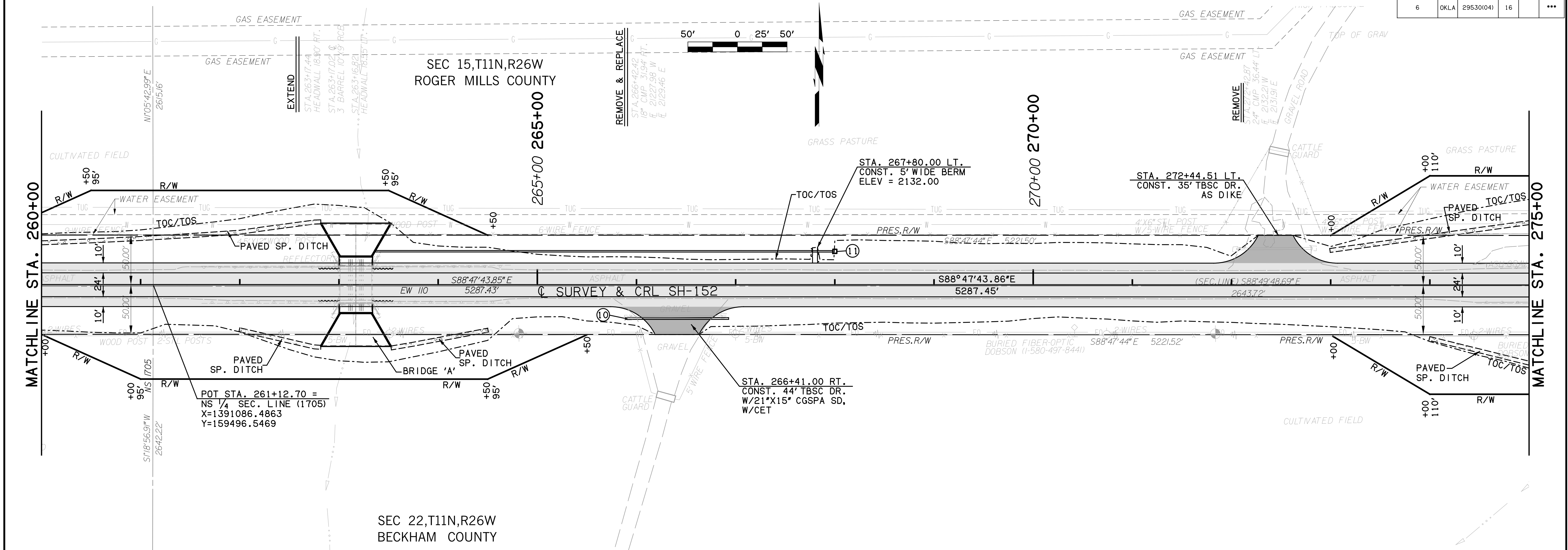
2144.51 2144.65 2144.91 2145.22 2145.58 2145.86 2146.18 2146.43 2146.64 2146.82 2146.84 2146.76 2146.67 2146.52 2146.20 2145.68 2145.11 2144.32 2143.36 2142.16 2141.00 2139.73 2138.31 2136.85 2135.50 2134.26 2133.07 2131.88 2130.90 2130.09

245+00 246+00 247+00 248+00 249+00 250+00 251+00 252+00 253+00 254+00 255+00 256+00 257+00 258+00 259+00 260+00

SH-152 BECKHAM & ROGER MILLS COUNTIES

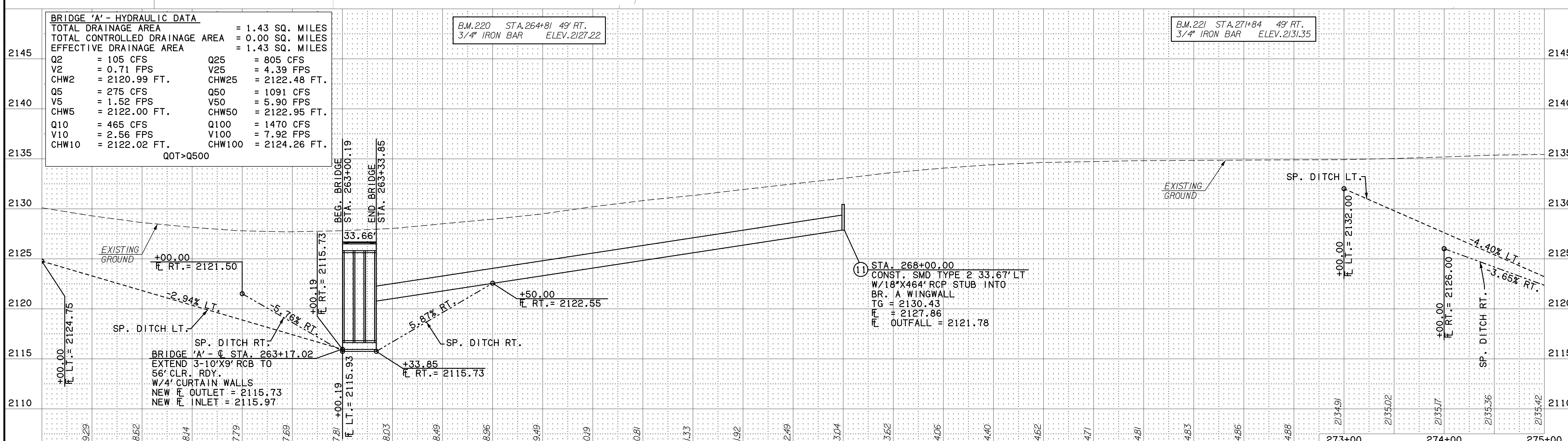
State Job No. 29530(04) Sheet No. R029

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



BRIDGE 'A' - HYDRAULIC DATA

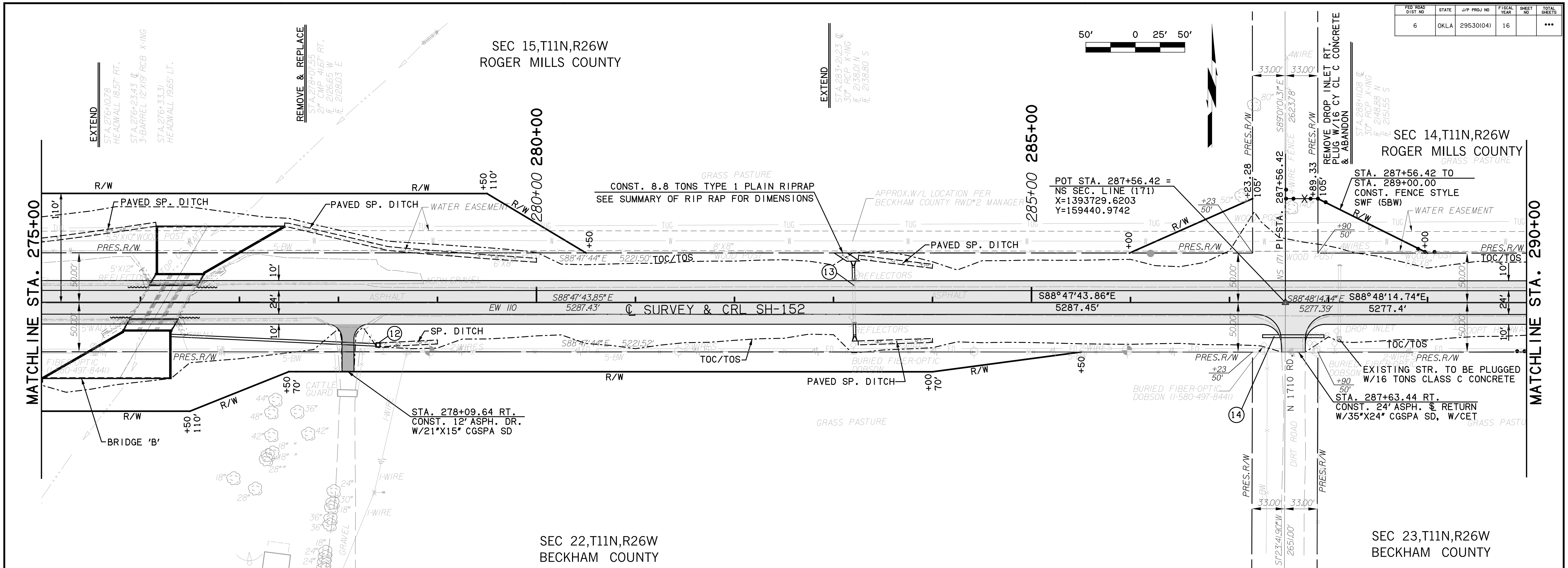
TOTAL DRAINAGE AREA	= 1.43 SQ. MILES		
TOTAL CONTROLLED DRAINAGE AREA	= 0.00 SQ. MILES		
EFFECTIVE DRAINAGE AREA	= 1.43 SQ. MILES		
Q2	= 105 CFS	Q25	= 805 CFS
V2	= 0.71 FPS	V25	= 4.39 FPS
CHW2	= 2120.99 FT.	CHW25	= 2122.48 FT.
Q5	= 275 CFS	Q50	= 1091 CFS
V5	= 1.52 FPS	V50	= 5.90 FPS
CHW5	= 2122.00 FT.	CHW50	= 2122.95 FT.
Q10	= 465 CFS	Q100	= 1470 CFS
V10	= 2.56 FPS	V100	= 7.92 FPS
CHW10	= 2122.02 FT.	CHW100	= 2124.26 FT.
QOT>Q500			

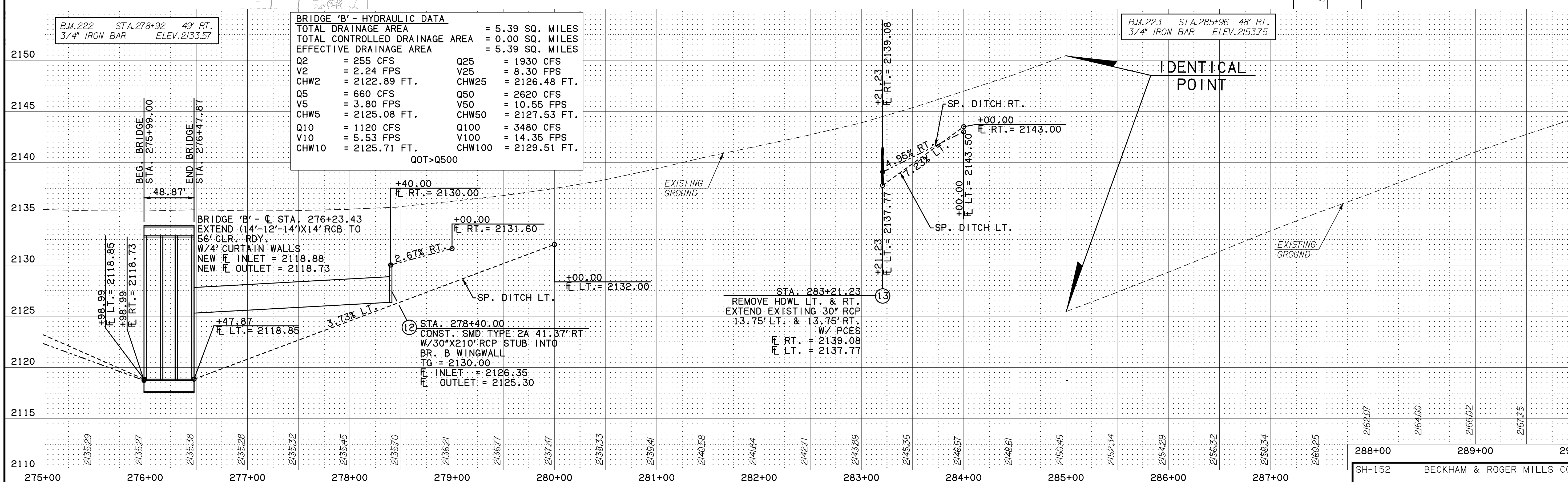


SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R030

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***





BRIDGE 'B' - HYDRAULIC DATA

TOTAL DRAINAGE AREA = 5.39 SQ. MILES
TOTAL CONTROLLED DRAINAGE AREA = 0.00 SQ. MILES
EFFECTIVE DRAINAGE AREA = 5.39 SQ. MILES

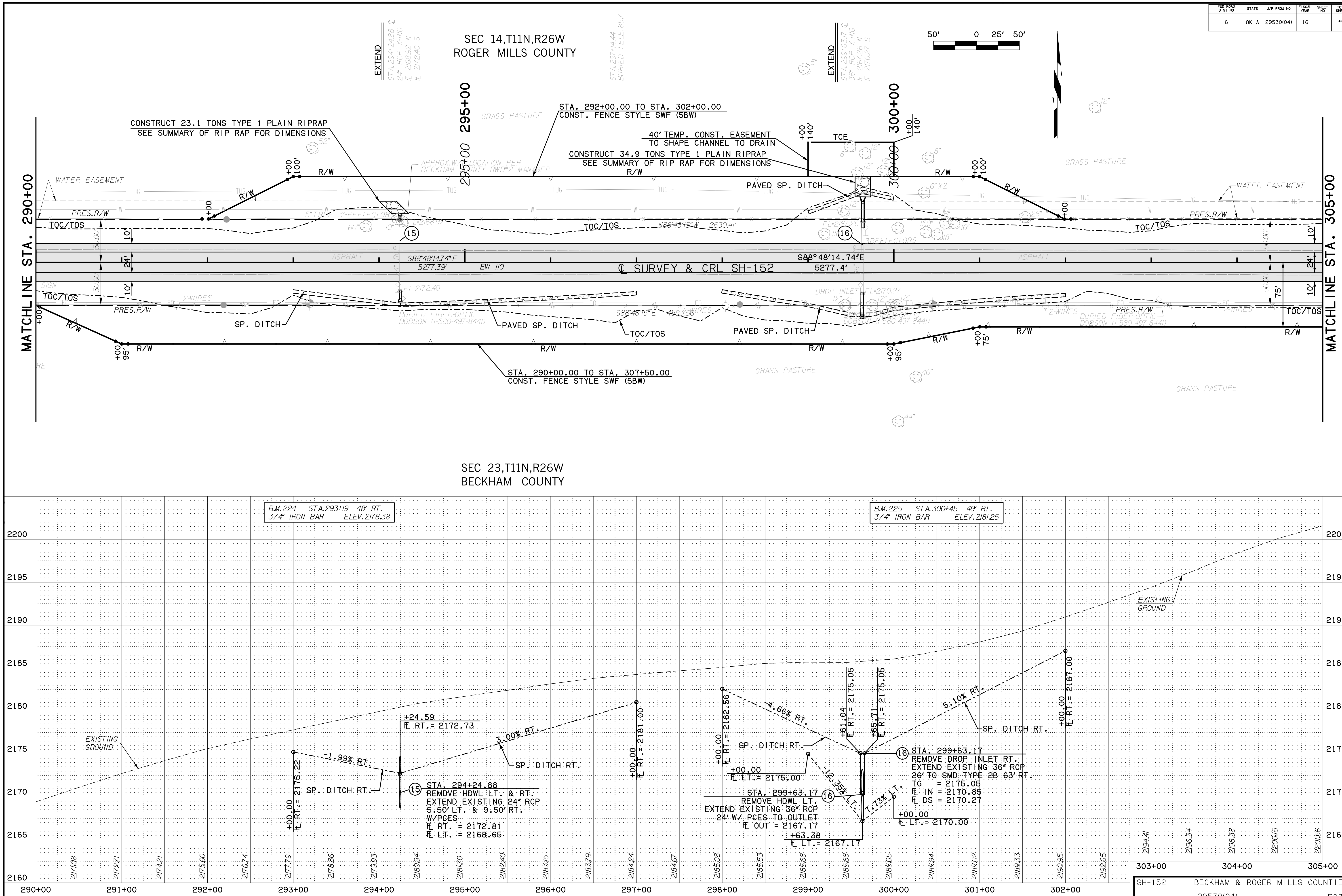
Q2	= 255 CFS	Q25	= 1930 CFS
V2	= 2.24 FPS	V25	= 8.30 FPS
CHW2	= 2122.89 FT.	CHW25	= 2126.48 FT.
Q5	= 660 CFS	Q50	= 2620 CFS
V5	= 3.80 FPS	V50	= 10.55 FPS
CHW5	= 2125.08 FT.	CHW50	= 2127.53 FT.
Q10	= 1120 CFS	Q100	= 3480 CFS
V10	= 5.53 FPS	V100	= 14.35 FPS
CHW10	= 2125.71 FT.	CHW100	= 2129.51 FT.

QOT>Q500

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R031

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R032

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

7/21/2022

11:45:44 AM

SEC 14,T11N,R26W
ROGER MILLS COUNTY

50' 0 25' 50'

REMOVE
STA.307+80.33
24" CMP 3.02° RT.
℄ 2203.40 W
℄ 2203.47 E

MATCHLINE STA. 305+00

MATCHLINE STA. 320+00

310+00

315+00

GRASS PASTURE

GRAVEL ROAD

STA.313+88.97 ℄
4-WIRE OHE X-ING
LOW WIRE = 2234.55

STA.316+91.88 ℄
4-WIRE OHE X-ING
LOW WIRE = 2260.24

4WIRES

STA.319+39.01
2-WIRE OHE
50.42° RT.

STA.319+75.37
BURIED FIBER OPT
45.15° RT.

STA.319+77.25
BURIED TELE.
56.95' LT.

STA. 313+34.34 LT.
CONST. 38' TBSC DR.
AS DIKE

6' CL FENCE W/
BARBWIRE ON TOP
WATER TOWER INSIDE

CATTLE GUARD

STL POSTS

WOOD POST

YELLOW JKT

APPROX.W/L LOCATION PER
BECKHAM COUNTY RWD#2 MANAGER

WATER EASEMENT

PRES.R/W

TOC/TOS

N88°48'15"W 2630.41'

S88°48'14.74"E
5277.39'

EW 110

℄ SURVEY & CRL SH-152

S88°48'14.74"E
5277.4'

ASPHALT

55MPH

JCT 30

S88°48'15"E 4593.56'

4' BARBWIRE FENCE

2-WIRES

5-BW

FO

BURIED FIBER-OPTIC
DOBSON (1-580-497-8441)

POT STA. 313+86.83 =
NS 1/4 SEC.LINE (1715)
X=1396359.4580
Y=159386.0750

STA. 314+19.12 RT.
CONST. 16' TBSC DR.
AS DIKE

STA. 307+78.41 RT.
CONST. 36' TBSC DR.
AS DIKE

STA. 290+00.00 TO STA. 307+50.00
CONST. FENCE STYLE SWF (5BW)

STA. 315+00.00 TO STA. 318+50.00
CONST. FENCE STYLE SWF (5BW)
(INCLUDES STEEL PIPE FOR CORNER POST
AND H BRACE ALTERNATIVE PER FENCE
STANDARD)

R/W

+50 75'

+00 65'

+50

5' PIPE FENCE

CATTLE GUARD

GRAVEL ROAD

NS 1715 S17°23.84"W
2642.60

N11°10.89"E
2625.56

I-WIRE

EDC EMT

ELEC. CABINET
STORM WARNING
SYSTEM ON POLE

4-BW

SHEETMETAL

GRASS PASTURE

SEC 23,T11N,R26W
BECKHAM COUNTY

B.M.226 STA.307+41 49' RT.
3/4" IRON BAR ELEV.2205.51

B.M.227 STA.314+44 48' RT.
3/4" IRON BAR ELEV.2210.06

EXISTING GROUND

2220
2215
2210
2205
2200
2195
2190
2185
2180

2202.88 2204.12 2205.06 2205.84 2206.36 2206.74 2206.94 2207.16 2207.47 2207.82 2208.12 2208.41 2208.70 2208.98 2209.25 2209.46 2209.60 2209.84 2209.78 2209.53 2209.14 2208.65 2207.92 2206.99 2205.89 2204.54 2203.24 2201.78 2200.22 2198.76

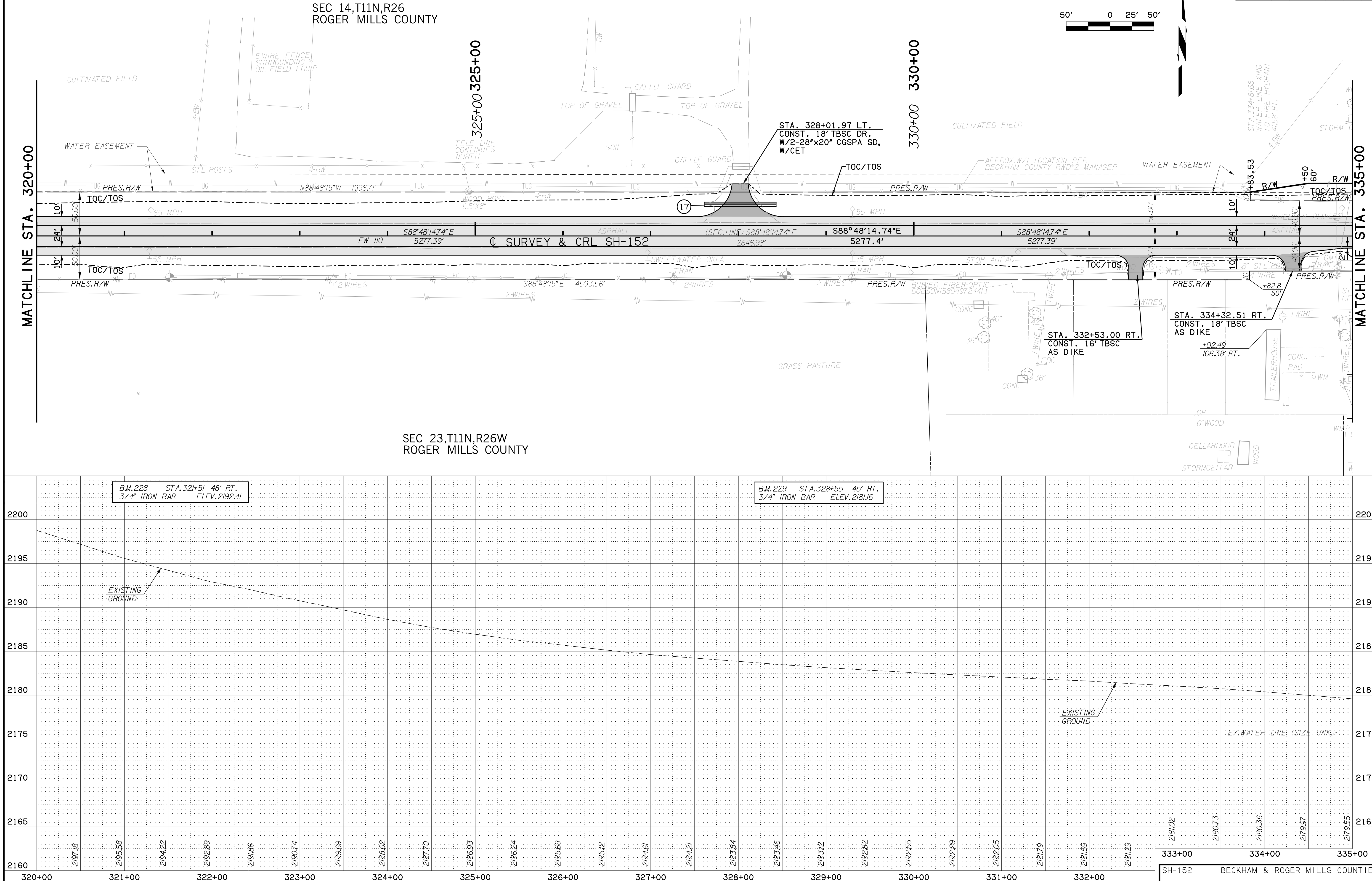
305+00 306+00 307+00 308+00 309+00 310+00 311+00 312+00 313+00 314+00 315+00 316+00 317+00 318+00 319+00 320+00

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R033

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\PPI7_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

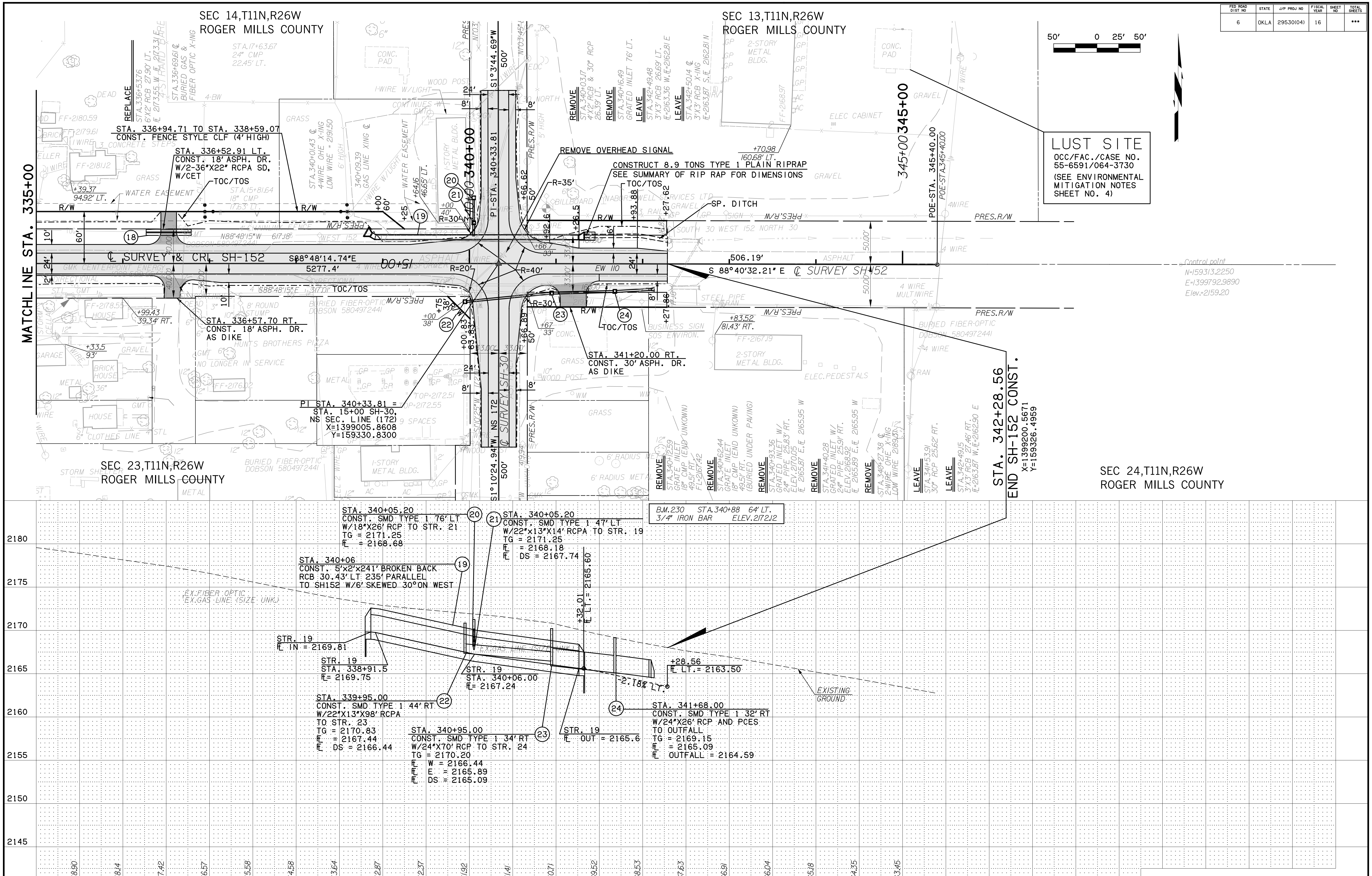


SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R034

7/27/2022
11:45:45 AM
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\PP18_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

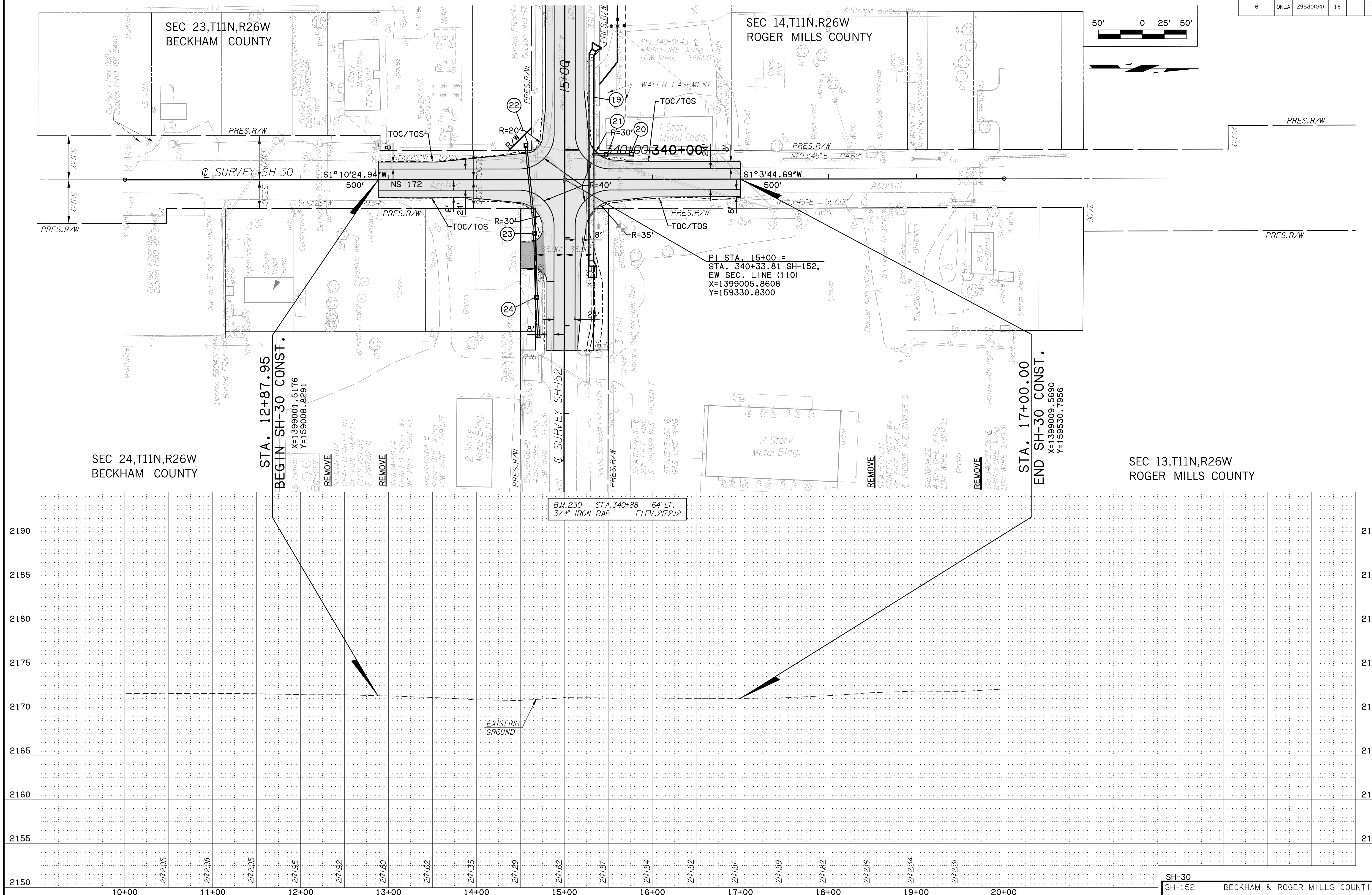


SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. R035

7/27/2022

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***



SH-30
SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. R036

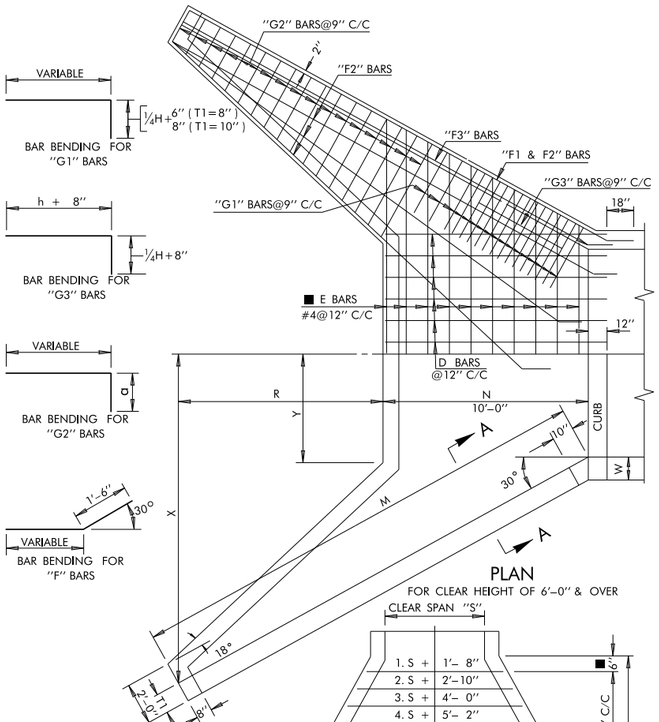
11:45:48 AM

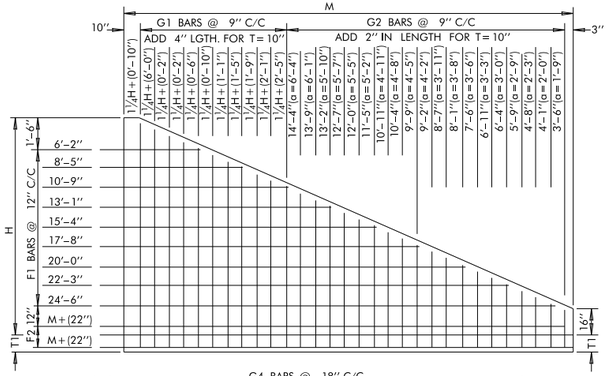
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\PP20_29530.dgn

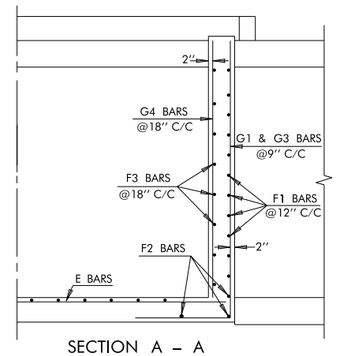
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

DESIGN NO.	CLEAR SPAN (ft.)	CLEAR HEIGHT (ft.)	X (ft.)	Y (ft.)	WING DIMENSIONS d (ft.)	T1	H	M	N	R	REINFORCING BARS: APRON "D" BARS NO	SIZE	LGTH.	APRON "E" BARS NO	SIZE	AVER. LENGTH	TWO WINGS "F1" BARS NO	SIZE	AVER. LENGTH	"F2" BARS NO	SIZE	LGTH	"F3" BARS NO	SIZE	AVER. LENGTH	"F4" BARS @ #4 NO	LGTH	"G1" BARS NO	SIZE	AVER. LENGTH	"G2" BARS @ #4 NO	AVER. LENGTH	"G3" BARS NO	SIZE	h	AVER. LENGTH	"G4" BARS @ #4 NO	AVER. LENGTH	ONE CURB "CH" BARS @ #4 NO	LGTH	"S" BARS @ #4 NO	MIN. LENGTH	* TOTAL QUANT. ONE HEADWALL CONC CU.YD	STEEL LBS.	ADD'L QUANT. CURTAIN WALL CONC. C.Y./V.F.
1	2		3.33								4					5'– 5"																												
2	3	2	3.83		0.08	8"	3'–0"	4'–8"	4'–0"		5	#4	4'–10"	4	#4	6'– 5"	2	#4	6'–2"	6	#4	6'–6"	2	#4	5'–8"	2	6'–0"	12	#4	3'–9"							6	2'–2"	2	3'– 8"	6	4'– 1"	1.59	143	0.33
3	4		4.33								6					7'– 5"																										4'– 8"	7	4'– 3"	1.75	154	0.36
4	5		4.83								7					8'– 5"																										5'– 8"	8	4'– 5"	1.91	165	0.40
5	3		4.96								5					7'– 7"																										3'– 8"	6	4'– 1"	2.57	218	0.41
6	4		5.46								6					8'– 7"																										4'– 8"	7	4'– 3"	2.78	232	0.45
7	5	3	5.96		0.13	8"	4'–0"	6'–11"	6'–0"		7	#4	6'–10"	6	#4	9'– 7"	4	#4	7'–3½"	6	#4	8'–9"	2	#4	5'–8"	2	8'–3"	18	#4	4'–6"							10	2'–6"	2	5'– 8"	8	4'– 5"	2.99	245	0.46
8	6		6.46								8					10'– 7"																										6'– 8"	9	4'– 7"	3.20	259	0.52
9	8		7.46								10					12'– 7"																										8'– 8"	11	4'–11"	3.62	287	0.60
10	4		6.63								6					9'– 9"																										4'– 8"	7	4'– 2"	4.06	336	0.53
11	5		7.13								7					10'– 9"																										5'– 8"	8	4'– 4"	4.32	352	0.57
12	6	4	7.63		0.17	8"	5'–0"	9'–3"	8'–0"		8	#4	8'–10"	8	#4	11'– 9"	6	#4	8'–5"	6	#4	11'–1"	4	#4	7'–4½"	2	10'–7"	24	#4	5'–3½"							12	3'–2½"	2	6'– 8"	9	4'– 6"	4.58	368	0.61
13	8		8.63								10					13'– 9"																										8'– 8"	11	4'–10"	5.11	402	0.68
14	10		9.63								12					15'– 9"																										11'– 0"	13	5'– 0"	5.63	435	0.76
15	5		8.25								7					11'–11"																										5'–10"	8	4'–4"	5.86	480	0.65
16	6	5	8.75		0.21	8"	6'–0"	11'–6"	10'–0"		8	#4	10'–10"	10	#4	12'–11"	8	#4	9'–7"	6	#4	13'–4"	6	#4	9'–1"	2	12'–10"	30	#4	6'–1"							16	3'–7"	2	6'–10"	9	4'– 6"	6.16	498	0.69
17	8		9.75								10					14'–11"																										8'–10"	11	4'–10"	6.79	537	0.76
18	10		10.75								12					16'–11"																										11'–0"	13	5'– 0"	7.41	575	0.84
19	5		9.42	5.32							7					11'–11"																										6'– 0"	8	4'– 3"	7.01	588	0.74
20	6	6	9.92	5.82	0.25	8"	7'–0"	13'–10"	10'–0"	2'–0"	8	#4	10'–10"	10	#4	12'–11"	10	#4	10'–9"	8	#4	15'–8"	6	#4	9'–1"	2	15'–2"	28	#4	7'–6"	8	4'–4½"						18	4'–3"	2	7'– 0"	9	4'– 5"	7.32	607	0.78
21	8		10.92	6.82							10					14'–11"																										9'– 0"	11	4'– 9"	7.95	645	0.85
22	10		11.92	7.82							12					16'–11"																										11'– 0"	13	4'–11"	8.56	682	0.93
23	5		10.58	4.48							7					11'–11"																										6'– 2"	8	4'– 3"	10.38	722	0.83
24	6	7	11.08	4.98	0.29	10"	8'–0"	16'–2"	10'–0"	4'–0"	8	#4	10'–10"	10	#4	12'–11"	12	#4	11'–11"	8	#4	18'–0"	8	#4	10'–10"	2	17'–6"	26	#4	9'–3"	16	5'–5½"						22	4'–7"	2	7'– 2"	9	4'– 5"	10.76	741	0.86
25	8		12.08	5.98							10					14'–11"																										9'– 2"	11	4'– 9"	11.50	779	0.94
26	10		13.08	6.98							12					16'–11"																										11'– 2"	13	4'–11"	12.24	818	1.01
27	6		12.25	3.90							8					12'–11"																										7'– 4"	9	4'– 4"	12.75	955	0.95
28	8	8	13.25	4.90	0.34	10"	9'–0"	18'–6"	10'–0"	6'–0"	10	#4	10'–10"	10	#4	14'–11"	14	#4	13'–1"	10	#4	20'–4"	10	#4	12'–7"	2	19'–10"	24	#4	10'–7½"	24	6'–7½"	12	#4	2'–0"	5'–7"	24	5'–3"	2	9'– 4"	11	4'– 8"	13.49	993	1.02
29	10		14.25	5.90							12					16'–11"																										11'– 4"	13	4'–10"	14.24	1032	1.10
30	10	9	15.38	4.87	0.38	10"	10'–0"	20'–9"	10'–0"	8'–0"	12	#4	10'–10"	10	#4	16'–11"	16	#4	14'–2½"	10	#4	22'–7"	10	#4	12'–7"	2	22'–1"	22	#4	12'–0"	32	7'–9½"	18	#4	3'–0"	6'–10"	28	5'–7"	2	11'– 6"	14	4'–10"	16.46	1208	1.18
31	10	10	16.54	3.79	0.42	10"	11'–0"	23'–1"	10'–0"	10'–0"	12	#4	10'–10"	10	#4	16'–11"	18	#4	15'–4"	12	#4	24'–11"	12	#4	14'–3½"	2	24'–5"	20	#4	13'–5"	40	8'–10½"	24	#5	4'–3"	8'–4"	30	6'–3"	2	11'– 8"	14	4'– 9"	19.00	1545	1.27

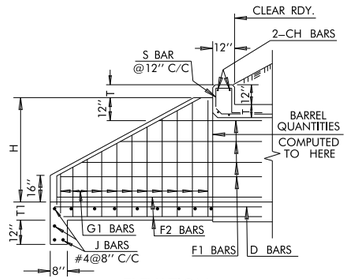
* INCLUDES 2 WINGS, ONE APRON, ONE CURB AND ONE STD. DEPTH CURTAIN WALL



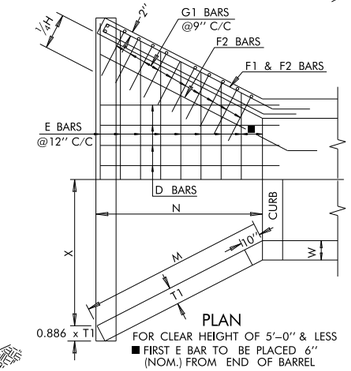




SECTION A – A

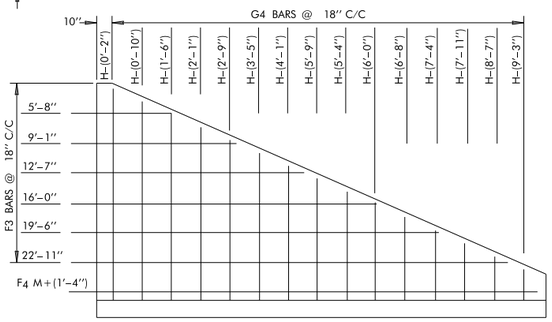


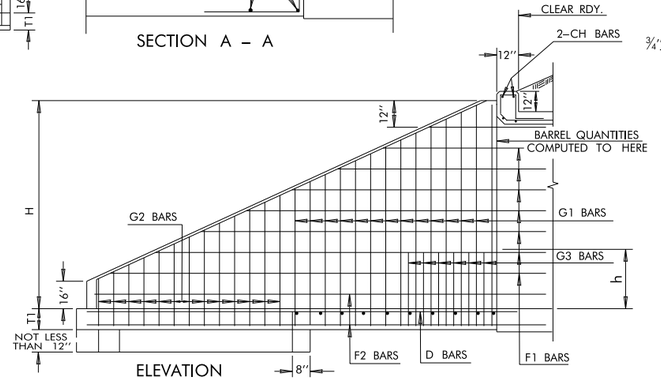
ELEVATION



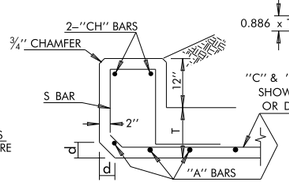
PLAN
FOR CLEAR HEIGHT OF 5'–0" & LESS
■ FIRST E BAR TO BE PLACED 6" (NOM.) FROM END OF BARREL

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
* 509.06(A)	CLASS AA CONCRETE	C. Y.
* 509.06(B)	CLASS A CONCRETE	C. Y.
511.06(A)	REINFORCING STEEL	LBS.





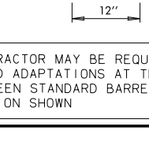
ELEVATION

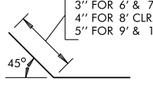


"C" & "A" BARS (OR EQUIV.) SIZES & SPACING SHOWN ON ROADWAY OR BRIDGE STDS. OR DETAIL SHEETS & TO BE FIELD BENT AS SHOWN ON THIS SHEET

d (FT.) = 0.042 x CLR. HT.

T+9" FOR 2' & 3' CLR. HT.
T+8" FOR 4' & 5' CLR. HT.
T+7" FOR 6' & 7' CLR. HT.
T+6" FOR 8' & 9' CLR. HT.
T+5" FOR 10' CLR. HT.





BAR BENDING FOR "C" BARS

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIAL SHALL BE IN ACCORDANCE WITH THE 1999 ENGLISH STANDARD SPECICATIONS.
2. REINFORCING STEEL IN APRON SHALL BE SUPPORTED ON BAR CHAIRS.
3. CHAIRS SHALL BE SUPPORTED ON CLASS C CONCRETE STRIPS SPACED AT 4' CENTERS.
4. THE TOP OF CHAIR SUPPORTS, SHALL BE AT THE ELEVATION OF THE BOTTOM OF FOOTING. REINFORCING STEEL IN THE WINGS SHALL BE HELD IN PLACE BY METAL CHAIRS. MAXIMUM SPACING OF CHAIRS SHALL BE 4'–0" CENTERS.
5. COST OF METAL CHAIRS OR CONCRETE STRIPS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
6. DETAILS OF SINGLE CELL BARRELS CORRESPONDING TO THE HEADWALLS SHOWN ON THIS STANDARD SHALL BE INCLUDED IN THE PLANS.
7. ALL REINFORCING STEEL SHALL HAVE 2" MINIMUM CLEARANCE FROM ALL ADJACENT CONCRETE SURFACES.
8. * WING WALL, CURB AND APRON CONSTRUCTION SHALL CONSIST OF THE SAME CLASS OF CONCRETE USED FOR THE REINFORCED CONCRETE BOX.

CONTRACTOR MAY BE REQUIRED TO MAKE FIELD ADAPTATIONS AT THE CONNECTION BETWEEN STANDARD BARREL WALLS AND END SECTION SHOWN

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

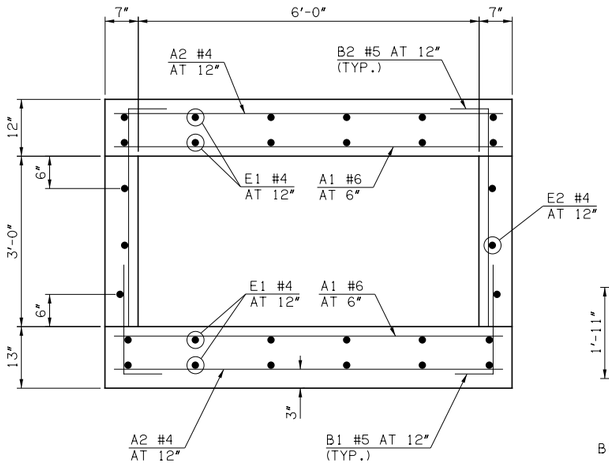
DRAINAGE STRUCTURE DETAILS

SPECIAL END SECTIONS
STR. #3, #4, #7
(SHEET 1 OF 5)

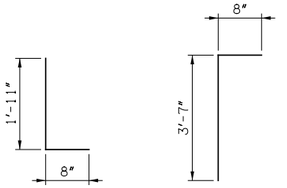
State Job No. 29530(04) Sheet No. R037

7/27/2022 11:55:27 AM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CRDY_DETAIL01_29530.dgn



STR. NO. 3 BARREL SECTION



STR. NO. 3 BAR BENDS

DESIGN DATA

MATERIAL
CLASS AA CONCRETE F'C = 4 KSI
REINFORCING STEEL FY = 60 KSI

LOADING
HL-93 OR OKLAHOMA OVERLOAD TRUCK

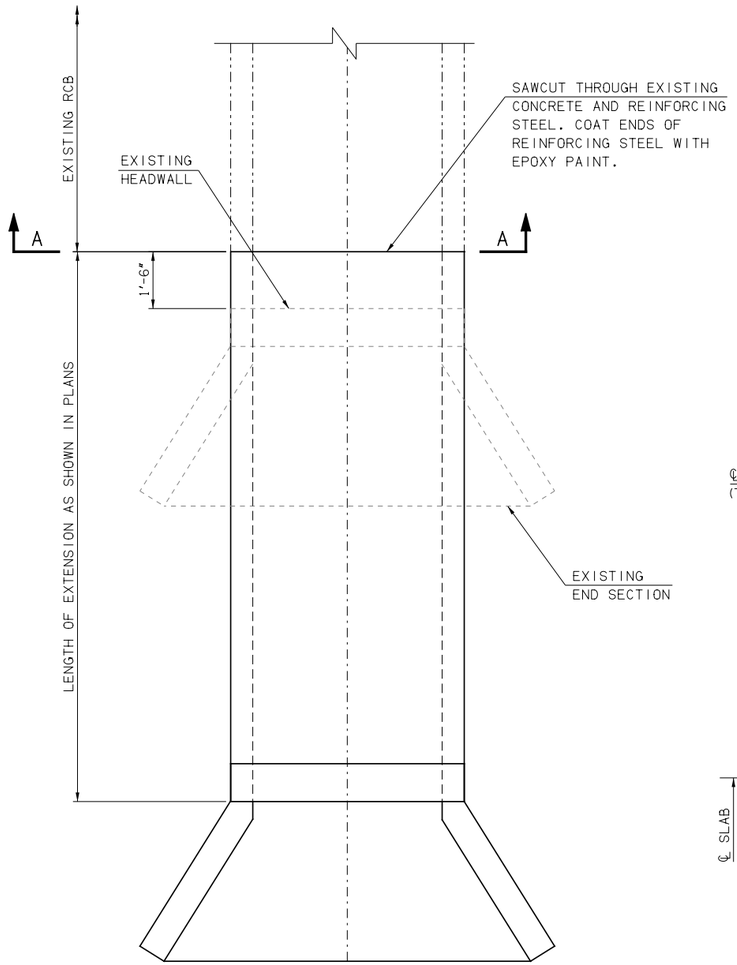
DESIGN
AASHTO LRFD BRIDGE DESIGN
SPECIFICATIONS, 7TH EDITION

GENERAL NOTES

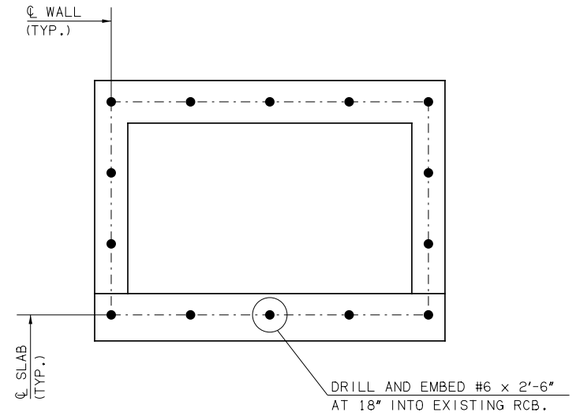
1. ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
2. ALL CONCRETE EDGES WILL HAVE A 1½″ CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL CHAMFER STRIPS WILL BE SIZED LUMBER.
3. ALL REINFORCING STEEL WILL HAVE A 2″ MINIMUM CLEAR COVER UNLESS OTHERWISE SHOWN.
4. THE QUANTITY FOR REINFORCING STEEL DOES NOT INCLUDE LAP SPLICES OF E1-BARS OR E2 BARS IN THE LENGTH OF THE BARREL OR AT TRANSVERSE CONSTRUCTION JOINTS. THE SPLICE LENGTH FOR E-BARS SHALL BE 24″ MINIMUM. THE NUMBER OF SPLICES USED IS TO BE APPROVED B THE ENGINEER. REINFORCING STEEL FOR SPLICES SHALL NOT BE MEASURED FOR PAYMENT, AND ALL COSTS WILL BE INCLUDED IN THE UNIT BID PRICE FOR REINFORCING STEEL.
5. TRANSVERSE CONSTRUCTION JOINTS SHALL BE PLACED IN ALL CULVERTS 100 FT. OR MORE IN LENGTH. JOINTS SHALL BE SPACED AT 60 FT. MAX.
6. REINFORCING STEEL SHALL BE CONTINUOUS THROUGH THE TRANSVERSE CONSTRUCTION JOINT AND EXTEND A MIN. OF 24″ INTO ADJACENT SECTION.

STR. NO. 3 QUANTITIES

ITEM	UNIT	TOTAL PER FOOT OF BARREL
CLASS AA CONCRETE	CY	0.69
EPOXY COATED REINFORCING STEEL	LB	128.40



NON-SKEWED DETAIL
OF END SECTION REMOVAL
AND EXTENSION



SECTION A-A

NOTE: ALL COST OF EPOXY ANCHORAGE SYSTEM, DRILLING, DOWELS AND INCIDENTALS NECESSARY TO ANCHOR DOWELS INTO EXISTING RCB WILL BE INCLUDED IN OTHER ITEMS OF WORK.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DRAINAGE STRUCTURE DETAILS

(STR. NO. 3 BARREL AND
TYPICAL BOX EXTENSION DETAIL)
(SHEET 2 OF 5)

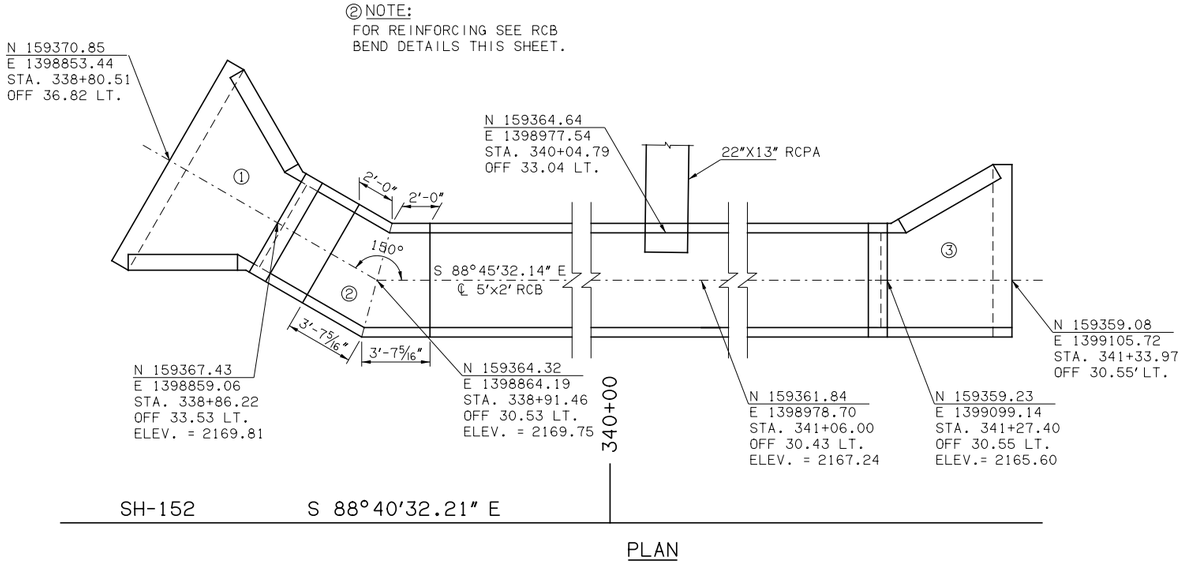
State Job No. 29530(04) Sheet No. R038

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

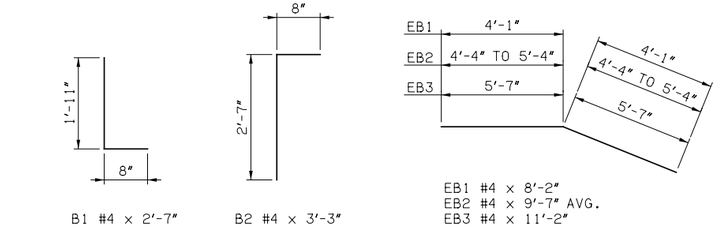
① NOTE:
FOR REINFORCING SEE DRAINAGE DETAILS SHEET 2 OF 3.

② NOTE:
FOR REINFORCING SEE RCB BEND DETAILS THIS SHEET.

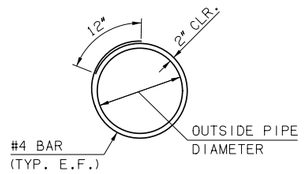
③ NOTE:
FOR REINFORCING SEE DRAINAGE DETAILS SHEET 3 OF 3.



PLAN



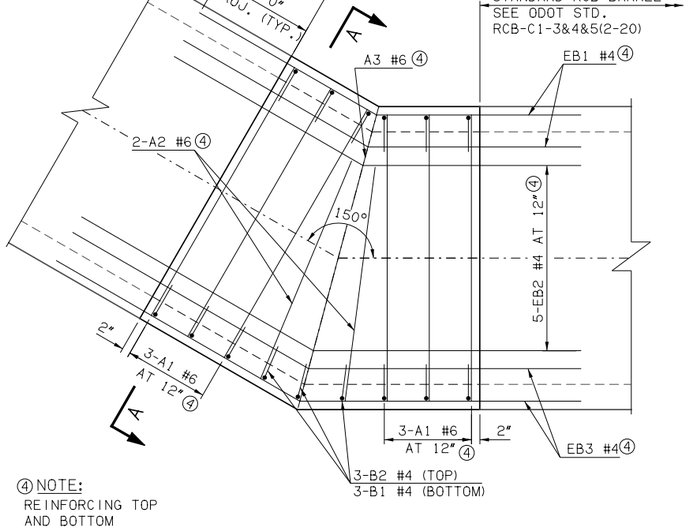
BAR BENDS



TYPICAL PIPE PENETRATION DETAIL

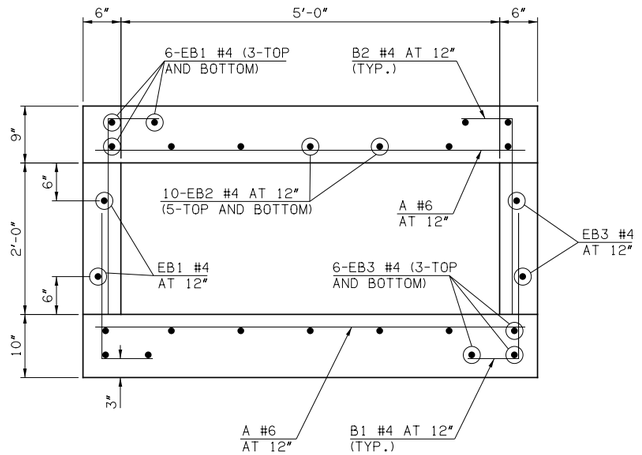
5'x2' RCB BEND BAR LIST

PLAIN REINFORCING					
MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
A1	#6	12	STR.	5'-8"	
A2	#6	4	STR.	4'-8"	
A3	#6	2	STR.	5'-10"	
B1	#4	15	BNT.	2'-7"	
B2	#4	15	BNT.	3'-3"	
EB1	#4	4	BNT.	8'-2"	
EB2	#4	10	BNT.	9'-7" AVG.	8'-8" TO 10'-8"
EB3	#4	4	BNT.	11'-2"	



④ NOTE:
REINFORCING TOP AND BOTTOM

PLAN
TOP SLAB REINFOCING SHOWN
BOTTOM SLAB REINFORCING SIMILAR



SECTION A-A

5'x2' RCB BEND QUANTITIES

ITEM	UNIT	TOTAL
CLASS AA CONCRETE	CY	2.40
EPOXY COATED REINFORCING STEEL	LB	321.90

NOTES:

1. ALL REINFORCING STEEL SHALL BE GRADE 60 AND HAVE A 2" MINIMUM CLEARANCE UNLESS OTHERWISE SHOWN ON PLANS.
2. ALL CONCRETE EDGES SHALL HAVE A 1½" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL CHAMFER STRIPS SHALL BE SIZED LUMBER.
3. ALIGN EB BARS WITH E BARS IN THE ODOT STD. 5'x2' RCB.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

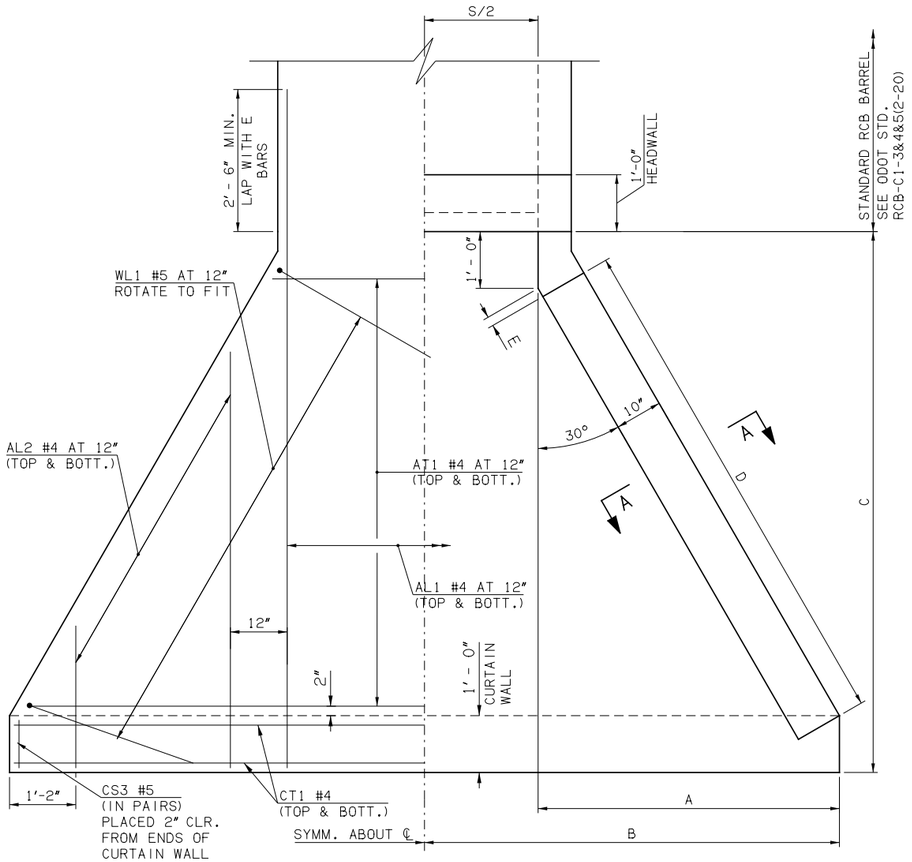
SH-152 BECKHAM & ROGER MILLS COUNTIES

DRAINAGE STRUCTURE DETAILS
(STR. NO. 19)
(SHEET 3 OF 5)

State Job No. 29530(04) Sheet No. R039

7/27/2022 11:55:25 AM
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\DRAINAGE_DETAIL_02.29530.dgn

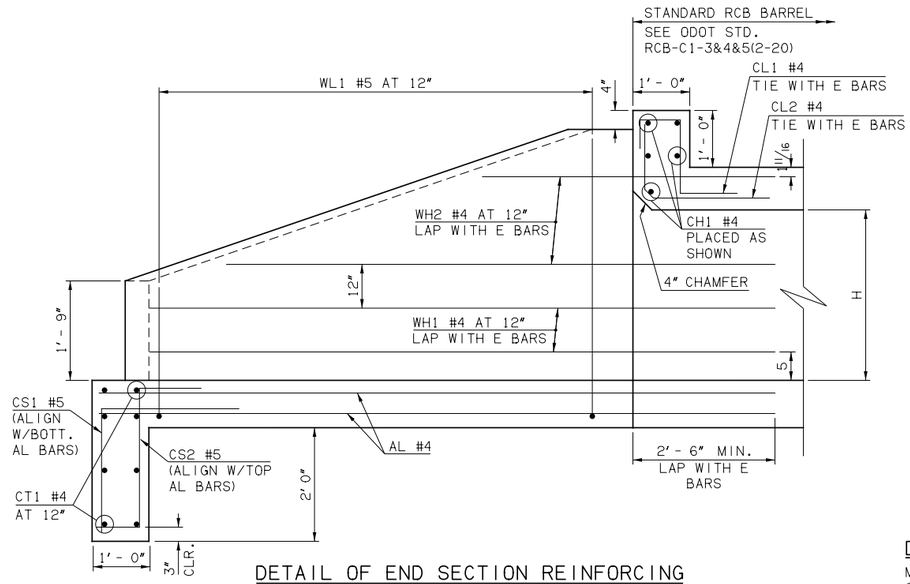
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



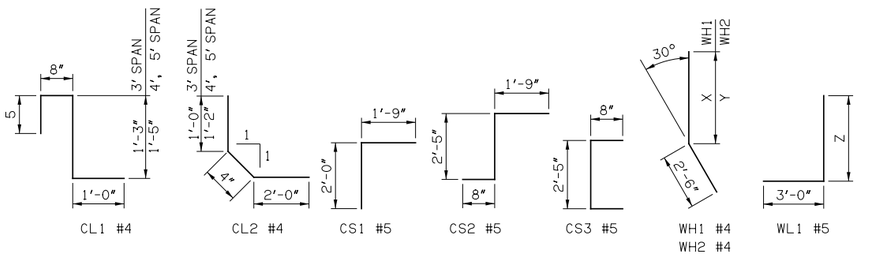
HALF APRON REINFORCING

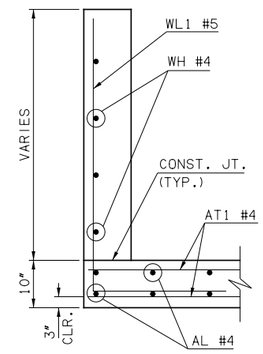
HALF APRON PLAN

APRON SECTION



DETAIL OF END SECTION REINFORCING





SECTION A-A

DESIGN DATA

MATERIAL
CLASS AA CONCRETE F'C = 4 KSI
REINFORCING STEEL FY = 60 KSI

LOADING
HL-93 OR OKLAHOMA OVERLOAD TRUCK

DESIGN
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION

GENERAL NOTES

1. ALL CONCRETE EDGES WILL HAVE A 1½" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL CHAMFER STRIPS WILL BE SIZED LUMBER.
2. ALL REINFORCING STEEL WILL HAVE A 2" MINIMUM CLEAR COVER UNLESS OTHERWISE SHOWN.

STD RCB DIMENSIONS		END SECTION DIMENSIONS					REINFORCING BAR LIST																														QUANTITIES	
							AL1 #4 STR		①③AL2 #4 STR			②③AT1 #4 STR			CH1 #4 STR		CL1 #4 BNT		CL2 #4 BNT		CS1 #5 BNT		CS2 #5 BNT		CS3 #5 BNT		CT1 #4 STR		WH1 #4 BNT			③WH2 #4 BNT				③WL1 #5 BNT				CLASS AA CONCRETE (CY)	REINFORCING STEEL (LB)
S	H	A	B	C	D	E	QTY	LENGTH	QTY	LENGTH	REMARKS	QTY	LENGTH	REMARKS	QTY	LENGTH	QTY	LENGTH	QTY	LENGTH	QTY	LENGTH	QTY	LENGTH	QTY	LENGTH	QTY	LENGTH	X	QTY	LENGTH	Y	QTY	LENGTH	REMARKS	Z	QTY	LENGTH	REMARKS		
3'	2'	3'-3 13/16"	4'-9 13/16"	6'-1"	5'-2"	3/8"	10	8'-5"	8	2'-2"	2'-6" TO 3'-11"	10	6'-8"	4'-5" TO 9'-0"	5	3'-8"	5	3'-5"	5	3'-4"	9	3'-9"	9	4'-10"	4	3'-9"	8	9'-3"	5'-10"	4	8'-4"	3'-1"	2	5'-7"	-	2'-2" TO 3'-8"	14	5'-11"	5'-2" TO 6'-8"	3.20	410.00
3'	3'	5'-0 5/8"	6'-6 5/8"	9'-1"	8'-7"	15/16"	10	11'-5"	16	4'-7"	2'-6" TO 6'-9"	16	8'-5"	4'-5" TO 12'-6"	5	3'-10"	5	3'-5"	5	3'-4"	13	3'-9"	13	4'-10"	4	3'-9"	8	12'-9"	9'-3"	4	11'-9"	3'-2" TO 6'-6"	4	7'-4"	5'-8" TO 9'-0"	2'-2" TO 4'-8"	20	6'-5"	5'-2" TO 7'-8"	5.50	640.00
4'	2'	3'-7 5/16"	5'-7 5/16"	6'-7"	5'-9"	5/16"	12	8'-11"	8	3'-5"	2'-6" TO 4'-3"	12	7'-8"	4'-10" TO 10'-7"	5	4'-10"	6	3'-7"	6	3'-6"	10	3'-9"	10	4'-10"	4	3'-9"	8	10'-10"	6'-5"	4	8'-11"	3'-1" TO 5'-6"	4	6'-9"	5'-7" TO 8'-0"	2'-2" TO 3'-10"	14	6'-0"	5'-2" TO 6'-10"	3.90	490.00
4'	3'	5'-4 1/16"	7'-4 1/16"	9'-7"	9'-2"	7/8"	12	11'-11"	16	4'-10"	2'-6" TO 7'-3"	18	10'-0"	6'-0" TO 14'-1"	5	4'-10"	6	3'-7"	6	3'-6"	14	3'-9"	14	4'-10"	4	3'-9"	8	14'-4"	9'-10"	4	12'-4"	3'-1" TO 8'-5"	6	8'-3"	5'-7" TO 10'-11"	2'-2" TO 4'-10"	22	6'-6"	5'-2" TO 7'-10"	6.30	750.00
4'	4'	7'-0 7/8"	9'-0 7/8"	12'-7"	12'-8"	7/16"	12	14'-11"	24	6'-3"	2'-6" TO 10'-1"	24	11'-9"	6'-0" TO 17'-6"	5	5'-0"	6	3'-7"	6	3'-6"	18	3'-9"	18	4'-10"	4	3'-9"	8	17'-9"	13'-4"	4	15'-10"	3'-1" TO 11'-7"	8	9'-10"	5'-7" TO 14'-1"	2'-2" TO 5'-10"	28	7'-0"	5'-2" TO 8'-10"	9.30	1030.00
5'	2'	3'-7 5/16"	6'-1 5/16"	6'-7"	5'-9"	5/16"	14	8'-11"	12	3'-5"	2'-6" TO 4'-5"	12	8'-8"	5'-10" TO 11'-7"	5	5'-8"	7	3'-7"	7	3'-6"	13	3'-9"	13	4'-10"	4	3'-9"	8	11'-10"	6'-5"	4	8'-11"	3'-1" TO 5'-6"	4	6'-9"	5'-7" TO 8'-0"	2'-2" TO 3'-10"	14	6'-0"	5'-2" TO 6'-10"	4.10	560.00
5'	3'	5'-4 1/16"	7'-10 1/16"	9'-7"	9'-2"	7/8"	14	11'-11"	16	4'-11"	2'-6" TO 7'-5"	18	10'-5"	5'-10" TO 15'-1"	5	5'-8"	7	3'-7"	7	3'-6"	15	3'-9"	15	4'-10"	4	3'-9"	8	15'-4"	9'-10"	4	12'-4"	3'-1" TO 8'-5"	6	8'-3"	5'-7" TO 10'-11"	2'-2" TO 4'-10"	22	6'-5"	5'-2" TO 7'-10"	6.70	790.00
5'	4'	7'-0 7/8"	9'-6 7/8"	12'-7"	12'-8"	7/16"	14	14'-11"	24	6'-4"	2'-6" TO 10'-3"	24	12'-2"	5'-10" TO 18'-6"	5	5'-10"	7	3'-7"	7	3'-6"	19	3'-9"	19	4'-10"	4	3'-9"	8	18'-9"	13'-4"	4	15'-10"	3'-1" TO 11'-7"	8	9'-10"	5'-7" TO 14'-1"	2'-2" TO 5'-10"	28	7'-0"	5'-2" TO 8'-10"	9.80	1080.00
5'	5'	8'-9 5/8"	11'-3 5/8"	15'-7"	16'-2"	0"	14	17'-11"	32	7'-9"	2'-6" TO 13'-1"	30	13'-11"	5'-10" TO 22'-0"	5	6'-0"	7	3'-7"	7	3'-6"	23	3'-9"	23	4'-10"	4	3'-9"	8	22'-3"	16'-9"	4	19'-3"	3'-1" TO 14'-10"	10	11'-5"	5'-7" TO 17'-4"	2'-2" TO 6'-10"	36	7'-6"	5'-2" TO 9'-10"	13.40	1420.00

① 4 SETS REQUIRED

② 2 SETS REQUIRED

③ LENGTH SHOWN IS AVERAGE LENGTH OF BAR FOR QUANTITY CALCULATION

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DRAINAGE STRUCTURE DETAILS

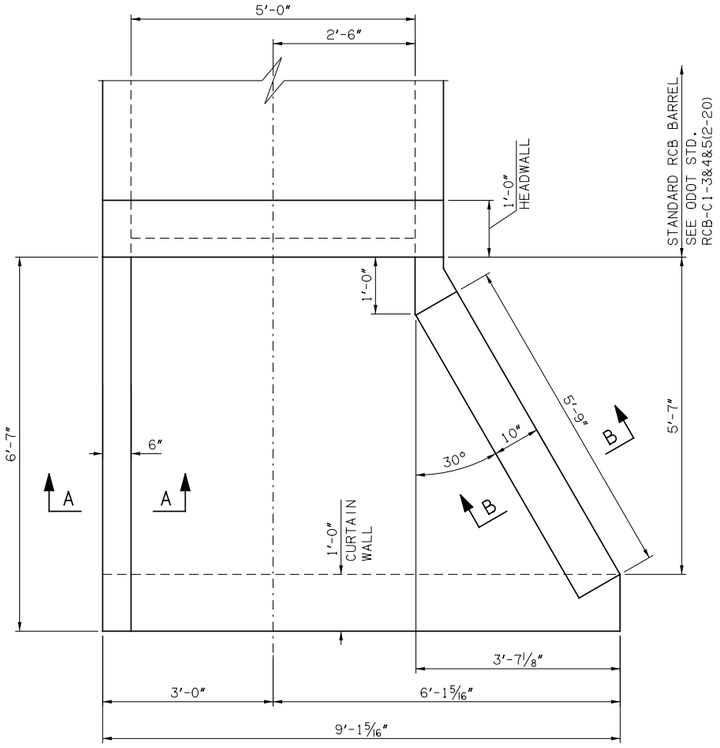
(STR. NO. 19 UPSTREAM/WEST END)

(SHEET 4 OF 5)

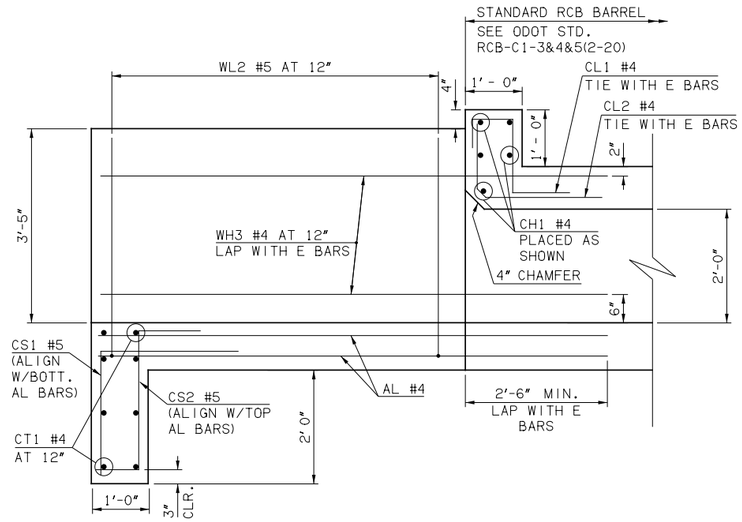
State Job No. 29530(04) Sheet No. R040

7/27/2022 11:55:25 AM

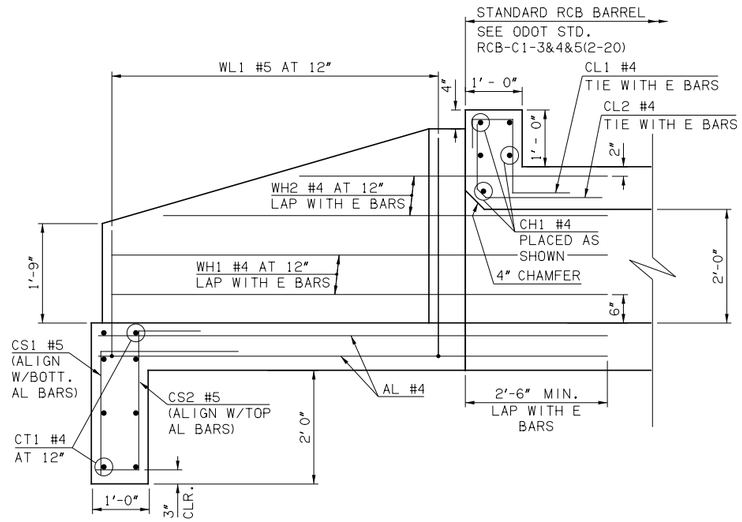
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\DRAINAGE_DETAIL_03.29530.dgn



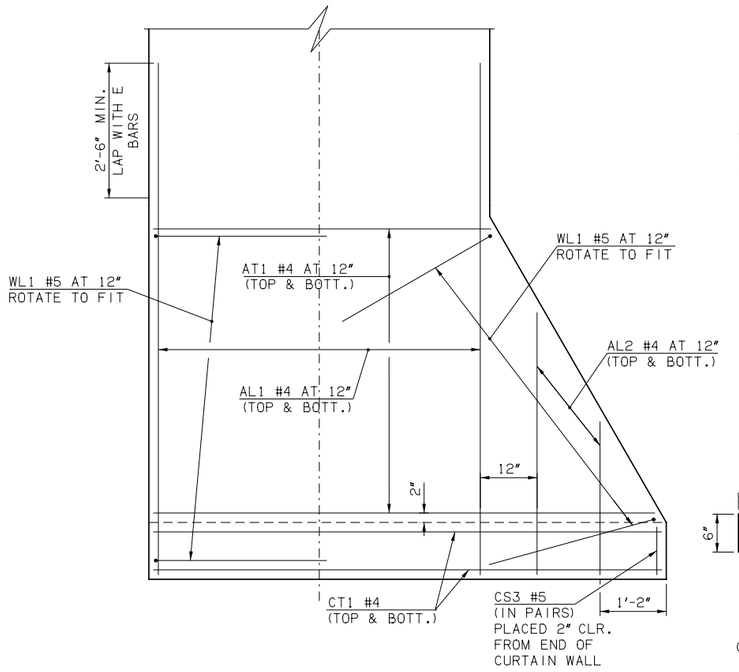
APRON PLAN



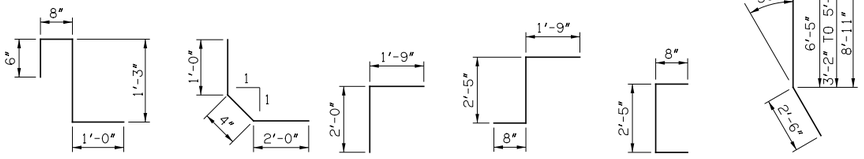
DETAIL OF END SECTION REINFORCING



DETAIL OF WING REINFORCING



APRON REINFORCING PLAN



DESIGN DATA

MATERIAL
CLASS AA CONCRETE F'C = 4 KSI
REINFORCING STEEL FY = 60 KSI

LOADING
HL-93 OR OKLAHOMA OVERLOAD TRUCK

DESIGN
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION

GENERAL NOTES

1. ALL CONCRETE EDGES WILL HAVE A 1½" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL CHAMFER STRIPS WILL BE SIZED LUMBER.
2. ALL REINFORCING STEEL WILL HAVE A 2" MINIMUM CLEAR COVER UNLESS OTHERWISE SHOWN.

END SECTION BAR LIST

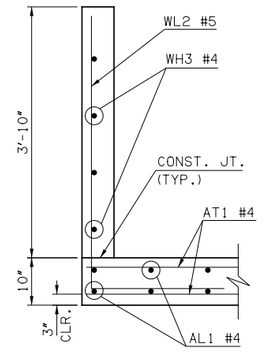
	PLAIN REINFORCING					
MARK	SIZE	QTY.	FORM	LENGTH	REMARKS
AL1	#4	14	STR.	8'-11"	
(1) AL2	#4	4	STR.	3'-8" AVG.	2'-8" TO 4'-7"
(2) AT1	#4	12	STR.	7'-2" AVG.	5'-9" TO 8'-7"
CH1	#4	5	STR.	5'-8"	
CL1	#4	7	BNT.	3'-5"	
CL2	#4	7	BNT.	3'-4"	
CS1	#5	9	BNT.	3'-9"	
CS2	#5	9	BNT.	4'-10"	
CS3	#5	2	BNT.	3'-9"	
CT1	#4	8	STR.	8'-9"	
WH1	#4	2	BNT.	8'-11"	
WH2	#4	2	BNT.	6'-9" AVG.	5'-8" TO 7'-10"
WH3	#4	4	BNT.	11'-5"	
WL1	#5	7	BNT.	5'-2" AVG.	4'-7" TO 5'-10"
WL2	#5	7	BNT.	5'-10"	

(1) 4 SETS REQUIRED

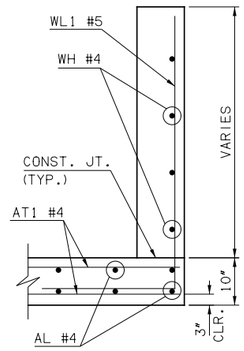
(2) 2 SETS REQUIRED

END SECTION QUANTITIES

ITEM	UNIT	TOTAL
CLASS AA CONCRETE	CY	3.70
REINFORCING STEEL	LB	470.00



SECTION A-A



SECTION B-B

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

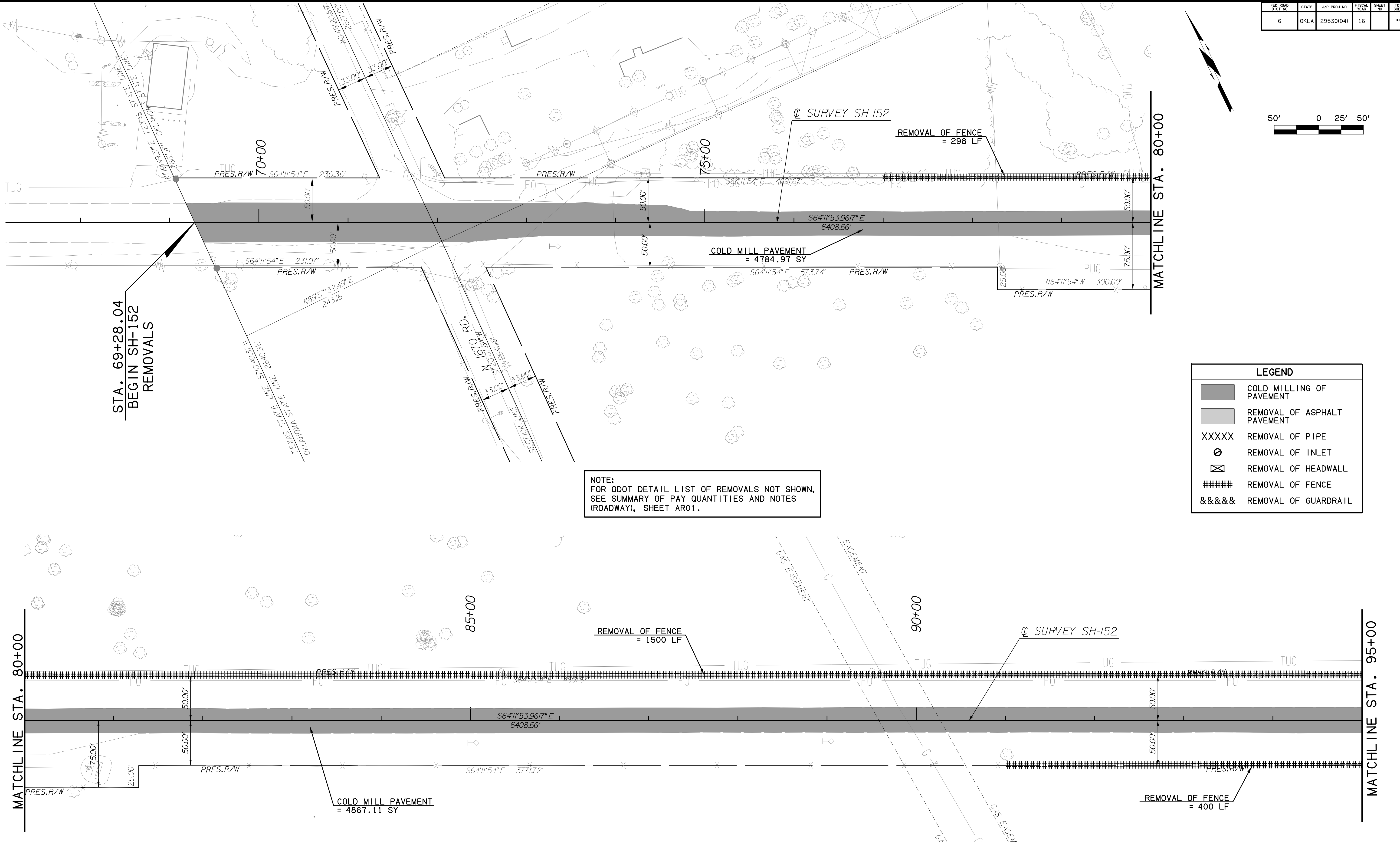
DRAINAGE STRUCTURE DETAILS

(STR. NO. 19 DOWNSTREAM/EAST END)

(SHEET 5 OF 5)

State Job No. 29530(04) Sheet No. R041

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



NOTE:
FOR ODOT DETAIL LIST OF REMOVALS NOT SHOWN, SEE SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY), SHEET AR01.

LEGEND

Symbol	Description
(dark shading)	COLD MILLING OF PAVEMENT
(light shading)	REMOVAL OF ASPHALT PAVEMENT
XXXXX	REMOVAL OF PIPE
⊘	REMOVAL OF INLET
⊠	REMOVAL OF HEADWALL
#####	REMOVAL OF FENCE
&&&&&	REMOVAL OF GUARDRAIL

Design	
Drawn	
Checked	
Approved	
Squad	olsson

SH-152 BECKHAM & ROGER MILLS COUNTIES

DEMOLITION PLAN

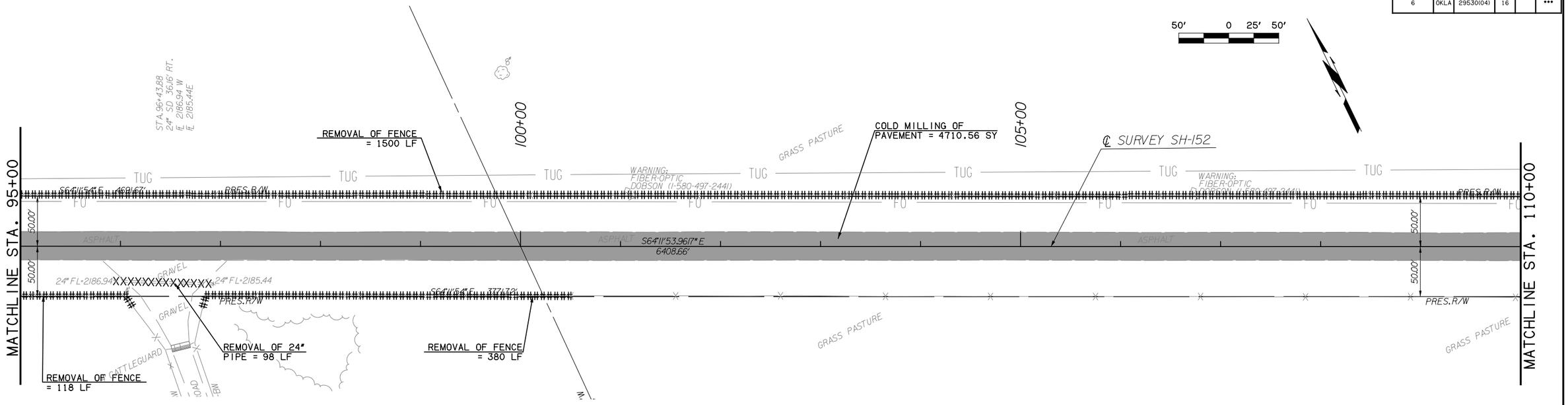
(SHEET 1 OF 10)

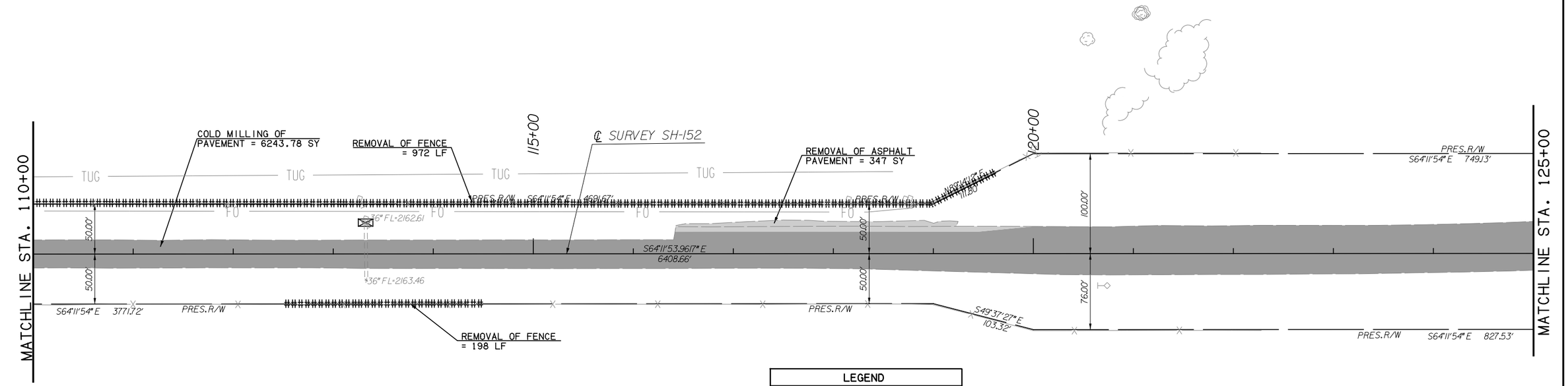
State Job No. 29530(04) Sheet No. R042

7/27/2022 12:02:50 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\REM01_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••





NOTE:
FOR ODOT DETAIL LIST OF REMOVALS NOT SHOWN, SEE SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY), SHEET AR01.

LEGEND

	COLD MILLING OF PAVEMENT
	REMOVAL OF ASPHALT PAVEMENT
XXXXX	REMOVAL OF PIPE
⊘	REMOVAL OF INLET
⊠	REMOVAL OF HEADWALL
#####	REMOVAL OF FENCE
&&&&&	REMOVAL OF GUARDRAIL

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DEMOLITION PLAN

(SHEET 2 OF 10)

State Job No. 29530(04) Sheet No. R043

T/27/2022

12:02:51 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\REM02_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

MATCHLINE STA. 125+00

PRES.R/W

100.00'

76.00'

PRES.R/W

PRES.R/W

N 1680 RD.

PRES.R/W

PRES.R/W

130+00

COLD MILLING OF PAVEMENT = 7517.89 SY

PRES.R/W

135+00

140+00

MATCHLINE STA. 140+00

50.00'

PRES.R/W

℄ SURVEY SH-152

PRES.R/W

PRES.R/W

PRES.R/W

50' 0 25' 50'

MATCHLINE STA. 140+00

PRES.R/W

PT-STA 142+76.16

145+00

140.00'

COLD MILLING OF PAVEMENT = 6992.22 SY

PRES.R/W

150+00

PRES.R/W PRES.R/W

140.00'

MATCHLINE STA. 155+00

S88°55'25.82"E

2623.96'

50.00'

PRES.R/W

PRES.R/W

℄ SURVEY SH-152

50.00'

PRES.R/W

PRES.R/W

50' 0 25' 50'

NOTE:
FOR ODOT DETAIL LIST OF REMOVALS NOT SHOWN, SEE SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY), SHEET AR01.

LEGEND

	COLD MILLING OF PAVEMENT
	REMOVAL OF ASPHALT PAVEMENT
XXXXX	REMOVAL OF PIPE
⊘	REMOVAL OF INLET
⊠	REMOVAL OF HEADWALL
#####	REMOVAL OF FENCE
&&&&&	REMOVAL OF GUARDRAIL

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DEMOLITION PLAN

(SHEET 3 OF 10)

State Job No. 29530(04) Sheet No. R044

7/27/2022

12:02:52 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\REM03_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

50' 0 25' 50'

MATCHLINE STA. 155+00

PRES.R/W

140.00'

50.00'

50.00'

PRES.R/W

COLD MILLING OF PAVEMENT
= 5645.89 SY

160+00

S88°56'54"E 2221.88'

S88°56'53.96"E
2655.41'

S88°56'54"E 1190.65'

165+00

PRES.R/W

140.00'

50.00'

PRES.R/W

℄ SURVEY SH-152

S22°54'W
258.32'
PRES.R/W

S22°59'54"E
266.55'
PRES.R/W

PRES.R/W

PI-STA169+31.57

132.00'

50.00'

PRES.R/W

CONCRETE

MATCHLINE STA. 170+00

PRES.R/W

98'

Sta.181+77.52
Headwall 55.44' Rt.
Sta.181+77.68
5'X3' RCB X-Ing
Sta.181+77.53
Headwall 42.90' Lt.
Sta.182+24.42
Headwall 46.82' Rt.

33.00' 33.00'

N 1690 RD. ASPHALT ROAD

Sta.182+25.06
5'X3' RCB X-Ing
Sta.182+25.15
Headwall 42.35' Lt.
STA.182+36.11 ℄ X-ING
2-WIRE OHE * 21347.0
LOW WIRE

STA.183+91.31
WATER VALVE 62.4' PRES.R/W

STA.183+95.26
WATER VALVE 61.7'

PRES.R/W

PRES.R/W

CULTIVATED FIELD

1" STL POST

REMOVAL OF ASPHALT
PAVEMENT = 164 SY

WARNING:
FIBER-OPTIC
DOBSON (1-580-497-2441)

WARNING:
FIBER-OPTIC
DOBSON (1-580-497-2441)

WARNING:
FIBER-OPTIC
DOBSON (1-580-497-2441)

PRES.R/W

S88°47'59"E 163.28'

FO

TU

2-WV'S 705.00'

PRES.R/W

6-6"X3' STL POSTS
WATER EASEMENT

2-8" WOOD POST

2-8" WOOD POST

WATER EASEMENT

3"X3" REFLECTORS

3"X3" REFLECTORS
CROSS TRAFFIC
NO STOP

82.00'

82.00'

5'X3' RCB

5'X3' RCB

ASPHALT

STOP

2-WIRES

33.00' 33.00'

GRAVEL ROAD

5-BW

5-BW

2-WIRES

N80°27'20"E 268.09' 5-BW PRES.R/W

MATCHLINE STA. 185+00

MATCHLINE STA. 170+00

PRES.R/W

N88°47'59"W 318.61'

PRES.R/W

S83°05'2"E 502.49'

175+00

COLD MILLING OF PAVEMENT
= 7,750.78 SY

PRES.R/W

S88°47'59"E 420.72'

180+00

132.00'

50.00'

50.00'

PRES.R/W

S88°47'59"E 868.43'

℄ SURVEY SH-152

PRES.R/W

S81°06'5"E 373.87'

GAS EASEMENT

GAS EASEMENT

GAS EASEMENT

GAS EASEMENT

CULTIVATED FIELD

LEGEND	
	COLD MILLING OF PAVEMENT
	REMOVAL OF ASPHALT PAVEMENT
XXXXX	REMOVAL OF PIPE
⊘	REMOVAL OF INLET
⊠	REMOVAL OF HEADWALL
#####	REMOVAL OF FENCE
&&&&&	REMOVAL OF GUARDRAIL

NOTE:
FOR ODOT DETAIL LIST OF REMOVALS NOT SHOWN, SEE SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY), SHEET AR01.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DEMOLITION PLAN

(SHEET 4 OF 10)

State Job No. 29530(04) Sheet No. R045

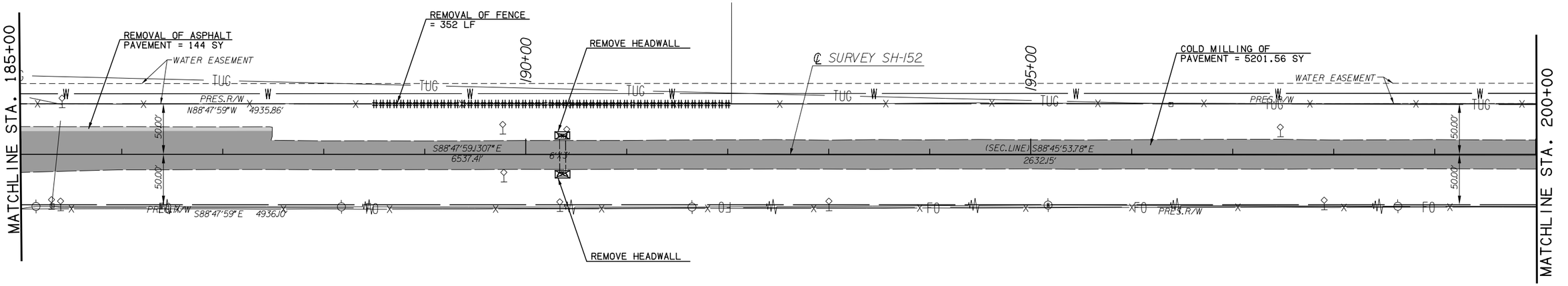
7/27/2022

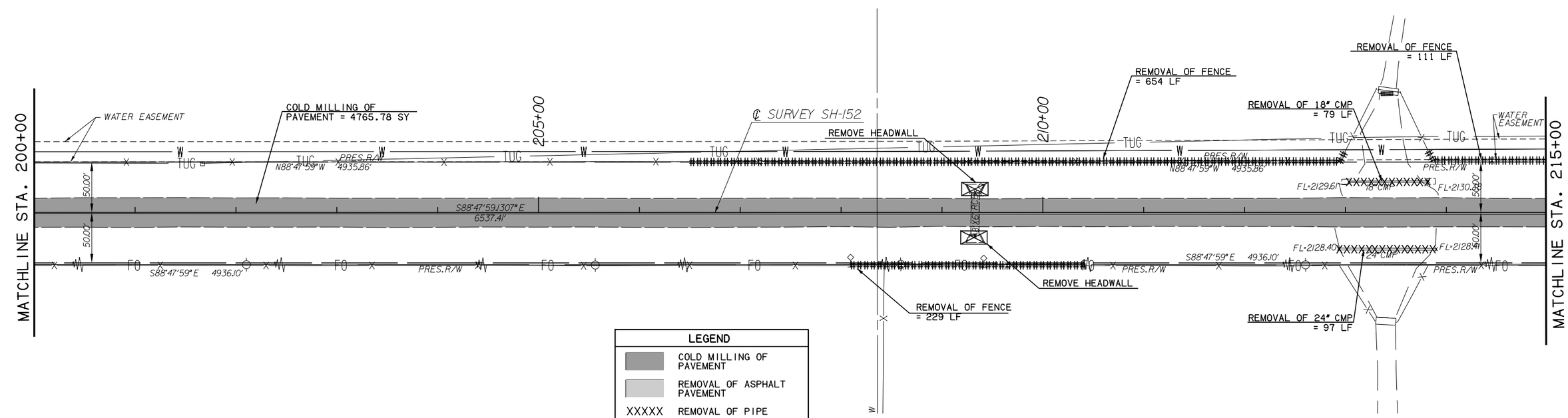
12:02:52 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\REM04_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

50' 0 25' 50'





LEGEND	
	COLD MILLING OF PAVEMENT
	REMOVAL OF ASPHALT PAVEMENT
XXXXX	REMOVAL OF PIPE
⊘	REMOVAL OF INLET
⊠	REMOVAL OF HEADWALL
#####	REMOVAL OF FENCE
&&&&&	REMOVAL OF GUARDRAIL

NOTE:
FOR ODOT DETAIL LIST OF REMOVALS NOT SHOWN, SEE SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY), SHEET AR01.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DEMOLITION PLAN

(SHEET 5 OF 10)

State Job No. 29530(04) Sheet No. R046

T/27/2022

12:02:53 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C_REM05_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

50' 0 25' 50'

MATCHLINE STA. 215+00

REMOVAL OF FENCE = 100 LF

WATER EASEMENT

220+00

℄ SURVEY SH-152

COLD MILLING OF PAVEMENT = 4789.33 SY

225+00

REMOVAL OF FENCE = 100 LF

WATER EASEMENT

MATCHLINE STA. 230+00

TUG

W

PRES.R/W

50.00'

S88°47'59J307"E
6537.41'

(SEC.LINE) S88°45'53.78"E
2633.27'

FO

REMOVAL OF FENCE = 100 LF

MATCHLINE STA. 230+00

REMOVAL OF FENCE = 479 LF

REMOVE HEADWALL

REMOVE HEADWALL

WATER EASEMENT

N 1700 RD.

REMOVE 6'X3' RCB STRUCTURE

REMOVE HEADWALL

REMOVAL OF FENCE = 242 LF

COLD MILLING OF PAVEMENT = 4,747.22 SY

240+00

℄ SURVEY SH-152

WATER EASEMENT

S88°47'59.1307"E
6537.41'

6'X3' RCB

S88°47'43.85"E
5287.43'

S88°47'44"E 5221.50'

S88°47'44"E 5221.52'

REMOVAL OF FENCE = 469 LF

REMOVE HEADWALL

REMOVAL OF FENCE = 174 LF

MATCHLINE STA. 245+00

33.00'

GAS EASEMENT

GAS EASEMENT

NOTE:
FOR ODOT DETAIL LIST OF REMOVALS NOT SHOWN, SEE SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY), SHEET AR01.

LEGEND

	COLD MILLING OF PAVEMENT
	REMOVAL OF ASPHALT PAVEMENT
XXXXX	REMOVAL OF PIPE
⊘	REMOVAL OF INLET
⊠	REMOVAL OF HEADWALL
#####	REMOVAL OF FENCE
&&&&&	REMOVAL OF GUARDRAIL

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DEMOLITION PLAN

(SHEET 6 OF 10)

State Job No. 29530(04) Sheet No. R047

7/27/2022 12:02:54 PM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\REM06_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

50' 0 25' 50'

MATCHLINE STA. 245+00

MATCHLINE STA. 260+00

MATCHLINE STA. 260+00

MATCHLINE STA. 275+00

℄ SURVEY SH-152

250+00

255+00

265+00

270+00

GAS EASEMENT

WATER EASEMENT

PRES.R/W

TUG

W

FO

50.00'

S88°47'44"E 5221.50'

S88°49'48.69"E 2643.72'

S88°47'43.85"E 5287.43'

(SEC.LINE) S88°49'48.69"E 2643.72'

N1°05'42.99"E 2615.16'

S1°18'56.91"W 2642.22'

COLD MILLING OF PAVEMENT = 4741.67 SY

REMOVAL OF FENCE = 50 LF

REMOVAL OF FENCE = 240 LF

REMOVAL OF GUARDRAIL = 142 LF

REMOVAL OF GUARDRAIL = 140 LF

REMOVAL OF FENCE = 448 LF

REMOVAL OF ASPHALT = 89 SY

COLD MILLING OF PAVEMENT = 5011.67 SY

REMOVAL OF FENCE = 200 LF

REMOVAL OF ASPHALT = 76 SY

REMOVAL OF GUARDRAIL = 142 LF

REMOVAL OF FENCE = 547 LF

REMOVAL OF ASPHALT = 74 SY

REMOVAL OF GUARDRAIL = 138 LF

REMOVAL OF 18" PIPE = 92 LF

REMOVAL OF FENCE = 198 LF

REMOVAL OF GUARDRAIL = 85 LF

REMOVAL OF ASPHALT = 20 SY

FL=2137.91 18" FL=2136.63

FL=2115.90

FL=2115.76

FL=2127.98

FL=2129.46

FL=2132.21

24"

FL=2131.91

3-0"X3'-0"

NOTE:
FOR ODOT DETAIL LIST OF REMOVALS NOT SHOWN, SEE SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY), SHEET AR01.

LEGEND

	COLD MILLING OF PAVEMENT
	REMOVAL OF ASPHALT PAVEMENT
XXXXX	REMOVAL OF PIPE
⊘	REMOVAL OF INLET
⊠	REMOVAL OF HEADWALL
#####	REMOVAL OF FENCE
&&&&&	REMOVAL OF GUARDRAIL

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DEMOLITION PLAN

(SHEET 7 OF 10)

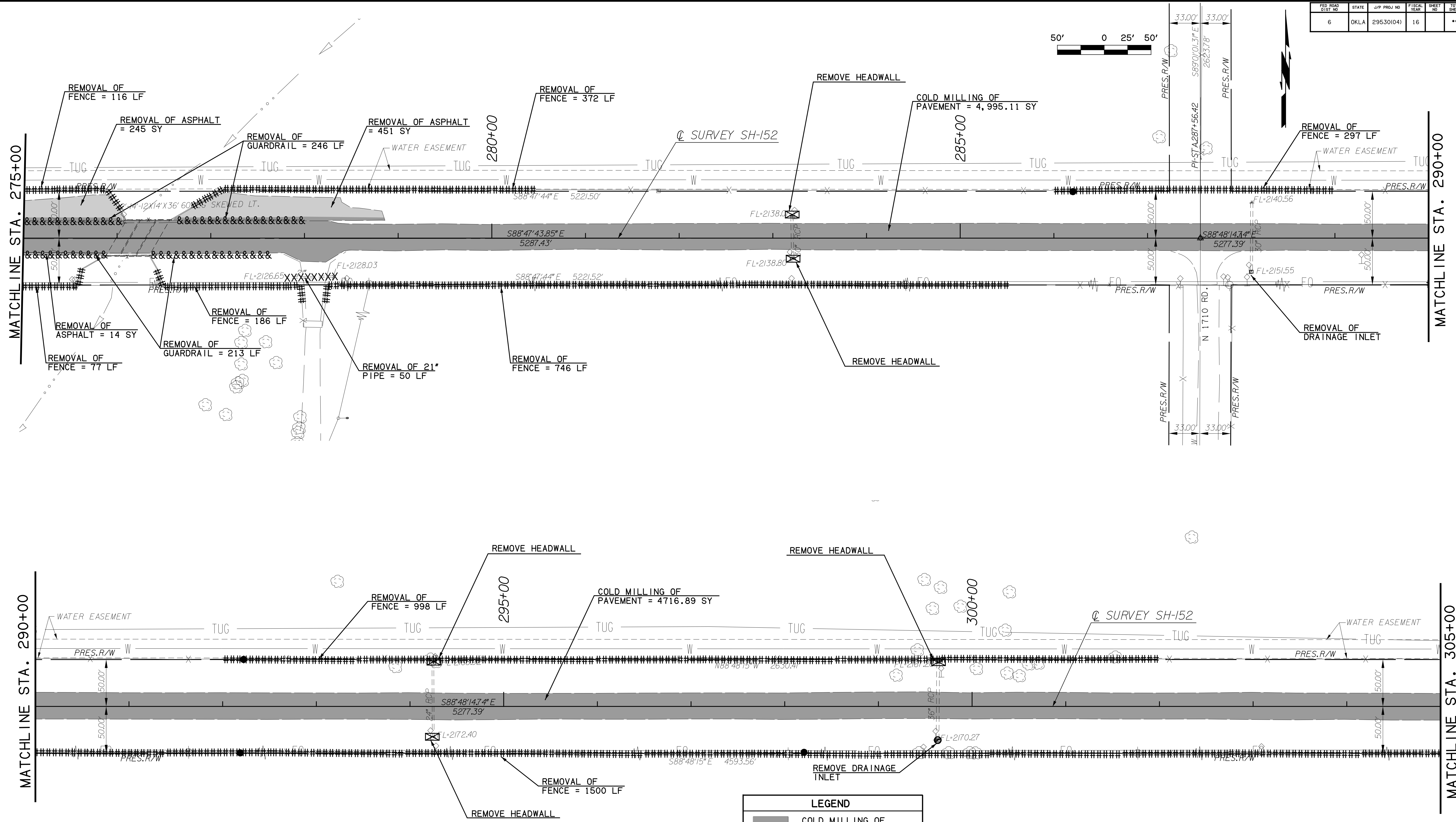
State Job No. 29530(04) Sheet No. R048

T/27/2022

12:02:55 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C_REM07_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



NOTE:
FOR ODOT DETAIL LIST OF REMOVALS NOT SHOWN, SEE SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY), SHEET AR01.

LEGEND

Symbol	Description
(dark shading)	COLD MILLING OF PAVEMENT
(light shading)	REMOVAL OF ASPHALT PAVEMENT
XXXXX	REMOVAL OF PIPE
⊘	REMOVAL OF INLET
⊠	REMOVAL OF HEADWALL
#####	REMOVAL OF FENCE
&&&&&	REMOVAL OF GUARDRAIL

Design		SH-152 — BECKHAM & ROGER MILLS COUNTIES
Drawn		DEMOLITION PLAN (SHEET 8 OF 10)
Checked		
Approved		
Squad	olsson	State Job No. 29530(04) Sheet No. R049

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

50′ 0 25′ 50′

MATCHLINE STA. 305+00

℄ SURVEY SH-152

WATER EASEMENT

DA 1A = X.XX AC.

TUC W PRES.R/W

310+00

N88°48'15"W 2630.41'

N1°10.89"E 2642.56'

315+00

REMOVAL OF ASPHALT PAVEMENT = 112 SY

WATER EASEMENT

PRES.R/W

50.00'

S88°48'14.74"E 5277.39'

FL-2203.40 24" CMP FL-2203.47

FO

S88°48'15"E 4593.56'

REMOVAL OF FENCE = 240 LF

REMOVE 52 LF PIPE

COLD MILLING OF PAVEMENT = 4821.44 SY

S1°17'23.84"W 2642.60'

REMOVAL OF FENCE = 356 LF

MATCHLINE STA. 320+00

MATCHLINE STA. 320+00

325+00

330+00

℄ SURVEY SH-152

WATER EASEMENT

N88°48'15"W 1996.71'

(SEC.LINE) S88°48'14.74"E 2646.98'

40.00'

10'

COLD MILLING OF PAVEMENT = 5029.56 SY

REMOVAL OF ASPHALT PAVEMENT = 86 SY

MATCHLINE STA. 335+00

NOTE:
FOR ODOT DETAIL LIST OF REMOVALS NOT SHOWN, SEE SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY), SHEET AR01.

LEGEND

	COLD MILLING OF PAVEMENT
	REMOVAL OF ASPHALT PAVEMENT
XXXXX	REMOVAL OF PIPE
⊘	REMOVAL OF INLET
⊠	REMOVAL OF HEADWALL
######	REMOVAL OF FENCE
&&&&&	REMOVAL OF GUARDRAIL

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DEMOLITION PLAN

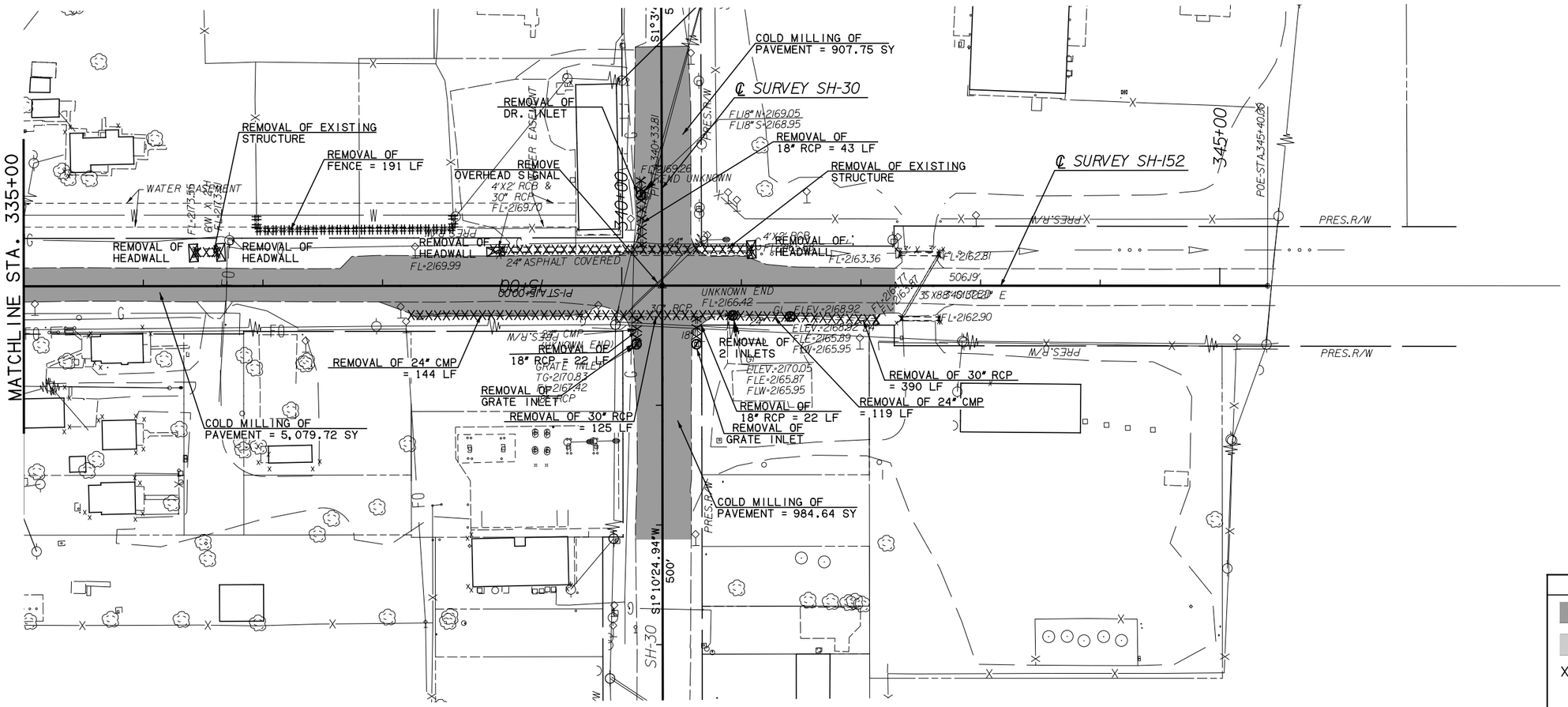
(SHEET 9 OF 10)

State Job No. 29530(04) Sheet No. R050

7/27/2022 12:02:57 PM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\REM09_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***

50' 0 25' 50'



LEGEND	
	COLD MILLING OF PAVEMENT
	REMOVAL OF ASPHALT PAVEMENT
XXXXX	REMOVAL OF PIPE
⊘	REMOVAL OF INLET
⊠	REMOVAL OF HEADWALL
#####	REMOVAL OF FENCE
&&&&&	REMOVAL OF GUARDRAIL

NOTE:
FOR ODOT DETAIL LIST OF REMOVALS NOT SHOWN, SEE SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY), SHEET ARO1.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

DEMOLITION PLAN

(SHEET 10 OF 10)

State Job No. 29530(04) Sheet No. R051

7/27/2022 12:02:58 PM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CREM10_29530.dgn

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SWO 5126(1) J/P 29530(04) ; CO. Roger Mills / Beckham

HORIZONTAL CONTROL:

( ) Oklahoma Coordinate System of 1927 _____ Zone.
(X) Oklahoma Coordinate System of 1983 NORTH 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:

Oklahoma Department of Transportation coordinates were derived by multiplying the Oklahoma Coordinate Systems of 1927 or 1983 by the combined adjustment factor of 1.00010. The ODOT Coordinate System is 2350 feet above sea level.

1. PRIMARY CONTROL adjusted to ODOT Control (B) Order
   Stations B-5-434 and B-5-435
   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 TRIMBLE R-10 GPS Equipment
2. Secondary Control adjusted to Primary Control (B) Order
   Stations B-5-434 and B-5-435
   A) Closure before adjustment X _____; Y Angles
   B) Secondary Control ; is (3rd) Order; Tied to Primary Control
   C) Method of Distance Measurement:
   ( ) Electronic (X) GPS ( ) Triangulation ( ) Chained
   D) Instrument used for angles TRIMBLE R-10 GPS Equipment

VERTICAL CONTROL IS (3rd) order. Level Line taken from B-5-434 & B-5-435
() order and tied to R-65-464 & R-65-465 (3rd) order.
( ) 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

Nicholas S. Schrader
Professional Land Surveyor

Date

(FORM SD #20)
Rev. 11/03

SURVEY BEGAN: 04/06/2015
SURVEY COMPLETED: 10/16/2015

PERSONNEL ON SURVEY:
NICHOLAS S. SCHRADER, LICENSED SURVEYOR
DANIEL BENNETT, SENIOR SURVEYOR
BRANDON HOLLAND, ASSOCIATE SURVEYOR
CHASE GARTEN, ASSISTANT SURVEYOR
DONALD SPICER, ASSISTANT SURVEYOR
ALAN SHIPMAN, SENIOR TECHNICIAN
COREY TIMMONS, SENIOR TECHNICIAN

OLSSON ASSOCIATES
201 NW 63RD ST., SUITE 130
OKLAHOMA CITY, OK 73116

EQUIPMENT:
TRIMBLE R10 (GPS EQUIPMENT)
TRIMBLE S-6 ROBOTIC TOTAL STATION
TRIMBLE DINI DIGITAL LEVEL
SOKKIA CX-105 TOTAL STATION

SCALES 1"

SURVEY DATA SHEETS 1" = 100'
LAND TIE DATA SHEETS 1" = 500'

CONVENTIONAL SYMBOLS

- RAILROADS
- RANGE & TOWNSHIP
- SECTION LINES
- QUARTER SECTION LINES
- FENCES
- EXISTING ROADS
- BASE LINE
- TELEPHONE & TELEGRAPH
- POWER LINES
- BUILDINGS
- OILWELL
- DRAINAGE STRUCTURES - IN PLACE

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, JULY 25, 2013.

SPECIFICATIONS FOR SURVEYS FOR PRIMARY AND SECONDARY HIGHWAYS DATED JANUARY 2011 GOVERN.

SDS 1 OF 26

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SURVEY OF

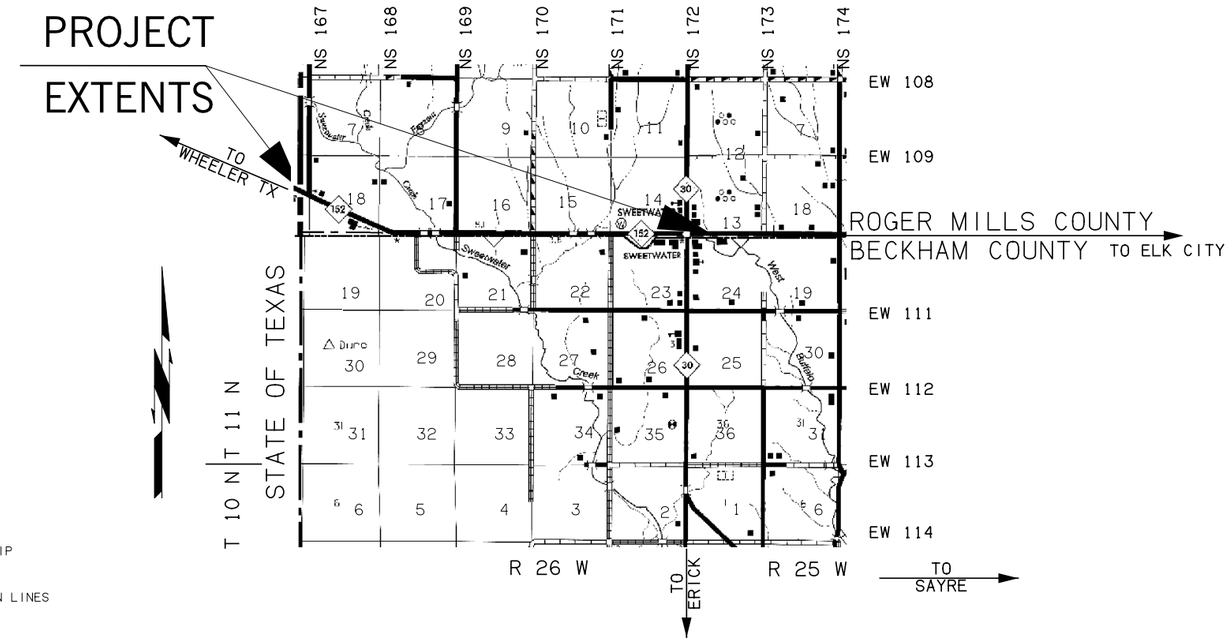
S.H. 152

SWO 5126(1)
J P NO. 29530(04)

ROGER MILLS COUNTY

OKLAHOMA

FROM THE TEXAS STATE LINE,
EAST TO S.H. 30 (AT SWEETWATER)



PROJECT LENGTH 27,910.00 Ft. 5.28 MI.

A001
BEGIN STATION: 66+30.00 (SH152)
END STATION: 345+40.00 (SH152)

A002
BEGIN STATION: 10+00.00 (SH-30)
END STATION: 20+00.00 (SH-30)

Electronic File Transfer Disclaimer:

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

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

REVISIONS	
DESCRIPTION	DATE

INDEX OF SURVEY SHEETS

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SWO 5126(1) Job/Piece 29530(04) Engr. Contract No. 1615

LAND SURVEYOR'S CERTIFICATION

I hereby certify that all land and property sub-division, 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 instruction contained in the U.S. Government Bureau of Land Management publication **"Manual of Surveying Instruction"**;
-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 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 20th day of November, 20 15 .

(seal)

Land Surveyor _____
Signature

Nicholas S. Schrader
Printed Name

Oklahoma Registered Land Surveyor No. 1898

Certificate of Authorization No. 2483 Exp. Date June 30, 2017

Pipelines:
Enbridge Energy Company, Inc.
1100 Louisiana St.
Houston, TX 77002
(888)650-8099

Electric Coop:
Northfork Electric Coop.
P.O. Box 400
Sayre, OK 73662
Contact (580)928-3366

Communications:
Dobson Telco
200 South LL Males Ave.
Cheyenne, OK 73628
Contact (580)497-3344

Water:
Beckham County RWD #2
107 W Roger Miller Blvd.
Erick, OK 73645
Contact: Marlo Marquez
(580) 729-2861

Gas:
Centerpoint Energy
12282 US-283
Sayre, OK 73662
Contact: Charles Allen
(580) 512-5821

PLS	NSS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	CRT		SURVEY DATA SHEET
CHECKED	NSS		
APPROVED	NSS		
CREW	BENNETT		SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S001

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

REVISIONS	
DESCRIPTION	DATE

FILE: 1 TR9947479701582 R-65-464

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: nschrader@olssonassociates.com DATE: April 30, 2015
RINEX FILE: 1___098n.15o TIME: 12:46:32 UTC

SOFTWARE: page5 1209.04 master92.pl 022814 START: 2015/04/08 13:25:00
EPHEMERIS: igs18393.eph [precise] STOP: 2015/04/08 16:25:30
NAV FILE: brdc0980.15n OBS USED: 8505 / 9271 : 92%
ANT NAME: TRMR10 NONE # FIXED AMB: 49 / 54 : 91%
ARP HEIGHT: 2.3 OVERALL RMS: 0.019(m)

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2015.2675)

X:	-903336.988(m)	0.002(m)	-903337.798(m)	0.002(m)
Y:	-5124520.418(m)	0.014(m)	-5124519.029(m)	0.014(m)
Z:	3677092.853(m)	0.004(m)	3677092.713(m)	0.004(m)
LAT:	35 25 43.09172	0.006(m)	35 25 43.11110	0.006(m)
E LON:	260 0 9.92422	0.002(m)	260 0 9.88305	0.002(m)
W LON:	99 59 50.07578	0.002(m)	99 59 50.11695	0.002(m)
EL HGT:	644.594(m)	0.013(m)	643.513(m)	0.013(m)
ORTHO HGT:	671.675(m)	0.023(m)	[NAVD88 (Computed using GEOID12B)]	

	UTM COORDINATES (UTM (Zone 14))	STATE PLANE COORDINATES (SPC (3501 OK N))
Northing (Y) [meters]	3921035.621	49424.424
Easting (X) [meters]	409475.480	418638.929
Convergence [degrees]	-0.57812974	-1.17866727
Point Scale	0.99970098	1.00002792
Combined Factor	0.99959985	0.99992675

US NATIONAL GRID DESIGNATOR: 14SME0947521035(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DL3073	TXME MEMPHIS CORS ARP	N344326.023	W1003145.680	92030.4
DN5856	TXCI CANADIAN CORS ARP	N355513.071	W1002241.907	64551.0
DM3543	TXPM PAMPA CORS ARP	N353202.614	W1005543.220	85343.3

NEAREST NGS PUBLISHED CONTROL POINT

FK0608	DUNE	N352409.236	W0995948.587	2902.4

This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.

FILE: 2 TR9946699388212 R 65 465

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: nschrader@olssonassociates.com DATE: April 30, 2015
RINEX FILE: 2___097r.15o TIME: 12:45:22 UTC

SOFTWARE: page5 1209.04 master52.pl 022814 START: 2015/04/07 17:55:00
EPHEMERIS: igs18392.eph [precise] STOP: 2015/04/07 21:43:00
NAV FILE: brdc0970.15n OBS USED: 8350 / 9060 : 92%
ANT NAME: TRMR10 NONE # FIXED AMB: 40 / 44 : 91%
ARP HEIGHT: 2.3 OVERALL RMS: 0.016(m)

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2015.2653)

X:	-895923.401(m)	0.007(m)	-895924.210(m)	0.007(m)
Y:	-5126220.629(m)	0.004(m)	-5126219.239(m)	0.004(m)
Z:	3676528.573(m)	0.008(m)	3676528.433(m)	0.008(m)
LAT:	35 25 20.78380	0.006(m)	35 25 20.80323	0.006(m)
E LON:	260 5 11.00951	0.008(m)	260 5 10.96844	0.008(m)
W LON:	99 54 48.99049	0.008(m)	99 54 49.03156	0.008(m)
EL HGT:	637.703(m)	0.006(m)	636.620(m)	0.006(m)
ORTHO HGT:	664.786(m)	0.013(m)	[NAVD88 (Computed using GEOID12B)]	

	UTM COORDINATES (UTM (Zone 14))	STATE PLANE COORDINATES (SPC (3501 OK N))
Northing (Y) [meters]	3920274.964	48584.069
Easting (X) [meters]	417061.279	426218.890
Convergence [degrees]	-0.52955802	-1.12931044
Point Scale	0.99968477	1.00002931
Combined Factor	0.99958472	0.99992922

US NATIONAL GRID DESIGNATOR: 14SME1706120274(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DN5856	TXCI CANADIAN CORS ARP	N355513.071	W1002241.907	69442.9
DL3176	TXWL WELLINGTON CORS ARP	N345059.037	W1001207.499	68768.6
DF4058	OKCL CLINTON CORS ARP	N352859.349	W0985817.246	85802.2

NEAREST NGS PUBLISHED CONTROL POINT

FK0608	DUNE	N352409.236	W0995948.587	7867.8

This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.

SDS 02 OF 26

			OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
PLS	NSS		
DRAWN	CRT		SURVEY DATA SHEET
CHECKED	NSS		
APPROVED	NSS		
CREW	BENNETT		SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S002

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

REVISIONS	
DESCRIPTION	DATE

Oklahoma Department of Transportation
SURVEY DIVISION (405) 521-2621 FAX (405)522-0364

Date: October 16, 2015

To: Mr. Leroy Tackett, Chief of Surveys

From: Nicholas S. Schrader, Professional Land Surveyor

Subject: SWO 5126(1) - J/P 29530(04) - ROGER MILLS COUNTY
FROM THE TEXAS STATE LINE, EAST TO SH 30 (AT SWEETWATER)

Historical Letter & Written Report

1. GENERAL:

Survey Began: April 6, 2015
Survey Completed: October 16, 2015

Personnel on this survey:

Nicholas S. Schrader	Licensed Surveyor
Daniel Bennett	Senior Surveyor
Brandon Holland	Associate Surveyor
Chase Garten	Assistant Surveyor
Don Spicer	Assistant Surveyor
Alan Shipman	Senior Technician
Corey Timmons	Senior Technician

2. PURPOSE:

The purpose of this survey is to develop plans to add shoulder and overlay the existing roadway on present alignment. There are also two bridge-sized cross drains, located between NS 170 and NS 171 that will either be extended or replaced as part of this project. The survey includes the Alignment, Topographic/Planimetric data, Surface Features/DTM data, Land and Property Ties, Utilities, Drainage and all other pertinent information needed to aid in the design.

3. LIMITS:

The Survey begins approximately 300 feet Northwest of the Texas State Line, and extends Southeasterly, then Easterly, to a point approximately 300 feet East of SH30, at Sweetwater. Except approximately one mile, between NS 168 and NS 169, that was surveyed under SWO 4533(1). As-Built data was collected overlapping the new construction 300 feet on each end.

4. ALIGNMENT:

The Centerline of survey for this project is along and identical to the centerline of the existing SH 152, as depicted on the FAP No. F-408(1) Highway Plans, which were derived from the SWO 1706(1) Survey. Portions of that alignment were re-established under SWO 4533(1) in 2010. The alignment points were recovered and used on this survey. For convenience, the alignment established under SWO 4533(1) is shown in its entirety.

5. STATIONING:

The Stationing for this survey was derived from stationing established under SWO 4533(1). POT Station 100+00.00 at the beginning of that survey was backed Northwesterly to the beginning of this survey, Station 66+30.00, being approximately 300 feet northwest of the Texas State Line. Stationing for the portion of the survey lying East of the SWO 4533(1) Survey was derived from POT Station 196+32.05, at the end of SWO 4533(1), and carried forward (Easterly) to the end of this survey, Station 345+40.00, being approximately 300 feet east of the Junction of SH 30.

6. HORIZONTAL CONTROL:

Horizontal control for this project is NGS Oklahoma State Plane Coordinate System, NAD83, Lambert Projection, North Zone. Control monuments B-5-434 and B-5-435, being established under SWO 4533(1), were used as the basis of control for this project. Control Monuments R-65-464 and R-65-465 were established by collecting a RTK position based on existing control. Double GPS static sessions were then ran on each and processed through OPUS. The results of these sessions were averaged and compared to the RTK observations verifying the location of the control monument.

7. VERTICAL CONTROL:

Vertical control for this survey is NGS NAVD88. Control monuments B-5-434 and B-5-435, being established under SWO 4533(1), were used as the basis of control for this project. Control Monuments R-65-464 and R-65-465 were established by collecting a RTK position based on existing control. Double GPS static sessions were then ran on each and processed through OPUS. The results of these sessions were averaged and compared to the RTK observations verifying the location of the control monument. Two forward level runs were then performed beginning at B-5-435 and ending at R-65-465. Additional project benchmarks were set along the alignment at an approximate interval of 700 feet throughout the length of the project.

8. MEASUREMENT UNITS:

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

9. TOPOGRAPHY/DIGITAL TERRAIN MODEL:

All topography and surface features were collected by conventional methods including Trimble R10 RTK GPS systems, a Trimble S-6 Robotic Total Station, Sokkia CX-105 total station, and a Trimble DiNi Digital Level.

10. LAND TIES: *(Please refer to the Land Tie Data Sheet for additional information)*

Land Ties were recovered and/or established on all section corners and 1/4 section corners for Sections 13, 14, 15, 16, 17, 18, 20, 21, 22, and 23 Township 11 North, Range 26 West of the Indian Meridian as required by the Survey Special Provisions. Fractional Section 13 of Township 11 North, Range 27 West of the Indian Meridian and State Line monuments were also searched for and located to establish the Oklahoma/Texas State Line. Oklahoma Certified Corner Records were completed and sent in as required.

The Oklahoma-Texas State line was determined by finding numerous monuments along the state line north and south of the project. I held a monument 65+5562, approximately 6.16 miles north of the centerline of State Highway 152, and monument number 53+5260, approximately 5.87 miles south of the centerline of State Highway 152. Both of these monuments were in the very good overall shape in comparison to the others with the least amount of damage. Some monuments were found to be disturbed ranging from only leaning to completely laid over. Parole evidence also revealed that some of the monuments had been moved east and west over time and those monuments were not held. Multiple monuments were found in between these and they were all within a close distance from the line. The monuments north of State Highway 152 were the closest with some being within 0.10'. Once all the field work was performed, a meeting was called with ODOT Survey Division to discuss the location of the state line. This meeting resulting in the approval of the current shown location of the state line between Oklahoma and Texas.

11. EXISTING RIGHT-OF-WAY

The Right-of-way shown on this survey was taken from field investigation, plats and deeds on file at the Beckham County and Roger Mills County Clerk's office, and the following highway plans and surveys

FAP No F-408(1)
FAP No S-476(7)(8)S
US Public Works Project No. NRS 362 "B"
SWO 4533(1)
FAP No. BRFY-105C(098)55 (State Job No. 21703(04)

12. UNDERGROUND STORAGE TANKS/HAZARDOUS WASTE SITES:

There are underground storage tanks for fuel along State Highway 152. These storage tanks are located approximately 115 feet left of Alignment A001 (SH 152) between stations 68+00 and 69+20, and approximately 125 feet right of Alignment A001 (SH 152) 338+50 and 340+00.

13. UTILITIES:

Multiple locate requests were made to cover the extent of the project through OKIE. During the course of the survey, Survey Crew Personnel made contact with representatives of certain utilities when possible to confirm located position on the ground as well as any special circumstances. All utilities shown on the survey represent marks on the ground and information from representatives of the respective utility companies. Not all depths of the utility lines were given. The location of the waterline shown in the Topographic Survey is based upon an atlas and configurations with the Beckham County Rural Water District No. 2.

14. DRAINAGE:

There are multiple cross drains on Alignment A001 at the following stations: 113+33, 190+36, 209+33, 232+20, 263+17, 276+22, 293+21, 288+11, 294+25, and 299+63. The drainage structures are detailed in "SWO5126_1_v1_topo.dgn". The drainage area information is detailed in "SWO5126_1_v1_dra.dgn".

15. DATA SUBMITTED:

1. ODOT form SD-1, Transmittal Letter
2. ODOT form SD-7, Public and Private Owned Utilities List.
3. ODOT form SD-11, Position and Description of Survey Control (4)
4. ODOT form SD-20, Survey Control and Accuracy
5. ODOT form SD-41, Surveyor's Certification.
6. Historical Letter & Written Report
7. SWO DGN drawing files.
8. DTM file (1)
9. ALG file (1)
10. COGO Point list
11. Benchmark and check level list.
12. Corner Record Documents (46 copies)

			OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
PLS	NSS		
DRAWN	CRT		**SURVEY DATA SHEET**
CHECKED	NSS		
APPROVED	NSS		
CREW	BENNETT		SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S003

OKLAHOMA DEPARTMENT OF TRANSPORTATION

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

REVISIONS

DESCRIPTION	DATE

POINT NO.	EASTING	NORTHING	ELEVATION
B-5-434	1385233.7060	159569.8389	2129.44
B-5-435	1377766.3680	159686.8233	2161.94
R-65-464	1373484.5730	162153.3627	2203.63
R-65-465	1398353.1400	159396.2411	2181.04
101	1378618.0140	159695.4470	2147.99
103	1379924.4730	159669.2700	2135.88
107	1384007.1890	159627.0500	2112.66
201	1372616.1900	162601.1560	2202.07
202	1373254.3370	162291.8080	2197.21
203	1373885.0040	161986.2470	2195.30
204	1374536.0290	161672.4450	2189.65
205	1375169.3070	161366.3020	2187.21
206	1375819.1700	161051.5890	2171.07
207	1376455.6070	160742.8420	2166.54
208	1377084.1600	160411.5210	2164.36
209	1383474.4690	159603.8930	2110.05
210	1384174.1310	159589.7130	2111.24
211	1384874.3380	159575.9160	2120.00
212	1385572.9720	159661.4500	2133.07
213	1386268.1280	159547.0630	2130.07
214	1386979.0410	159531.2520	2135.25
215	1387945.1400	159511.5730	2141.17
216	1388640.3210	159598.5660	2140.15
217	1389331.0510	159483.7050	2139.56
218	1390037.6650	159469.2730	2140.07
219	1390741.1760	159454.1200	2128.63
220	1391454.0880	159439.8910	2127.22
221	1392156.3040	159424.9910	2131.35
222	1392864.4050	159410.2460	2133.57
223	1393568.8310	159396.2020	2153.75
224	1394291.1020	159381.4860	2178.34
225	1395016.8840	159365.1350	2181.25
226	1395712.9610	159350.4140	2205.51
227	1396415.7480	159337.1980	2210.06
228	1397123.3080	159322.5540	2192.41
229	1397826.4730	159310.4510	2181.16
230	1399062.0260	159393.4180	2172.12
300	1372288.3190	162812.3303	0
301	1378058.0730	160022.9139	0
302	1378623.9640	159749.3309	0
303	1379304.9940	162602.1007	0
304	1379252.4130	159737.7943	0
305	1381907.3720	159689.0564	0
306	1388443.3500	159552.1196	0
307	1393729.6200	159440.9742	0
308	1399005.8610	159330.8300	0
309	1399511.9290	159319.5652	0
310	1372556.8680	162682.4988	0
311	1372797.2360	162566.2920	0
312	1372847.7480	162541.8717	0
313	1375322.3480	161345.5137	0
314	1377870.0370	160113.8210	0
315	1380482.6130	159715.2111	0
316	1383179.0930	159662.4123	0
317	1384607.2580	159632.4905	0
318	1385810.6660	159607.2776	0
319	1391086.4860	159496.5469	0
320	1393729.6200	159440.9742	0
321	1396359.4580	159386.0750	0
322	1398995.6200	158830.9349	0
323	1399015.1320	159830.7440	0
324	1377122.9620	160474.9978	0
325	1383377.2140	159658.2614	0
326	1374057.6980	161955.9030	0
327	1376222.6890	160910.2180	0
328	1387110.4350	159580.0390	0
329	1389843.0740	159522.6900	0
330	1392336.2520	159470.2860	0
331	1395029.3600	159413.8600	0
332	1397759.2010	159356.8900	0
7600	1372771.7220	163133.9935	0
7601	1372837.3090	163102.2849	0
7602	1372557.7790	162737.5951	0
7603	1372765.1700	162637.3310	0
7604	1372830.7570	162605.6225	0
7605	1372555.5130	162627.6173	0
7606	1372763.5480	162527.0420	0
7607	1372828.8300	162495.4810	0
7608	1372752.0250	162032.7825	0
7609	1372817.3070	162001.2215	0
7610	1377347.0430	159811.2982	0
7611	1377507.0070	159733.9629	0
7612	1377011.1690	160473.5083	0
7613	1377089.8830	160405.5746	0
7614	1377054.6940	160563.5389	0
7615	1377166.4880	160565.0284	0
7616	1377840.9340	160238.9640	0
7617	1377854.6220	160675.6397	0
7618	1377919.6710	160645.1916	0
7619	1377905.9830	160207.5159	0
7620	1377834.9110	160045.3867	0
7621	1377900.8500	160043.3875	0
7622	1377827.1550	159798.3658	0
7623	1377893.1400	159795.8596	0
7624	1378559.1600	159784.3486	0
7625	1378349.8790	160057.6689	0
7626	1378949.7630	159930.8278	0
7627	1379428.7940	159874.5800	0
7628	1379003.0000	159702.9983	0
7629	1380416.0540	159665.4246	0
7630	1380482.0450	159665.2131	0
7631	1380410.9390	159215.4426	0
7632	1381650.2960	159833.7992	0
7633	1381594.3920	160085.0008	0
7634	1381820.7530	160081.8454	0
7635	1381878.4380	159821.6098	0
7636	1381672.4940	159643.3597	0
7637	1381669.1910	159485.4183	0
7638	1381712.8010	159187.8911	0
7639	1381930.3190	159220.8458	0
7640	1381889.1460	159481.9325	0
7641	1381892.4570	159639.3218	0
7642	1382228.5020	159814.3573	0
7643	1382727.3450	159753.8950	0
7644	1382774.5690	159620.8766	0
7645	1383147.9680	159745.0824	0
7646	1383157.4870	160162.9747	0
7647	1383223.4720	160161.5922	0
7648	1383213.9540	159743.6999	0
7649	1383143.9500	159563.1266	0
7650	1383209.9350	159561.7442	0
7651	1383135.3470	159163.2191	0
7652	1383201.3330	159161.8366	0
7653	1383377.2020	159740.2797	0
7654	1383476.5100	159705.1920	0
7655	1383474.4150	159605.2140	0
7656	1388411.2860	159602.8024	0
7657	1388419.6400	160052.7261	0
7658	1388485.6260	160051.3413	0
7659	1388477.2720	159601.4175	0
7660	1388409.2890	159502.8247	0
7661	1388475.2740	159501.4374	0
7662	1388399.5800	159052.9269	0
7663	1388465.5660	159051.5420	0
7664	1393706.4850	159941.5711	0
7665	1393772.4710	159940.1886	0
7666	1393697.6130	159491.6582	0
7667	1393763.5990	159490.2708	0
7668	1393695.4100	159391.6824	0
7669	1393761.3960	159390.3000	0
7670	1393684.4550	158941.8133	0
7671	1393750.4410	158940.4306	0
7672	1396360.5020	159436.0641	0
7673	1398356.7750	159394.3909	0
7674	1398356.5670	159384.3931	0
7675	1398973.6100	159371.5120	0
7676	1398353.9590	159294.4279	0
7677	1398354.1680	159304.4257	0
7678	1398972.0900	159293.5267	0
7679	1398968.5670	159121.5499	0
7680	1398951.5700	159121.8981	0
7681	1398943.6240	158733.9795	0
7682	1399042.6810	158686.9408	0
7683	1399046.5720	158876.9009	0
7684	1399029.5760	158877.2491	0
7685	1399038.1770	159297.1025	0
7686	1399039.4650	159363.0902	0
7687	1399199.1370	159293.5196	0
7688	1399198.7590	159276.5238	0
7689	1399200.4260	159359.5073	0
7690	1399200.7410	159376.5045	0
7691	1399629.6380	159366.9574	0
7692	1399049.7950	159920.1167	0
7693	1399076.7900	159919.6161	0
7694	1398986.8600	160086.0121	0
7695	1398959.8650	160086.5128	0
7696	1399083.3500	160273.3553	0
7697	1398968.2880	160540.7347	0
7698	1396358.3320	159336.0877	0
7699	1391087.4420	159546.5378	0
7700	1391085.3440	159446.5599	0
7701	1385811.7050	159657.2668	0
7702	1385809.6790	159557.2873	0
7703	1380487.3640	159855.1475	0
7704	1375323.2630	161400.6081	0
7705	1375321.4330	161290.4193	0
7706	1372968.0120	162539.2660	0
7707	1398655.1440	159300.1431	0
7708	1379251.4950	159687.8027	0
7709	1373615.4660	162115.1778	0
7710	1373604.5850	162092.6701	0
7711	1373334.4930	162223.2474	0
7712	1373345.3740	162245.7550	0
7713	1372730.6940	162542.9254	0
8000	1383242.1340	160980.8715	0
8001	1384208.8410	160957.0228	0
8002	1384180.0140	159691.4527	0
8003	1396353.0160	159099.9776	0
8004	1397984.0400	159302.1501	0
8005	1398008.0350	159301.6492	0
8006	1397986.1750	159069.0548	0
8007	1398004.8210	159147.6828	0
8008	1398147.7840	159062.0106	0
8009	1398153.1110	159298.6207	0
8010	1398259.9800	159296.3898	0
8011	1398256.7660	159142.4233	0
8012	1398326.9650	159294.9914	0
8013	1398323.7510	159141.0249	0
8014	1398465.1440	159302.1090	0
8015	1398462.6810	159184.1347	0
8016	1398461.7340	159138.1445	0
8017	1398461.6500	159134.1454	0
8018	1398457.8010	159138.2266	0
8019	1398456.0730	159059.2454	0
8020	1398605.1130	159299.1871	0
8021	1398602.6510	159181.2128	0
8022	1398601.6200	159131.2234	0
8023	1398655.1020	159298.1435	0
8024	1398652.6400	159180.1693	0
8025	1398651.5960	159130.1802	0
8026	1398795.1280	159297.2209	0
8027	1398793.7560	159230.2349	0
8028	1398792.6710	159177.2460	0
8029	1398791.6470	159127.2565	0
8030	1398791.6040	159125.1752	0
8031	1398811.6000	159124.7656	0
8032	1398810.3710	159064.7782	0
8033	1398809.5520	159024.7865	0
8034	1398807.9130	158944.8033	0
8035	1398806.2750	158864.8201	0
8036	1398803.6530	158736.8470	0
8037	1398946.2450	158861.9527	0
8038	1398947.8840	158941.9359	0
8039	1398949.5220	159021.9191	0
8040	1398950.3410	159061.9107	0
8041	1398970.7180	159226.5408	0
8042	1399035.6170	159172.1287	0
8043	1399034.3890	159112.1998	0
8044	1399033.3650	159062.2103	0
8045	1399032.5460	159022.2187	0
8046	1399030.9480	158944.2351	0
8047	1399172.6540	158684.2782	0
8048	1399177.9170	158941.2243	0
8049	1399170.9190	158941.3676	0
8050	1399172.1000	158999.0488	0
8051	1399172.5160	159019.3513	0
8052	1399173.3360	159059.3429	0
8053	1399174.3600	159109.3324	0
8054	1399175.5820	159169.0132	0
8055	1399178.1420	159293.9869	0
8056	1399467.0270	158992.4834	0
8057	1399472.7210	159270.4256	0
8058	1398753.6580	159376.1036	0
8059	1398756.4380	159526.0782	0
8060	1398819.4250	159524.7633	0
8061	1398976.3910	159521.4866	0
8062	1398823.1330	159724.7290	0
8063	1398980.0990	159721.4522	0
8064	1398823.5440	159746.8757	0
8065	1398980.5170	159743.9647	0
8066	1398824.5170	159799.3666	0
8067	1398981.4900	159796.4556	0
8068	1398826.3710	159899.3495	0
8069	1398826.8330	159924.2515	0
8070	1398983.3440	159896.4384	0
8071	1398983.8060	159921.3404	0
8072	1399046.0750	159719.5289	0
8073	1399186.0430	159716.5356	0
8074	1399188.8240	159866.5098	0
8075	1399048.8590	159869.6254	0
8076	1399189.7510	159916.5012	0
8077	1398866.8260	159923.5098	0
8078	1398869.2370	160053.4875	0
8079	1398626.2790	160057.9930	0
8080	1398630.4130	160280.9547	0
8081	1398873.3720	160276.4491	0
8082	1398963.3560	160274.7804	0
8083	1398878.3040	160542.4034	0
8084	1399544.6710	160264.8002	0
8085	1399534.3930	159710.5955	0
8086	1399563.9860	159709.9368	0
8087	1399562.0110	159603.4551	0
8088	1399633.9940	159601.8528	0
9000	1372832.1080	165209.7421	0
9001	1375385.1480	165127.6433	0
9002	1378024.1890	165042.7790	0
9003	1380661.7390	164991.0177	0
9004	1383299.2890	164939.2564	0
9005	1385919.8590	164859.9716	0
9006	1388540.4360	164780.6866	0
9007	1391186.6160	164733.8730	0
9008	1393833.0750	164687.5188	0
9009	1396468.2570	164639.8099	0
9010	1399103.4380	164592.1010	0
9011	1372796.9280	162542.9728	0
9012	1375341.3160	162487.8443	0
9013	1377942.5210	162431.4848	0
9014	1380572.6360	162366.6706	0
9015	1383239.1940	162300.9584	0
9016	1385865.1460	162227.9899	0
9017	1388491.6810	162155.0051	0
9018	1391136.4440	162109.6270	0
9019	1393781.3480	162064.2465	0
9020	1396413.8190	162011.0684	0
9021	1399054.5760	161957.7230	0
9022	1372735.3730	159902.5078	0
9023	1375297.2420	159833.5004	0
9024	1377859.1110	159764.4930	0
9025	1380482.6130	159715.2111	0
9026	1383179.0930	159662.4123	0
9027	1385810.6330	159605.6783	0
9028	1388443.2910	159548.9202	0
9029	1391086.4560	159494.9472	0
9030	1393729.6200	159440.9742	0
9031	1396359.4580	159386.0750	0
9032	1399005.8610	159330.8300	0
9033	1377819.4310	157133.0701	0
9034	1380452.6290	157077.4148	0
9035	1383122.2710	157020.9893	0
9036	1385758.6310	156968.4549	0
9037	1388386.4770	156916.0902	0
9038	1391025.7820	156853.4271	0
9039	1393665.0830	156790.7641	0
9040	1396299.9680	156744.1435	0
9041	1398951.9090	156697.2210	0
9042	1377779.7520	154501.6471	0
9043	1380422.6560	154440.6055	0
9044	1383065.4490	154379.5664	0
9045	1385706.6300	154331.2473	0
9046	1388329.6620	154283.2602	0
9047	1390965.1820	154215.0856	0
9048	1393600.7010	154146.9110	0
9049	1396240.2320	154091.3200	0
9050	1398899.8520	154044.9870	0
9051	1372608.7150	165209.7000	0
9052	1372553.7660	162542.7989	0
9053	1372499.3630	159902.4369	0
9054	1396362.5890	159536.0423	0
9055	1396462.5420	159533.9558	0
9056	1396460.4710	159433.9772	0

SDS 04 OF 26

PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S004

8-87

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

REVISIONS	
DESCRIPTION	DATE

Project Name: SWO 5126(1)
Description: J/P 29530(04)
Horizontal Alignment Name: A001
Description: SH-152
Style: Centerline

		STATION	NORTHING	EASTING
Element: Linear				
POB	(300)	66+30.00	162812.33	1372288.32
PC	(301)	130+38.66	160022.91	1378058.07
Tangent Direction:	S 64^11'53.96" E			
Tangent Length:	6408.66			
Element: Circular				
PC	(301)	130+38.66	160022.91	1378058.07
PI	( )	136+67.21	159749.33	1378623.96
CC	(303)		162602.10	1379304.99
PT	(304)	142+76.16	159737.79	1379252.41
Radius:	2864.79			
Delta:	24^45'00.00" Left			
Degree of Curvature(Arc):	2^00'00.00"			
Length:	1237.50			
Tangent:	628.55			
Chord:	1227.90			
Middle Ordinate:	66.56			
External:	68.14			
Tangent Direction:	S 64^11'53.96" E			
Radial Direction:	S 25^48'06.04" W			
Chord Direction:	S 76^34'23.96" E			
Radial Direction:	S 1^03'06.04" W			
Tangent Direction:	S 88^56'53.96" E			
Element: Linear				
PT	(304)	142+76.16	159737.79	1379252.41
PI	(305)	169+31.57	159689.06	1381907.37
Tangent Direction:	S 88^56'53.96" E			
Tangent Length:	2655.41			
Element: Linear				
PI	(305)	169+31.57	159689.06	1381907.37
PI	(306)	234+68.98	159552.12	1388443.35
Tangent Direction:	S 88^47'59.13" E			
Tangent Length:	6537.41			

Project Name: SWO 5126(1)
Description: J/P 29530(04)
Horizontal Alignment Name: A002
Description: SH-30
Style: Centerline

		STATION	NORTHING	EASTING
Element: Linear				
POB	(322)	10+00.00	158830.93	1398995.62
PI	(308)	15+00.00	159330.83	1399005.86
Tangent Direction:	N 1^10'24.94" E			
Tangent Length:	500.00			
Element: Linear				
PI	(308)	15+00.00	159330.83	1399005.86
POE	(323)	20+00.00	159830.74	1399015.13
Tangent Direction:	N 1^03'44.69" E			
Tangent Length:	500.00			

CHECK LEVELS SWO 5126(1)					BENCHMARK LIST		NAVD88 DATUM FROM STATIC GPS
BM NO.	RUN 1	RUN 2	MEAN DIFF	ADJ DIFF	ADJ ELEV	PUBLISHED ELEV	BM DESCRIPTION
B-5-435						2161.94	Aluminum Monument B-5-435 Alignment A001 Sta. 129+22.3, 429.5'Rt.
TO	40.108	40.148	40.128	40.138			
201					2202.07		Set 3/4" iron bar Alignment A001 Sta. 70+17, 47' Rt.
TO	-4.864	-4.858	-4.861	-4.861			
202					2197.21		Set 3/4" iron bar Alignment A001 Sta. 77+26, 48'Rt.
TO	6.414	6.412	6.413	6.413			
R-65-464					2203.63	2203.63	Aluminum Monument R-65-464 Alignment A001 Sta. 79+93.8, 72.6'Rt.
TO	-8.322	-8.325	-8.324	-8.324			
203					2195.30		Set 3/4" iron bar Alignment A001 Sta. 84+27, 49'Rt
TO	-5.647	-5.649	-5.648	-5.648			
204					2189.65		Set 3/4" iron bar Alignment A001 Sta. 91+50, 48'Rt.
TO	-2.447	-2.445	-2.446	-2.446			
205					2187.21		Set 3/4" iron bar Alignment A001 Sta. 98+53, 48'Rt.
TO	-16.145	-16.135	-16.140	-16.140			
206					2171.07		Set 3/4" iron bar Alignment A001 Sta. 105+75, 48'Rt.
TO	-4.531	-4.529	-4.530	-4.530			
207					2166.54		Set 3/4" iron bar Alignment A001 Sta. 112+83, 49'Rt.
TO	-2.182	-2.176	-2.179	-2.179			
208					2164.36		Set 3/4" iron bar Alignment A001 Sta.119+93, 74'Rt.
TO	-16.369	-16.372	-16.370	-16.370			
101					2147.99	2147.99	BM 101 from SWO 4533(1) 80 D spike in power pole Alignment A001 Sta.136+64, 122'Rt.
TO	-12.088	-12.091	-12.089	-12.105			
103					2135.88	2135.88	BM 103 from SWO 4533(1) 80 D spike in power pole Alignment A001 Sta. 149+49, 56'Rt.
TO	-25.825	-25.831	-25.828	-25.831			
209					2110.05		Set 3/4" iron bar Alignment A001 Sta. 185+00, 52'Rt.
TO	2.604	2.603	2.603	2.590			
107					2112.64	2112.64	BM 107 from SWO 4533(1) SW Corner of S. Headwall Alignment A001 Sta. 190+32, 18' Rt.
TO	-1.409	-1.409	-1.409	-1.400			
210					2111.24		Set 3/4" iron bar Alignment A001 Sta. 191+99, 49'Rt.
TO	8.755	8.758	8.757	8.758			
211					2120.00		Set 3/4" iron bar Alignment A001 Sta. 199+00, 51'Rt.
TO	9.435	9.435	9.435	9.435			
B-5-434					2129.44	2129.44	Aluminum Monument B-5-434 Alignment A001 Sta. 202+59.7, 49.5'Rt.
TO	3.629	3.632	3.630	3.630			
212					2133.07		Set 3/4" iron bar Alignment A001 Sta. 206+00, 49'Lt.
TO	-2.990	-2.995	-2.993	-2.993			

CHECK LEVELS SWO 5126(1)					BENCHMARK LIST		NAVD88 DATUM FROM STATIC GPS
BM NO.	RUN 1	RUN 2	MEAN DIFF	ADJ DIFF	ADJ ELEV	PUBLISHED ELEV	BM DESCRIPTION
213					2130.07		Set 3/4" iron bar Alignment A001 Sta. 212+94, 51'Rt.
TO	5.176	5.169	5.173	5.173			
214					2135.25		Set 3/4" iron bar Alignment A001 Sta. 220+05, 51'Rt.
TO	5.927	5.930	5.928	5.928			
215					2141.17		Set 3/4" iron bar Alignment A001 Sta. 229+71, 51'Rt.
TO	-1.029	-1.020	-1.025	-1.025			
216					2140.15		Set 3/4" iron bar Alignment A001 Sta. 236+69, 51'Lt.
TO	-0.598	-0.588	-0.593	-0.593			
217					2139.56		Set 3/4" iron bar Alignment A001 Sta. 243+60, 40'Rt.
TO	0.514	0.521	0.517	0.517			
218					2140.07		Set 3/4" iron bar Alignment A001 Sta. 250+65, 43'Rt.
TO	-11.445	-11.448	-11.447	-11.447			
219					2128.63		Set 3/4" iron bar Alignment A001 Sta. 257+68, 49'Rt.
TO	-1.412	-1.408	-1.410	-1.410			
220					2127.22		Set 3/4" iron bar Alignment A001 Sta. 264+81, 49'Rt.
TO	4.132	4.136	4.134	4.134			
221					2131.35		Set 3/4" iron bar Alignment A001 Sta. 271+84, 49'Rt.
TO	2.216	2.214	2.215	2.215			
222					2133.57		Set 3/4" iron bar Alignment A001 Sta. 278+92, 49'Rt.
TO	20.177	20.185	20.181	20.181			
223					2153.75		Set 3/4" iron bar Alignment A001 Sta. 285+96, 48'Lt.
TO	24.625	24.629	24.627	24.627			
224					2178.38		Set 3/4" iron bar Alignment A001 Sta. 293+19, 48'Rt.
TO	2.873	2.873	2.873	2.87285			
225					2181.25		Set 3/4" iron bar Alignment A001 Sta. 300+45, 49'Rt.
TO	27.142	27.136	27.139	27.139			
226					2205.51		Set 3/4" iron bar Alignment A001 Sta. 307+41, 49'Rt.
TO	4.546	4.545	4.545	4.545			
227					2210.06		Set 3/4" iron bar Alignment A001 Sta. 314+44, 48'Rt.
TO	-17.658	-17.651	-17.654	-17.654			
228					2192.41		Set 3/4" iron bar Alignment A001 Sta. 321+51, 48'Rt.
TO	-11.239	-11.246	-11.242	-11.242			
229					2181.16		Set 3/4" iron bar Alignment A001 Sta. 328+55, 45'Rt.
TO	-9.042	-9.033	-9.038	-9.042			
230					2172.12		Set 3/4" iron bar Alignment A001 Sta. 340+88, 64'Lt.
TO	8.923	8.918	8.920	8.920			
R-65-465					2181.04	2181.04	Aluminum Monument R-65-465 Alignment A001 Sta. 333+79.9, 51.8'Lt.

PLS	NSS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	CRT	
CHECKED	NSS	**SURVEY DATA SHEET**
APPROVED	NSS	
CREW	BENNETT	SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S005

OKLAHOMA DEPARTMENT OF TRANSPORTATION

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

REVISIONS

DESCRIPTION	DATE

RECEIVED
JUN 07 2010
SURVEY DIVISION

STATE OF OKLAHOMA
DEPARTMENT OF HIGHWAYS
SURVEY DIVISION
POSITION AND DESCRIPTION OF SURVEY MONUMENTS

S.D. FORM NO. 11
REVISED 10/6/05

COUNTY Beckham | STATION NUMBER B-5-434 | SWO 4533(1) | DATE 6-7-2010

TYPE OF MONUMENT O.D.O.T. 2" Brass Cap | MONUMENT SET FOR horiz. & ver. control

METHOD ESTABLISHED (SPECIFY): Static GPS for horizontal and vertical

TYPE OF WITNESS POST: none

WRITTEN DESCRIPTION OF LOCATION: From the Jct. of SH 152 and St 30 in Sweetwater, west along SH 152 approximately 2.6 miles. This monument is located approximately 35' south of the highway and 3' north of a fence. This monument is set in a 6" concrete post flush with the ground in Section 19, T-11-N, R-26-W.

ESTABLISHED BY: Daryl Williams, PLS 1444

COORDINATE SYSTEM: ☐ USC&GS, ☐ OHD, ☒ OTHER (SPECIFY) STATE PLANE

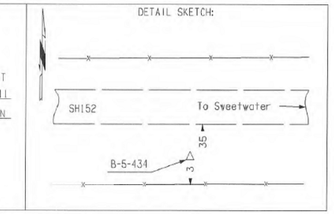
GRID DATA:	COORDINATES (FEET)	GRID BEARING	DISTANCE	POINTS OBSERVED
north ZONE	X 1385233.7059	N89°06'08.89"W	7468.25	B-5-435
ACCURACY: 3rd ORDER	Y 159569.8389			

GEODETIC DATA	POSITION		ELEVATION
ANGLE OF VARIANCE (θ)	LATITUDE 35°25'19.91375"	NORTH	2129.4448 FEET
-1°09'19.07"	LONGITUDE 99°57'27.51027"	WEST	SOURCE Static GPS
	ELLIPSOID HEIGHT 621.9967	METERS	ACCURACY: 3rd ORDER

GENERAL VICINITY:
SEC 21
R 26 W
T 11 N

△ = CONTROL MONUMENT
○ = LAND CORNER
□ = OTHER

DETAIL SKETCH:



RECEIVED
JUN 07 2010
SURVEY DIVISION

STATE OF OKLAHOMA
DEPARTMENT OF HIGHWAYS
SURVEY DIVISION
POSITION AND DESCRIPTION OF SURVEY MONUMENTS

S.D. FORM NO. 11
REVISED 10/6/05

COUNTY Beckham | STATION NUMBER B-5-435 | SWO 4533(1) | DATE 6-7-2010

TYPE OF MONUMENT O.D.O.T. 2" Brass Cap | MONUMENT SET FOR horiz. & ver. control

METHOD ESTABLISHED (SPECIFY): Static GPS for horizontal and vertical

TYPE OF WITNESS POST: none

WRITTEN DESCRIPTION OF LOCATION: From the Jct. of SH 152 and SH 30 in Sweetwater, west along SH 152 approximately 4.0 miles. This monument is located approximately 442' south of the highway, 5' north of a fence, 68' west of a gravel road, and 23' east of a fence. This monument is set in a 6" concrete post flush with the ground in Section 19, T-11-N, R-26-W.

ESTABLISHED BY: Daryl Williams, PLS 1444

COORDINATE SYSTEM: ☐ USC&GS, ☐ OHD, ☒ OTHER (SPECIFY) STATE PLANE

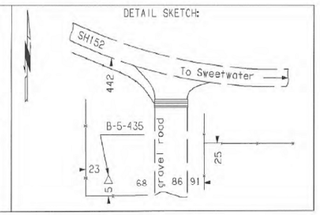
GRID DATA:	COORDINATES (FEET)	GRID BEARING	DISTANCE	POINTS OBSERVED
north ZONE	X 1377765.3681	S89°06'08.89"E	7468.25	B-5-434
ACCURACY: 3rd ORDER	Y 159686.8233			

GEODETIC DATA	POSITION		ELEVATION
ANGLE OF VARIANCE (θ)	LATITUDE 35°25'19.57194"	NORTH	2161.9361 FEET
-1°10'12.32"	LONGITUDE 99°58'57.74082"	WEST	SOURCE Static GPS
	ELLIPSOID HEIGHT 631.9065	METERS	ACCURACY: 3rd ORDER

GENERAL VICINITY:
SEC 19
R 26 W
T 11 N

△ = CONTROL MONUMENT
○ = LAND CORNER
□ = OTHER

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 Roger Mills | STATION NUMBER R-65-465 | SWO 5126(1) | DATE 10-6-2015

TYPE OF MONUMENT 2 1/2" Aluminum Cap | MONUMENT SET FOR Horiz. & Vert. Control

METHOD ESTABLISHED: TRILATERATION ____, TRIANGULATION ____, TRAVERS X, OTHER (SPECIFY) Observed Control Point with RTK GPS from existing control B-5-435 & B-5-434. Verified by OPUS observation & level run.

HEIGHT OF INSTUMENT ABOVE MONUMENT: ____ FEET, TYPE OF WITNESS POST Carsonite

WRITTEN DESCRIPTION OF LOCATION:

From the junction of SH 152 and SH 30 in Sweetwater, go west approximately 650'. This control monument is located approximately 50' north of the centerline of SH 152 and 7' east of a fence corner. This control monument is set in concrete flush with the ground.

ESTABLISHED BY: Olsson Associates, CA 2483

COORDINATE SYSTEM: ☐ USC&GS, ☐ OHD, ☒ OTHER (SPECIFY) NAD 83 (1993)

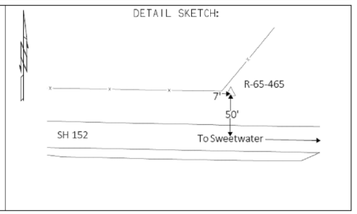
GRID DATA:	COORDINATES (FEET)	GRID BEARING	DISTANCE	POINTS OBSERVED
North ZONE	X 1398353.1402	N 89°11'28.77" W	20,588.82'	B-5-435
ACCURACY: 3rd ORDER	Y 159396.2411	N 89°14'30.84" W	13,120.58'	B-5-434
		N 83°40'24.90" W	25,020.94'	R-65-464

GEODETIC DATA	POSITION		ELEVATION
ANGLE OF VARIANCE (θ)	LATITUDE 35°25'20.78387"	NORTH	2181.04 FEET
-1°07'45.52"	LONGITUDE 99°54'48.99049"	WEST	SOURCE GPS
			ACCURACY: 3rd ORDER

GENERAL VICINITY:
SEC 14
R 26 W
T 11 N

△ = CONTROL MONUMENT
○ = LAND CORNER
□ = OTHER

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 Roger Mills | STATION NUMBER R-65-464 | SWO 5126(1) | DATE 10-6-2015

TYPE OF MONUMENT 2 1/2" Aluminum Cap | MONUMENT SET FOR Horiz. & Vert. Control

METHOD ESTABLISHED: TRILATERATION ____, TRIANGULATION ____, TRAVERS X, OTHER (SPECIFY) Observed Control Point with RTK GPS from existing control B-5-435 and verified by OPUS observation and level run.

HEIGHT OF INSTUMENT ABOVE MONUMENT: ____ FEET, TYPE OF WITNESS POST Carsonite

WRITTEN DESCRIPTION OF LOCATION:

From the State Line between Oklahoma and Texas, go southeast along SH 152 for approximately 800'. The control monument is located 90' northwest of the stone "OKLAHOMA" monument sign and 3' northeast of a fence. This control monument is set in concrete flush with the ground.

ESTABLISHED BY: Olsson Associates, CA 2483

COORDINATE SYSTEM: ☐ USC&GS, ☐ OHD, ☒ OTHER (SPECIFY) NAD 83 (1993)

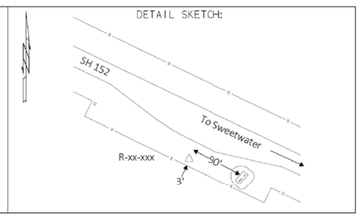
GRID DATA:	COORDINATES (FEET)	GRID BEARING	DISTANCE	POINTS OBSERVED
North ZONE	X 1373484.5730	S 60°03'20.85" E	4941.42'	B-5-435
ACCURACY: 3rd ORDER	Y 162153.3627	S 77°35'54.82" E	12,029.83'	B-5-434
		S 83°40'24.90" E	25,020.94'	R-65-465

GEODETIC DATA	POSITION		ELEVATION
ANGLE OF VARIANCE (θ)	LATITUDE 35°25'43.09190"	NORTH	2203.63 FEET
-1°10'43.20"	LONGITUDE 99°59'50.07590"	WEST	SOURCE GPS
			ACCURACY: 3rd ORDER

GENERAL VICINITY:
SEC 18
R 26 W
T 11 N

△ = CONTROL MONUMENT
○ = LAND CORNER
□ = OTHER

DETAIL SKETCH:



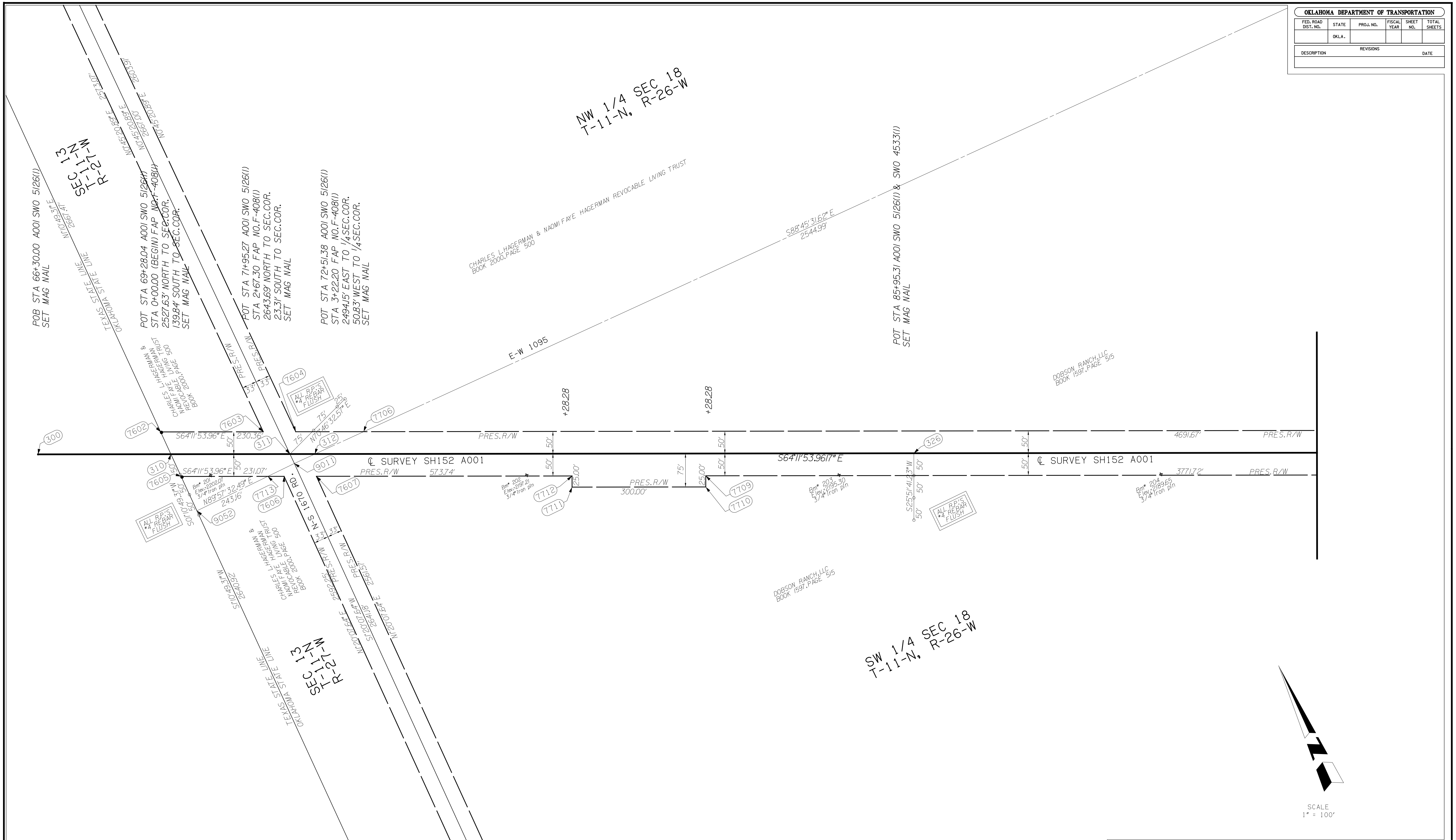
PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

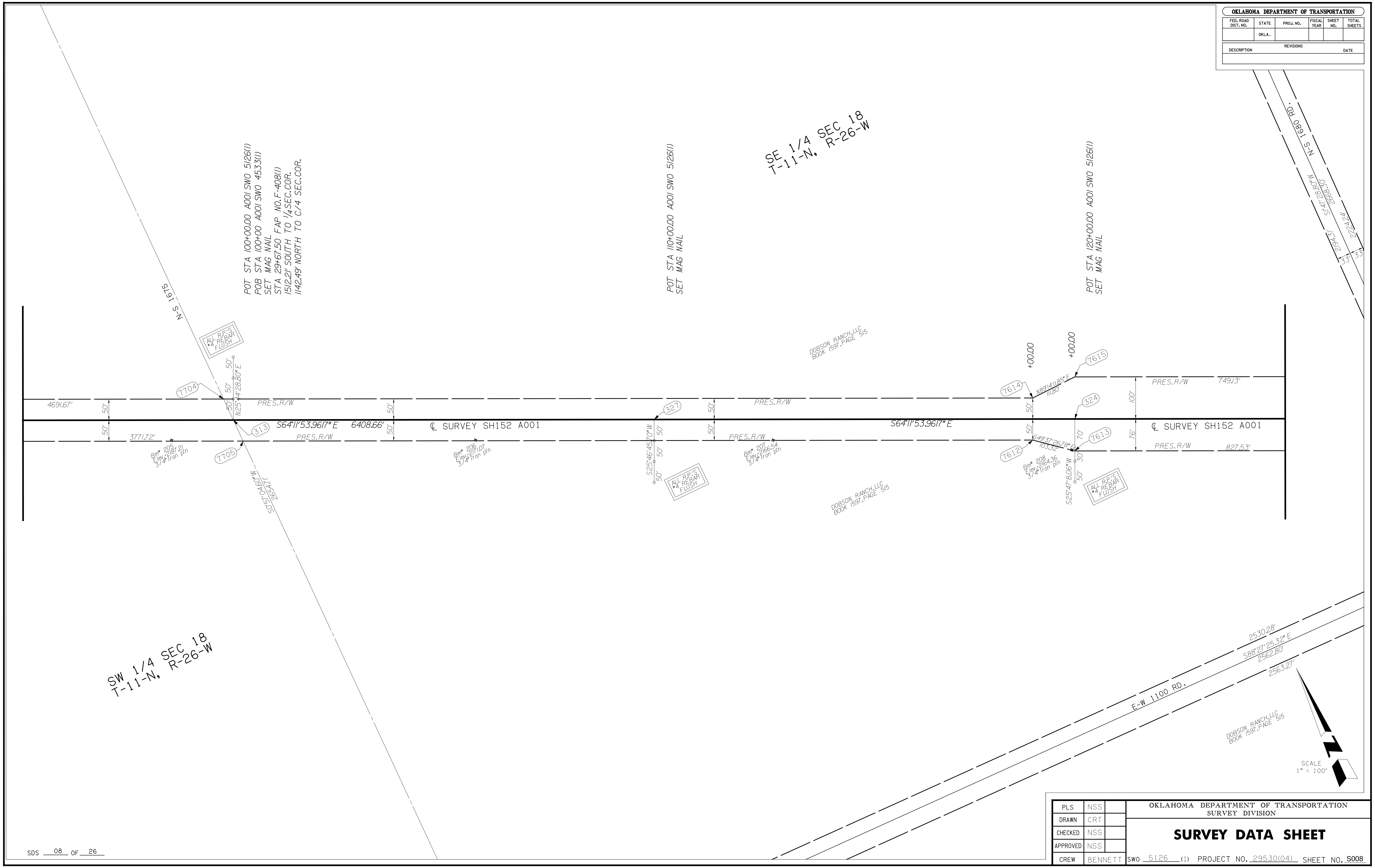
SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S006

SDS 06 OF 26



			OKLAHOMA DEPARTMENT OF TRANSPORTATION
PLS	NSS		SURVEY DIVISION
DRAWN	CRT		
CHECKED	NSS		**SURVEY DATA SHEET**
APPROVED	NSS		
CREW	BENNETT		SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S007

8-87



PLS	NSS
DRAWN	CRT
CHECKED	NSS
APPROVED	NSS
CREW	BENNETT

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

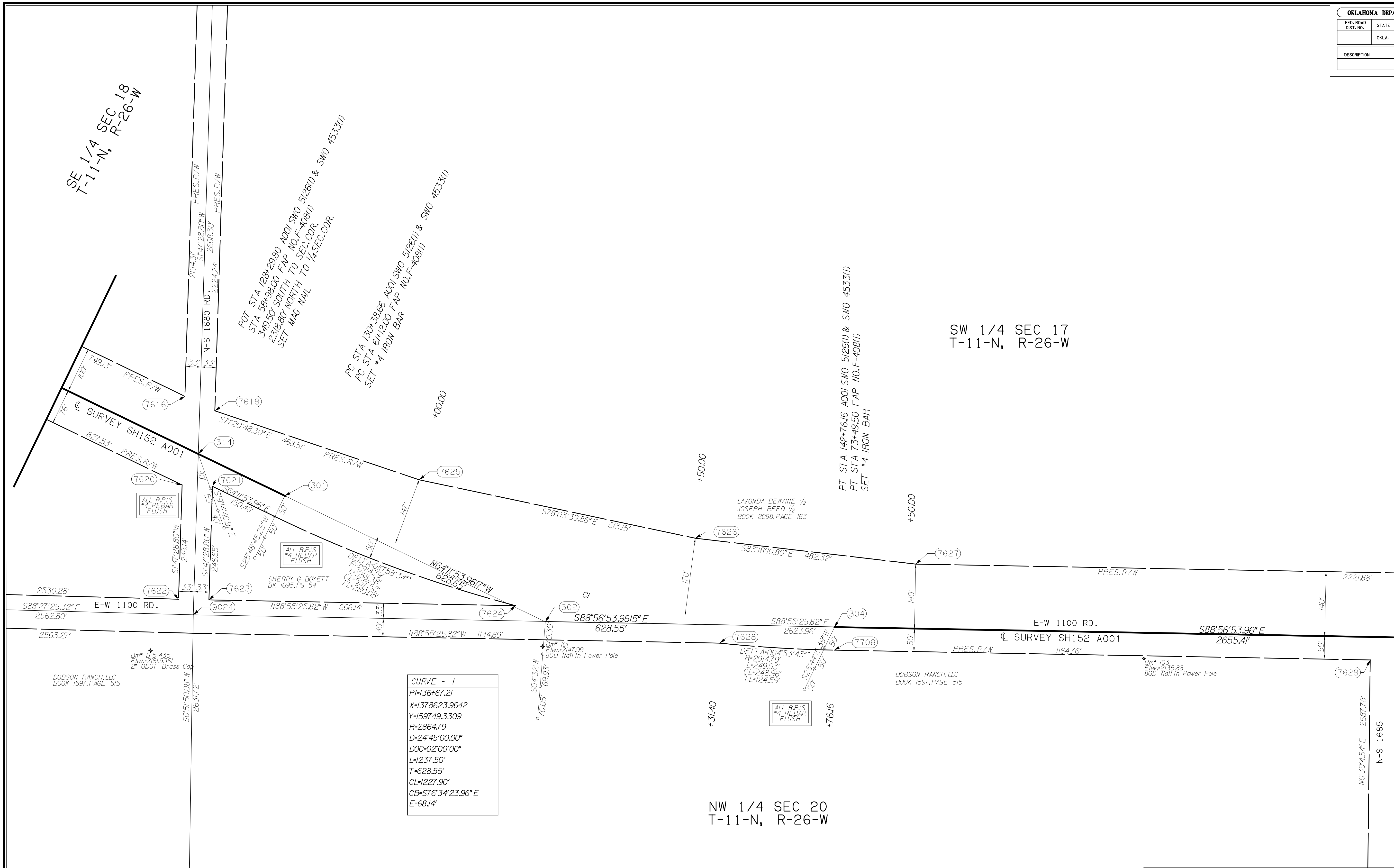
SWO 5126 (I) PROJECT NO. 29530(04) SHEET NO. S008

SDS 08 OF 26

8-87

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

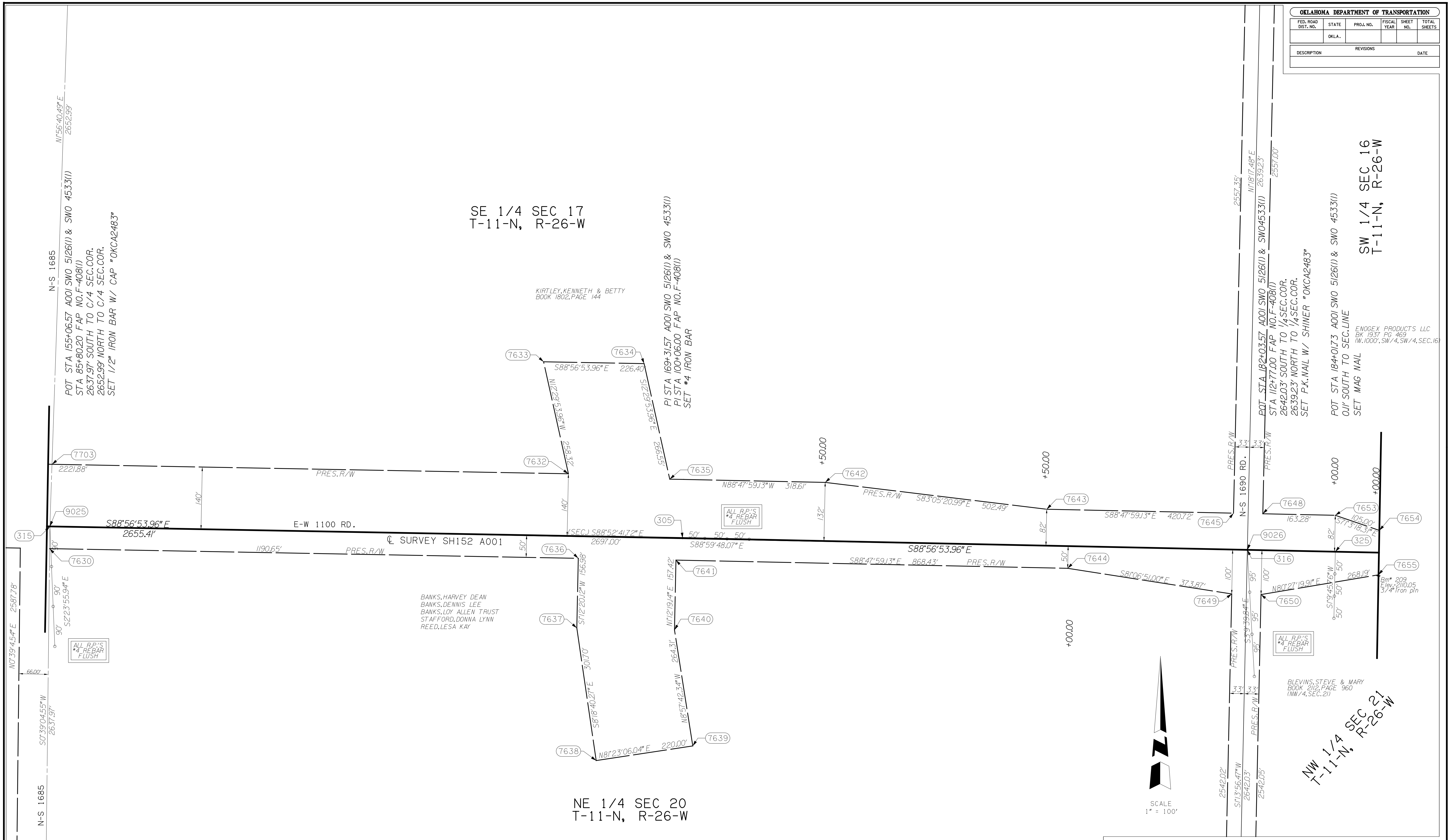
REVISIONS	
DESCRIPTION	DATE



SDS 09 OF 26

PLS	NSS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	CRT	**SURVEY DATA SHEET**
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S009

8-87



SDS 10 OF 26

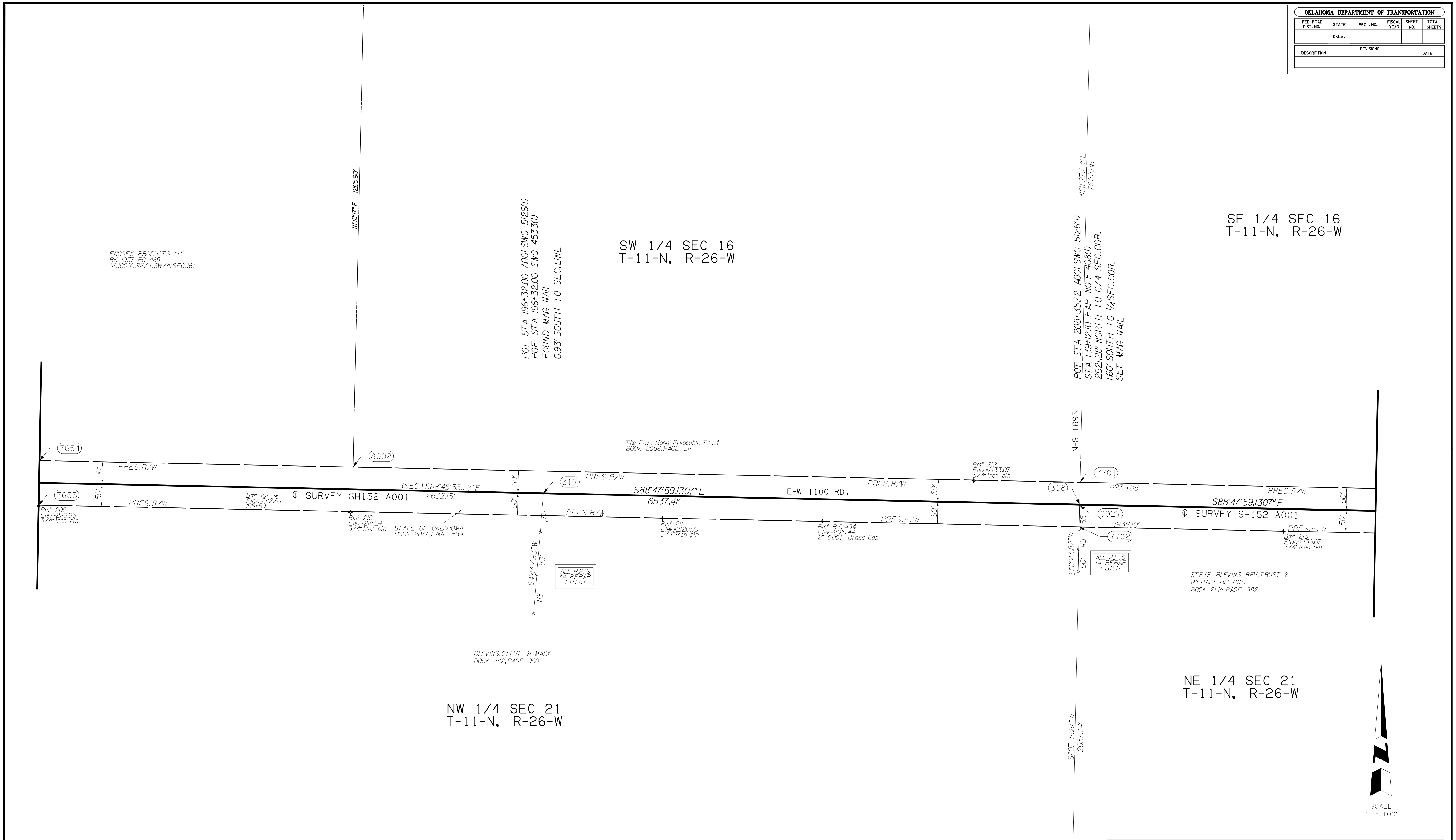
PLS	NSS
DRAWN	CRT
CHECKED	NSS
APPROVED	NSS
CREW	BENNETT

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S010

8-87



PLS	NSS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	CRT	
CHECKED	NSS	**SURVEY DATA SHEET**
APPROVED	NSS	
CREW	BENNETT	SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S011

8-87

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

REVISIONS	
DESCRIPTION	DATE

SE 1/4 SEC 16
T-11-N, R-26-W

POT STA 221+35.77 A001 SWO 5126(1)
2.39' SOUTH TO SEC.LINE
SET MAG NAIL

SW 1/4 SEC 15
T-11-N, R-26-W

2553.56'
N1°03'49.53"E
2606.53'
2553.46'

PI STA 234+68.98 A001 SWO 5126(1)
STA 165+48.10 FAP NO.F-408(1)
2603.33' NORTH TO 1/4 SEC.COR.
3.20' SOUTH TO SEC.LINE
SET MAG NAIL

PRES.R/W
33'
33'
N-S 1700 RD.
PRES.R/W

ALL R.P.'S
•4 REBAR
FLUSH

BANKS, DENNIS LEE
BK 1908, PG 378
BK 2006, PG 358

7659
7656
306
9028
7660
7661
328

S88°47'59.1307"E
℄ SURVEY SH152 A001

(SEC.) S88°45'53.78"E
2633.27'

50'
PRES.R/W

Bm• 214
Elev.=2135.25
3/4" iron pin

S1°16'6.22"W

STEVE BLEVINS REV. TRUST &
MICHAEL BLEVINS
BOOK 2144, PAGE 382

Bm• 215
Elev.=2141.17
3/4" iron pin

40'
50'
N46°12'22.15"E

Bm• 216
Elev.=2140.15
3/4" iron pin

S88°47'43.85"E
℄ SURVEY SH152 A001

(SEC.) S88°49'48.69"E
2643.72'

Bm• 217
Elev.=2139.56
3/4" iron pin

CLARENCE BLEVINS TRUST
BOOK 1898, PAGE 771

2586.68'
S1°41'0.35"W
2633.44'
2586.73'

NE 1/4 SEC 21
T-11-N, R-26-W

NW 1/4 SEC 22
T-11-N, R-26-W

N

SCALE
1" = 100'

PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S012

SDS 12 OF 26

8-87

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

REVISIONS	
DESCRIPTION	DATE

POT STA 248+69.01 A001 SWO 5126(1)
2.35' SOUTH TO SEC.LINE
SET MAG NAIL

SW 1/4 SEC 15
T-11-N, R-26-W

POT STA 261+12.70 A001 SWO 5126(1)
STA 191+96.10 FAP NO.F-408(1)
2613.55' NORTH TO C/4 SEC.COR.
1.60' SOUTH TO 1/4 SEC.COR.
SET MAG NAIL

N 0°5'42.99" E
2615.16'

SE 1/4 SEC 15
T-11-N, R-26-W

POT STA 278+62.74 A001 SWO 5126(1)
0.86' SOUTH TO SEC.LINE
SET MAG NAIL

BANKS, DENNIS LEE
BK 1908, PG 378
BK 2006, PG 358

ALL R.P.'S
#4 REBAR
FLUSH

(SEC.) S88°49'48.69" E
2643.72'

329

E-W 1100 RD.
℄ SURVEY SH152 A001

PRES. R/W
50'
5221.50'
S88°47'43.85" E
5287.43'
5221.52'
PRES. R/W
50'

7699
319
9029
7700

N 1°11'48.85" E
50'
50'

BANKS, DENNIS LEE
BK 1908, PG 378
BK 2006, PG 358

ALL R.P.'S
#4 REBAR
FLUSH

50'
50'
N 1°11'45.09" E

(SEC.) S88°49'48.69" E
2643.72'

50'
50'

PRES. R/W
S88°47'43.85" E
℄ SURVEY SH152 A001
PRES. R/W

330

S 1°13'30.18" W
50'
45'
55'

ALL R.P.'S
#4 REBAR
FLUSH

CLARENCE BLEVINS TRUST
BOOK 1898, PAGE 771

Bm# 218
Elev.=2140.07
3/4" Iron pin

Bm# 219
Elev.=2128.63
3/4" Iron pin

Bm# 220
Elev.=2127.22
3/4" Iron pin

Bm# 221
Elev.=2131.35
3/4" Iron pin

DENNIS LEE BANKS
BOOK 1909, PAGE 319 &
BOOK 1942, PAGE 574
(N/2.NE/4.SEC.22)

N-S 1705

S 1°8'56.9" W
2642.22'

NW 1/4 SEC 22
T-11-N, R-26-W

NE 1/4 SEC 22
T-11-N, R-26-W

N

SCALE
1" = 100'

PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S013

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

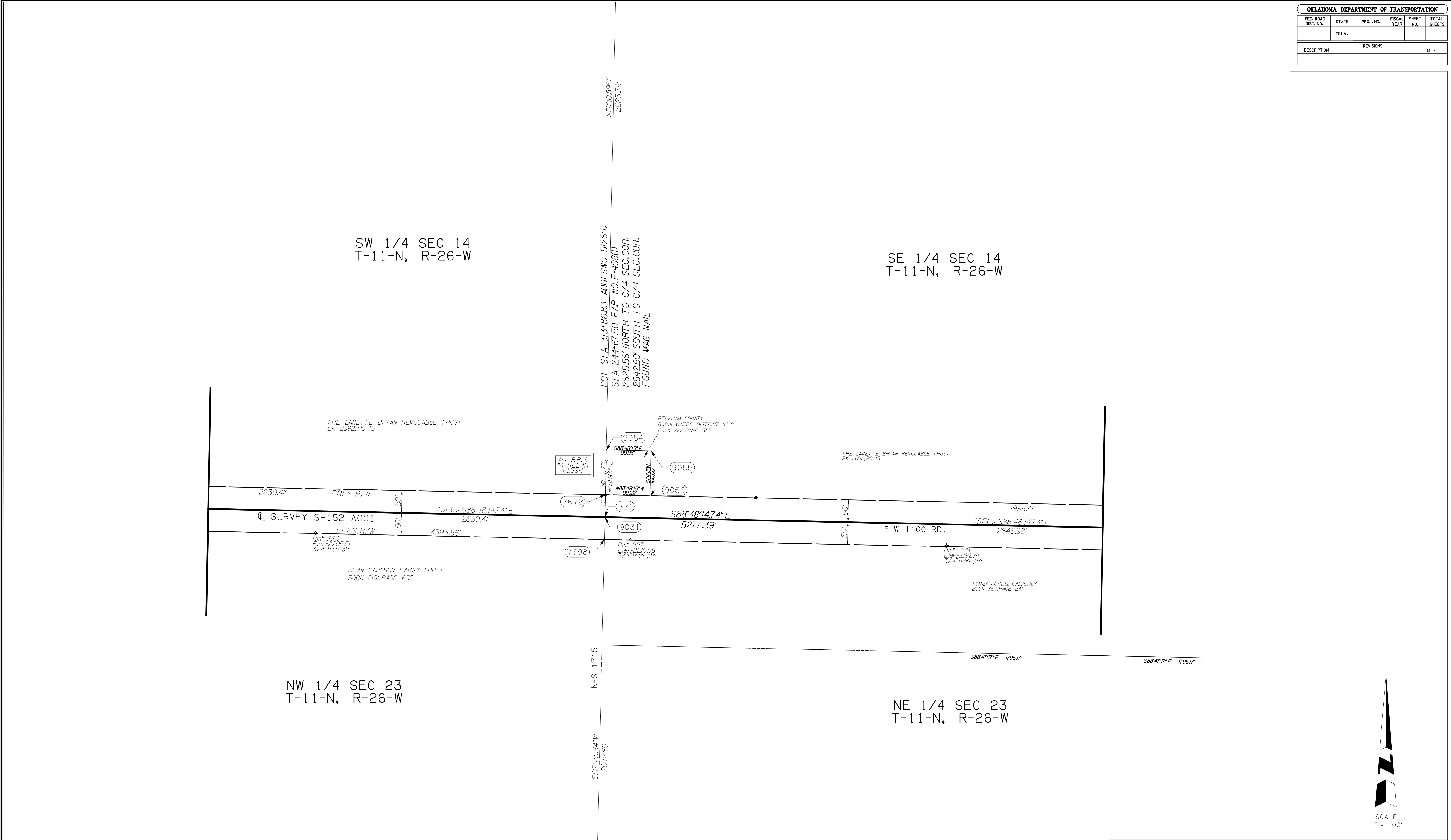
REVISIONS	
DESCRIPTION	DATE

SE 1/4 SEC 15
T-11-N, R-26-W
SW 1/4 SEC 14
T-11-N, R-26-W
NE 1/4 SEC 22
T-11-N, R-26-W
NW 1/4 SEC 23
T-11-N, R-26-W
2573.65'
S89°01'01.31"E
2623.78'
2573.81'
POT STA 287+56.42 A001 SWO 5126(1)
STA 218+37.00 FAP NO.F-408(1)
2623.78' NORTH TO 1/4SEC.COR.
2651.00' SOUTH TO 1/4SEC.COR.
SET P.K.NAIL W/ TAG "OKCA2483"
POT STA 300+56.44 A001 SWO 5126(1)
SET MAG NAIL
N-S 1710 RD.
PRES.R/W
33' 33'
BANKS,DENNIS LEE
BK 1908,PG 378
BK 2006,PG 358
ALL R.P.'S
#4 REBAR
FLUSH
THE LANETTE BRYAN REVOCABLE TRUST
BK 2092,PG 15
7666
7667
40'
60'
50'
N1°59'31.44"E
327
9030
S88°47'43.85"E
℄ SURVEY SH152 A001
(SEC) S88°49'48.69"E
2643.72'
(SEC) S88°48'14.74"E
2630.41'
2630.41'
E-W 1100 RD.
331
4593.56'
Bm# 222
Elev.:2133.57
3/4"Iron pin
Bm# 223
Elev.:2153.75
3/4"Iron pin
Bm# 224
Elev.:2178.38
3/4"Iron pin
Bm# 225
Elev.:2181.25
3/4"Iron pin
7668
7669
S0°13'26.64"W
DEAN CARLSON FAMILY TRUST
BOOK 2101,PAGE 650
DENNIS LEE BANKS
BOOK 1909,PAGE 319 &
BOOK 1942 PAGE 574
2600.91'
S1°23'41.90"W
2651.00'
2600.89'
N
SCALE
1" = 100'

SDS 14 OF 26

PLS	NSS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	CRT	
CHECKED	NSS	**SURVEY DATA SHEET**
APPROVED	NSS	
CREW	BENNETT	SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S014

8-87



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

REVISIONS	
DESCRIPTION	DATE

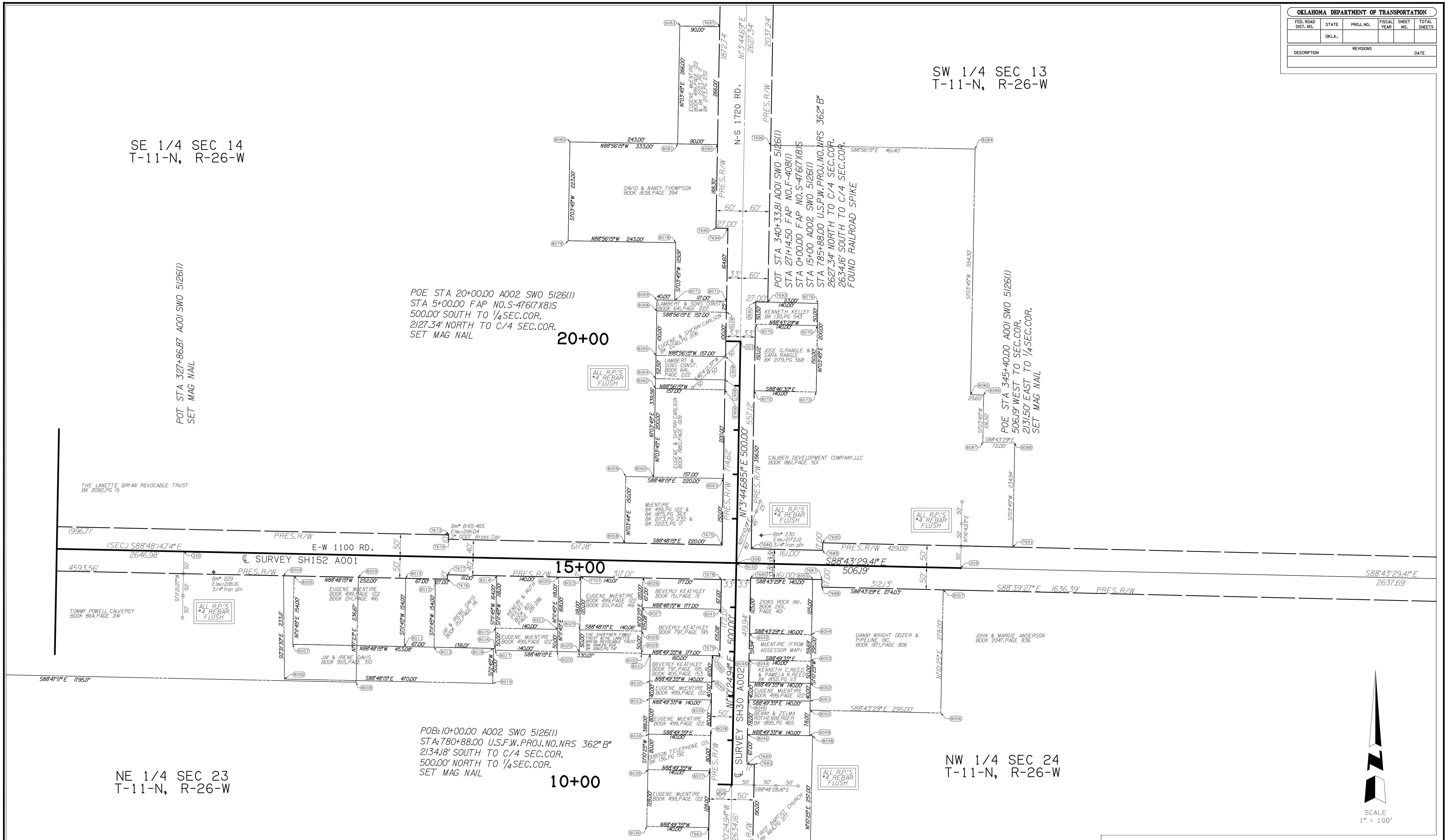
PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S015

8-87



PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

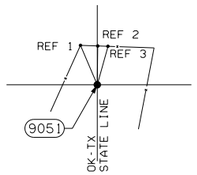
SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S016

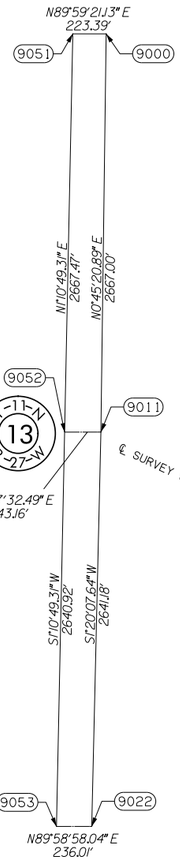
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

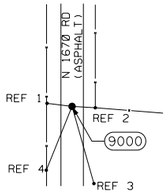
REVISIONS	
DESCRIPTION	DATE

FOUND ½" IRON BAR W/ CAP "TSLO CA1293" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DAN RODGERS DATED 08/26/2011. LOCATION IS ON LINE WITH FOUND TEXAS-OKLAHOMA STATE LINE MONUMENTS

REF 1) 60D NAIL IN WOOD CORNER POST (FOUN)	26.00'	N23°05'W
REF 2) SOUTH FACE OF T-POST (FOUND)	24.10'	S00°40'E
REF 3) SOUTH FACE OF T-POST (FOUND)	24.50'	S15°37'E





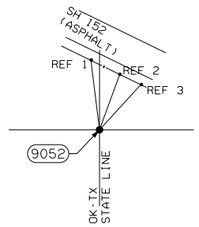


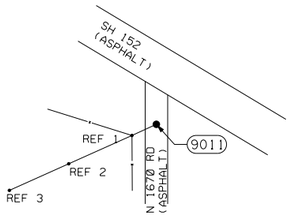
FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND ON OCCR BY ANTHONY FELDER DATED 08/31/1998.

REF 1) FACE OF 2" STEEL CORNER POST (FOUND)	33.78'	N83°11'W
REF 2) FACE OF 3" STEEL CORNER POST (FOUND)	31.11'	S86°52'E
REF 3) MAG NAIL W/ SHINER "LS1463" (FOUND)	107.45'	S15°49'E
REF 4) PK NAIL W/ SHINER "LS1444" IN FENCE POST (FOUND)	92.35'	S21°57'W

FOUND ⅜" IRON BAR W/ CAP "TSLO CA1293" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DAN RODGERS DATED 08/26/2011. LOCATION IS ON LINE WITH FOUND TEXAS-OKLAHOMA STATE LINE MONUMENTS

REF 1) 60D NAIL IN 12" ELM (FOUND)	94.11'	N07°05'W
REF 2) 60D NAIL IN POWER POLE (FOUND)	79.28'	N20°02'E
REF 3) TOP OF 3" STEEL POST (FOUND)	82.17'	N42°28'E



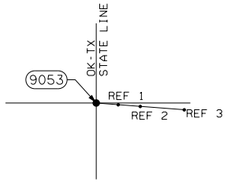


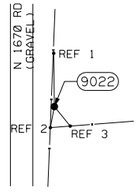
FOUND 1" IRON BAR AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY LARRY RESER DATED 06/29/1998 AND ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) 60D NAIL IN FENCE CORNER POST (FOUND)	35.93'	S65°51'W
REF 2) ½" IRON BAR (FOUND)	128.72'	S65°51'W
REF 3) ½" IRON BAR (FOUND)	215.79'	S65°51'W

FOUND ⅜" IRON BAR W/ CAP "TSLO CA1293" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DAN RODGERS DATED 08/26/2011. LOCATION IS ON LINE WITH FOUND TEXAS-OKLAHOMA STATE LINE MONUMENTS

REF 1) ⅜" REBAR (FOUND)	50.05'	S85°40'E
REF 2) ⅜" REBAR (FOUND)	100.00'	S85°40'E
REF 3) ⅜" REBAR (FOUND)	200.10'	S85°40'E





FOUND ½" IRON BAR W/ CAP "PLS 1463" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND ON OCCR BY ANTHONY FELDER DATED 08/31/1998.

REF 1) CENTER OF 3" STEEL CORNER POST (FOUND)	71.30'	N00°41'W
REF 2) CENTER OF 4" STEEL GATE POST (FOUND)	16.35'	S10°40'W
REF 3) CENTER OF 4" STEEL GATE POST (FOUND)	20.91'	S38°57'E

SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

SDS 17 OF 26

PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (J) PROJECT NO. 29530(04) SHEET NO. S017

8-87

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

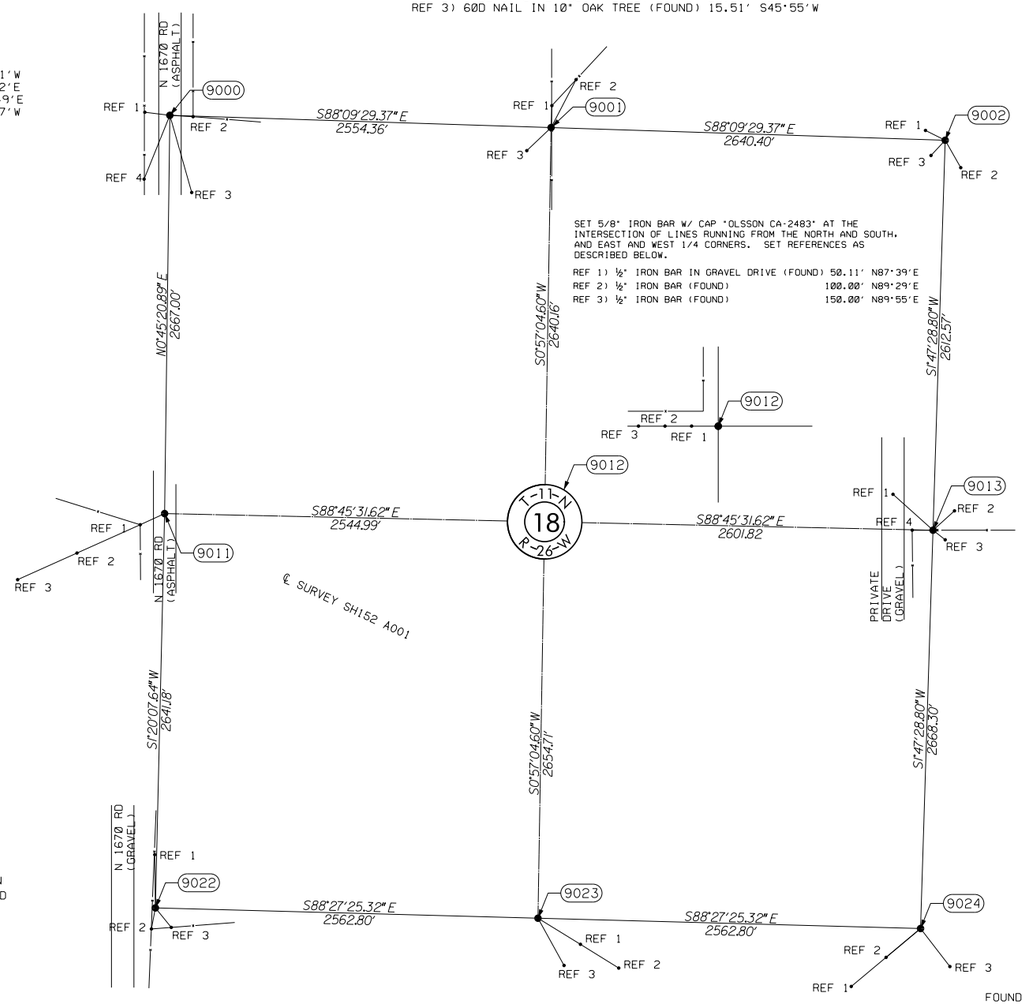
REVISIONS	
DESCRIPTION	DATE

FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND ON OCCR BY ANTHONY FELDER DATED 08/31/1998.

REF 1) FACE OF 2" STEEL CORNER POST (FOUND) 33.78' N83°11'W
REF 2) FACE OF 3" STEEL CORNER POST (FOUND) 31.11' S86°52'E
REF 3) MAG NAIL W/ SHINER "LS1463" (FOUND) 107.45' S15°49'E
REF 4) PK NAIL W/ SHINER "LS1444" IN FENCE POST (FOUND) 92.35' S21°57'W

FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) FACE OF GATE POST (FOUND) 16.09' N01°00'E
REF 2) FACE OF GATE POST (FOUND) 29.23' N27°30'E
REF 3) 60D NAIL IN 10" OAK TREE (FOUND) 15.51' S45°55'W



FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) RAILROAD SPIKE (FOUND) 29.65' N65°22'W
REF 2) RAILROAD SPIKE (FOUND) 42.15' S43°15'E
REF 3) RAILROAD SPIKE (FOUND) 27.79' S43°15'W

FOUND 1" IRON BAR AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY LARRY RESER DATED 06/29/1998 AND ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) 60D NAIL IN FENCE CORNER POST (FOUND) 35.93' S65°51'W
REF 2) ½" IRON BAR (FOUND) 128.72' S65°51'W
REF 3) ½" IRON BAR (FOUND) 215.79' S65°51'W

FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY ANTHONY FELDER DATED 10/21/1998.

REF 1) ½" IRON BAR IN GRAVEL DRIVE (FOUND) 46.87' N48°08'W
REF 2) ½" IRON BAR (FOUND) 36.65' N48°04'E
REF 3) ½" IRON BAR (FOUND) 7.73' S51°44'E
REF 4) FACE OF 4" STEEL FENCE POST 27.95' N89°54'W

FOUND ½" IRON BAR W/ CAP "PLS 1463" AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND ON OCCR BY ANTHONY FELDER DATED 08/31/1998.

REF 1) CENTER OF 3" STEEL CORNER POST (FOUND) 71.30' N00°41'W
REF 2) CENTER OF 4" STEEL GATE POST (FOUND) 16.35' S10°40'W
REF 3) CENTER OF 4" STEEL GATE POST (FOUND) 20.91' S38°57'E

FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) ½" IRON BAR (FOUND) 66.71' S58°22'E
REF 2) 60D NAIL IN POWER POLE (FOUND) 127.10' S58°22'E
REF 3) CONSERVATION COMMISSION CAP IN CONCRETE POST (FOUND) 72.26' S28°57'E

FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) BRASS CAP SET IN CONCRETE POST "B-5-434" (FOUND) 120.93' S50°03'W
REF 2) ½" IRON BAR (FOUND) 60.28' S50°03'W
REF 3) 60D NAIL IN POWER POLE (FOUND) 64.34' S37°41'E

N

SCALE:
1"=500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

SDS 18 OF 26

PLS	NSS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	CRT		SURVEY DATA SHEET
CHECKED	NSS		
APPROVED	NSS		
CREW	BENNETT		SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S018

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

REVISIONS	
DESCRIPTION	DATE

FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND FOUND 1/2" IRON BAR W/ CAP "RLS 1463" AS DESCRIBED ON OCCR BY ANTHONY FELDER DATED 10/21/1998.

REF 1) PK NAIL IN FENCE POST (FOUND) 29.60' N46°50'W
REF 2) ½" IRON BAR (FOUND) 16.47' N07°58'W
REF 3) PK NAIL IN FENCE CORNER POST (FOUND) 21.03' S88°52'W

FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) RAILROAD SPIKE (FOUND) 29.65' N65°22'W
REF 2) RAILROAD SPIKE (FOUND) 42.15' S43°15'E
REF 3) RAILROAD SPIKE (FOUND) 27.79' S43°15'W

FOUND 3/8" IRON BAR AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY ANTHONY FELDER DATED 10/21/1998 AND ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

ODOT MON. NO. R-65-391

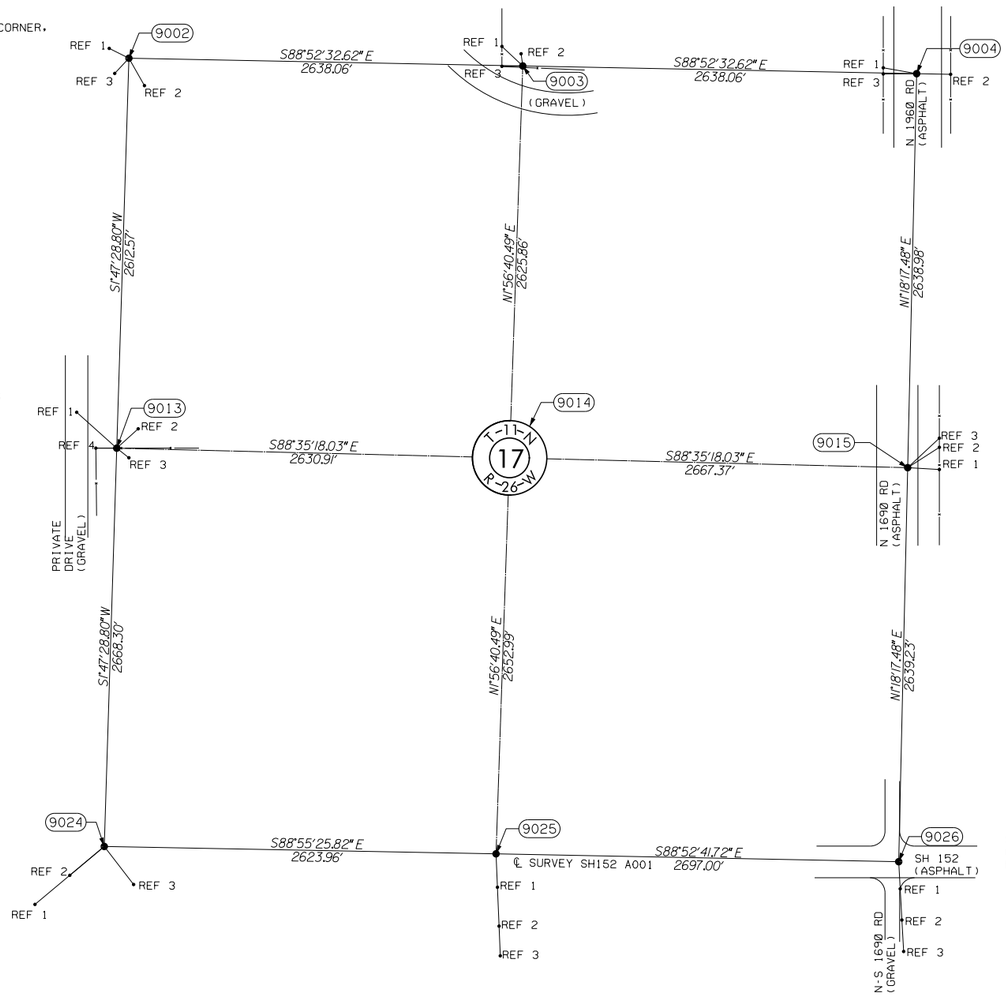
REF 1) PK NAIL IN FENCE POST (FOUND) 32.23' N79°56'W
REF 2) PK NAIL IN FENCE CORNER POST (FOUND) 31.90' S88°52'E
REF 3) PK NAIL IN FENCE CORNER POST (FOUND) 32.59' S89°32'W

FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND ON OCCR BY ANTHONY FELDER DATED 10/21/1998.

REF 1) ½" IRON BAR IN GRAVEL DRIVE (FOUND) 46.87' N48°08'W
REF 2) ½" IRON BAR (FOUND) 36.65' N48°04'E
REF 3) ½" IRON BAR (FOUND) 7.73' S51°44'E
REF 4) FACE OF 4" STEEL FENCE POST 27.95' N89°54'W

FOUND ½" IRON BAR W/ PLASTIC CAP STAMPED "LS 1463" AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND ON OCCR BY ANTHONY FELDER, JR. DATE 09/29/1998.

REF 1) WEST FACE OF 6" STEEL FENCE POST (FOUND) 31.64' N47°01'E
REF 2) 60D NAIL IN FENCE POST (FOUND) 27.29' N57°20'E
REF 3) 60D NAIL IN FENCE POST (FOUND) 23.18' S86°39'E



FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) BRASS CAP SET IN CONCRETE POST "B-5-434" (FOUND) 120.93' S50°03'W
REF 2) ½" IRON BAR (FOUND) 60.28' S50°03'W
REF 3) 60D NAIL IN POWER POLE (FOUND) 64.34' S37°41'E

SET ½" IRON BAR W/ CAP "OKCA2483" AT THE LOCATION OF THE SECTION CORNER FROM FOUND REFERENCE MONUMENTS AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND SWO 4533(1).

REF 1) ½" IRON BAR (FOUND) 90.48' S02°21'E
REF 2) ½" IRON BAR (FOUND) 180.47' S02°21'E
REF 3) ½" IRON BAR (FOUND) 270.49' S02°21'E

SET PK NAIL W/ SHINER "OKCA2483" AT THE LOCATION OF SECTION CORNER FROM FOUND REFERENCE MONUMENTS AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND SWO 4533(1).

REF 1) ½" IRON BAR (FOUND) 95.39' S03°10'E
REF 2) ½" IRON BAR (FOUND) 190.41' S03°10'E
REF 3) ½" IRON BAR (FOUND) 285.49' S03°10'E

SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

SDS 19 OF 26

PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S019

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

REVISIONS	
DESCRIPTION	DATE

FOUND 3/8" IRON BAR AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY ANTHONY FELDER DATED 10/21/1998 AND ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

ODOT MON. NO. R-65-391

REF 1) PK NAIL IN FENCE POST (FOUND) 32.23' N79°56'W
REF 2) PK NAIL IN FENCE CORNER POST (FOUND) 31.90' S88°52'E
REF 3) PK NAIL IN FENCE CORNER POST (FOUND) 32.59' S89°32'W

FOUND ½" IRON BAR W/ PLASTIC CAP STAMPED "LS 1463" AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND ON OCCR BY ANTHONY FELDER, JR. DATE 09/29/1998.

REF 1) WEST FACE OF 6" STEEL FENCE POST (FOUND) 31.64' N47°01'E
REF 2) 60D NAIL IN FENCE POST (FOUND) 27.29' N57°20'E
REF 3) 60D NAIL IN FENCE POST (FOUND) 23.18' S86°39'E

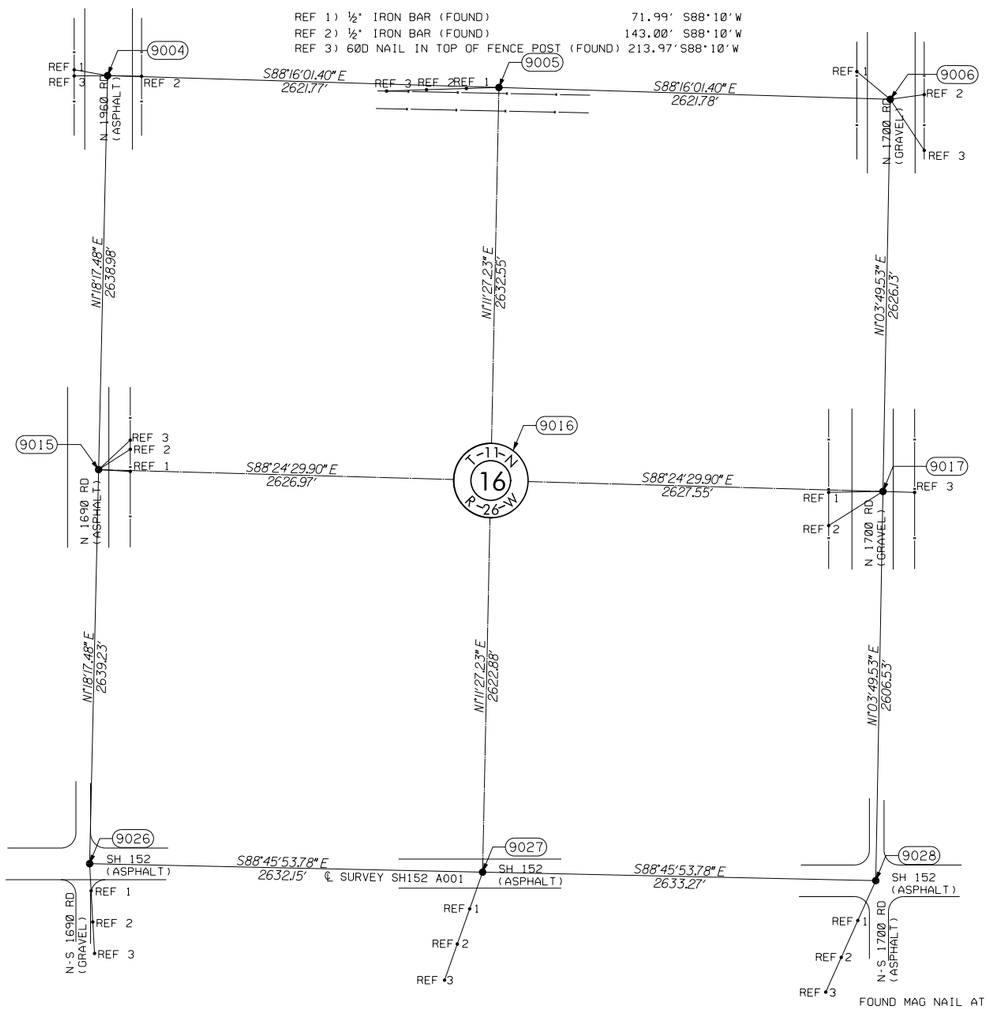
SET PK NAIL W/ SHINER "OKCA2483" AT THE LOCATION OF SECTION CORNER FROM FOUND REFERENCE MONUMENTS AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND SWO 4533(1).

REF 1) ½" IRON BAR (FOUND) 95.39' S03°10'E
REF 2) ½" IRON BAR (FOUND) 190.41' S03°10'E
REF 3) ½" IRON BAR (FOUND) 285.49' S03°10'E

FOUND 1/2" IRON BAR W/ PLASTIC CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

ODOT MON. NO. R-65-392

REF 1) ½" IRON BAR (FOUND) 71.99' S88°10'W
REF 2) ½" IRON BAR (FOUND) 143.00' S88°10'W
REF 3) 60D NAIL IN TOP OF FENCE POST (FOUND) 213.97'S88°10'W



FOUND 1/2" IRON BAR W/ CAP (UNREADABLE) AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

ODOT MON. NO. R-65-393

REF 1) 60D NAIL IN FENCE POST (FOUND) 28.05' N51°11'W
REF 2) 60D NAIL IN FENCE POST (FOUND) 19.24' N82°06'E
REF 3) 60D NAIL IN FENCE POST (FOUND) 32.22' S33°40'E

FOUND ½" IRON BAR W/ PLASTIC CAP STAMPED "PLS 1444" AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) PK NAIL IN FENCE POST (FOUND) 34.28' S89°03'W
REF 2) PK NAIL IN FENCE POST (FOUND) 41.25' S57°50'W
REF 3) PK NAIL IN FENCE POST (FOUND) 22.92' S88°13'W

FOUND MAG NAIL W/ SHINER AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) ½" IRON BAR (FOUND) 90.09' S19°26'W
REF 2) ½" IRON BAR (FOUND) 180.12' S19°26'W
REF 3) ½" IRON BAR (FOUND) 270.09' S19°26'W

FOUND MAG NAIL AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) ½" IRON BAR (FOUND) 94.96'S24°12'W
REF 2) ½" IRON BAR (FOUND) 189.95'S24°12'W
REF 3) ½" IRON BAR (FOUND) 284.97'S24°12'W

N

SCALE:
1"=500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

SDS 20 OF 26

PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S020

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

REVISIONS	
DESCRIPTION	DATE

FOUND 1/2" IRON BAR W/ CAP (UNREADABLE) AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) 60D NAIL IN FENCE POST (FOUND) 28.05' N51°11'W
REF 2) 60D NAIL IN FENCE POST (FOUND) 19.24' N82°06'E
REF 3) 60D NAIL IN FENCE POST (FOUND) 32.22' S33°40'E

FOUND 3/8" IRON BAR W/ CAP "RPLS 1200" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DAN ROGERS DATED 10/22/2012.

REF 1) FACE OF 4" STEEL FENCE POST (FOUND) 47.08' S23°01'W
REF 2) FACE OF 4" STEEL FENCE POST (FOUND) 53.43' S20°37'W
REF 3) FACE OF 4" STEEL FENCE POST (FOUND) 51.81' S13°29'W

SET ½" IRON BAR W/ CAP "OKCA2483" AT LOCATION OF SECTION CORNER AND FOUND REFERENCE MONUMENTS AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009.

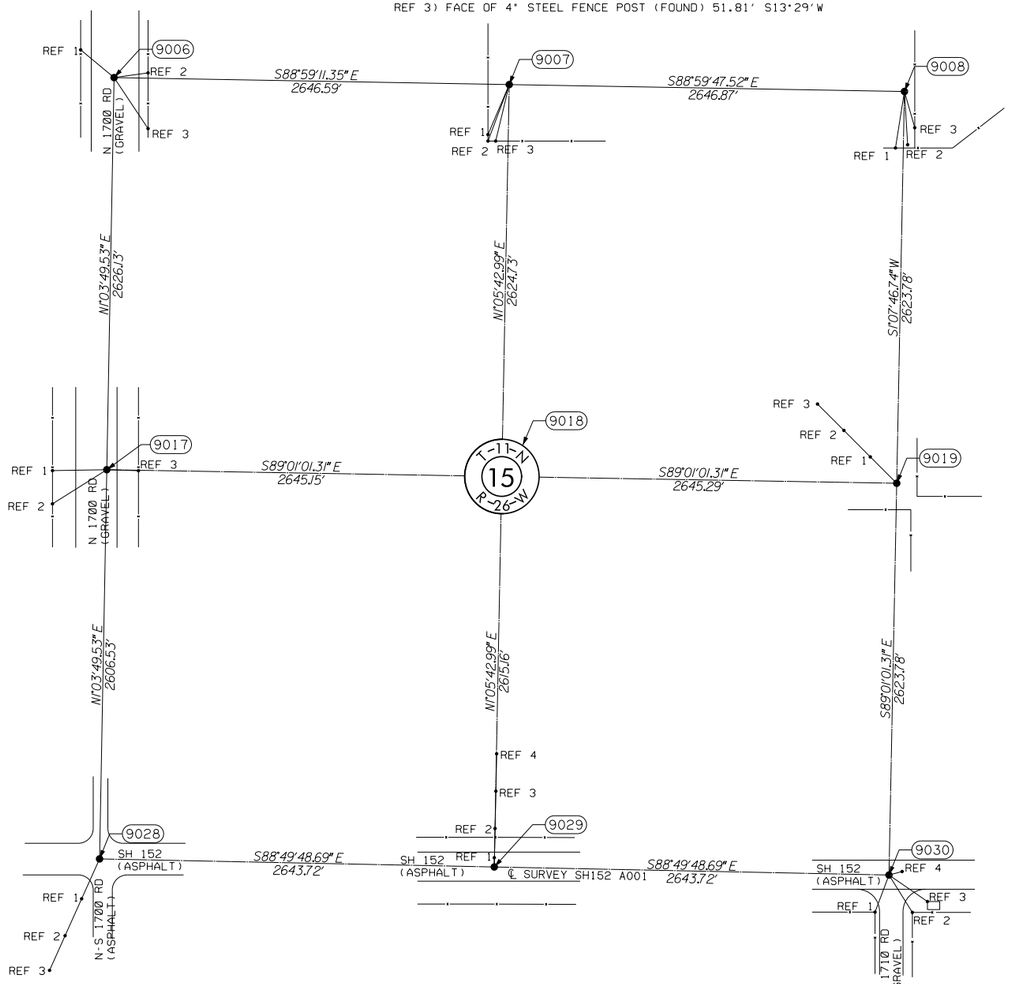
REF 1) TOP OF 6" FENCE POST (FOUND) 28.73' S09°01'W
REF 2) 60D NAIL IN FENCE POST (FOUND) 26.90' S03°28'E
REF 3) 60D NAIL IN FENCE POST (FOUND) 12.38' S15°54'E

FOUND ½" IRON BAR W/ PLASTIC CAP STAMPED "PLS 1444" AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) PK NAIL IN FENCE POST (FOUND) 34.28' S89°03'W
REF 2) PK NAIL IN FENCE POST (FOUND) 41.25' S57°50'W
REF 3) PK NAIL IN FENCE POST (FOUND) 22.92' S88°13'W

FOUND 3/8" IRON BAR W/ PLASTIC CAP STAMPED "JGVE CA234" AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009.

REF 1) ⅜" IRON BAR (FOUND) 50.00' N45°00'W
REF 2) ⅜" IRON BAR (FOUND) 100.00' N45°00'W
REF 3) ⅜" IRON BAR (FOUND) 150.00' N45°00'W



FOUND MAG NAIL AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) ½" IRON BAR (FOUND) 94.96' S24°12'W
REF 2) ½" IRON BAR (FOUND) 189.95' S24°12'W
REF 3) ½" IRON BAR (FOUND) 284.97' S24°12'W

SET PK NAIL W/ TAG "OKCA2483" AT LOCATION OF SECTION CORNER BY SINGLE PROPORTION FROM FOUND SOUTHEAST AND SOUTHWEST SECTION CORNERS.

REF 1) PK NAIL (SET) 1.60' N00°04'E
REF 2) ½" IRON BAR (SET) 51.60' N01°09'E
REF 3) ½" IRON BAR (SET) 101.60' N01°09'E
REF 4) ½" IRON BAR (SET) 151.60' N01°09'E

SET PK NAIL W/ TAG "OKCA2483" AT LOCATION OF SECTION CORNER FROM REFERENCES SET BY WILLIAM BROLLIER AND ODOT HIGHWAY PLANS FAP F-408(1).

REF 1) 60D NAIL IN FENCE CORNER POST (FOUND)	53.20' S20°37'W
REF 2) 60D NAIL IN FENCE CORNER POST (FOUND)	59.02' S32°00'E
REF 3) FACE OF 2" GUARD RAIL CORNER POST ON INLET (FOUND)	62.56' S55°25'E
REF 4) MAG NAIL IN ASPHALT (FOUND)	4.77' N75°01'E

SCALE:
1"=500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S021

SDS 21 OF 26

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

REVISIONS	
DESCRIPTION	DATE

FOUND ½" IRON BAR W/ CAP "JGVE CA234" AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009.

REF 1) TOP OF 6" FENCE POST (FOUND) 17.91' S69°03'W
REF 2) TOP OF 3" FENCE POST (FOUND) 33.80' S16°25'W
REF 3) TOP OF 3" FENCE POST (FOUND) 32.60' S04°28'W

SET ½" IRON BAR W/ CAP "OKCA2483" AT LOCATION OF SECTION CORNER AND FOUND REFERENCE MONUMENTS AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009.

REF 1) TOP OF 6" FENCE POST (FOUND) 28.73' S09°01'W
REF 2) 60D NAIL IN FENCE POST (FOUND) 26.90' S03°28'E
REF 3) 60D NAIL IN FENCE POST (FOUND) 12.38' S15°54'E

FOUND RAILROAD SPIKE 4" BELOW PAVEMENT AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 11/12/2009.

REF 1) CUT "X" ON TOP OF HEADWALL (FOUND) 40.30' N61°48'E
REF 2) CUT "X" ON TOP OF HEADWALL (FOUND) 40.40' S59°34'E
REF 3) FACE OF STEEL FENCE POST (FOUND) 73.13' N62°22'E

FOUND 3/8" IRON BAR W/ PLASTIC CAP STAMPED "JGVE CA234" AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009.

REF 1) ⅜" IRON BAR (FOUND) 50.00' N45°00'W
REF 2) ⅜" IRON BAR (FOUND) 100.00' N45°00'W
REF 3) ⅜" IRON BAR (FOUND) 150.00' N45°00'W

FOUND MAG NAIL AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 11/02/2009 AND ON OCCR BY BRIAN OAKLEY DATED 04/19/2006.

REF 1) CUT "X" ON TOP OF HEADWALL (FOUND) 40.14' N48°11'W
REF 2) CUT "X" ON TOP OF HEADWALL (FOUND) 44.50' S64°25'W
REF 3) FACE OF 3" STEEL FENCE POST (FOUND) 63.21' S87°16'E
REF 4) FACE OF R/W MARKER (FOUND) 59.81' N87°27'W

FOUND RAILROAD SPIKE 6" BELOW PAVEMENT AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009 AND ON OCCR BY BRIAN OAKLEY DATED 03/15/2006.

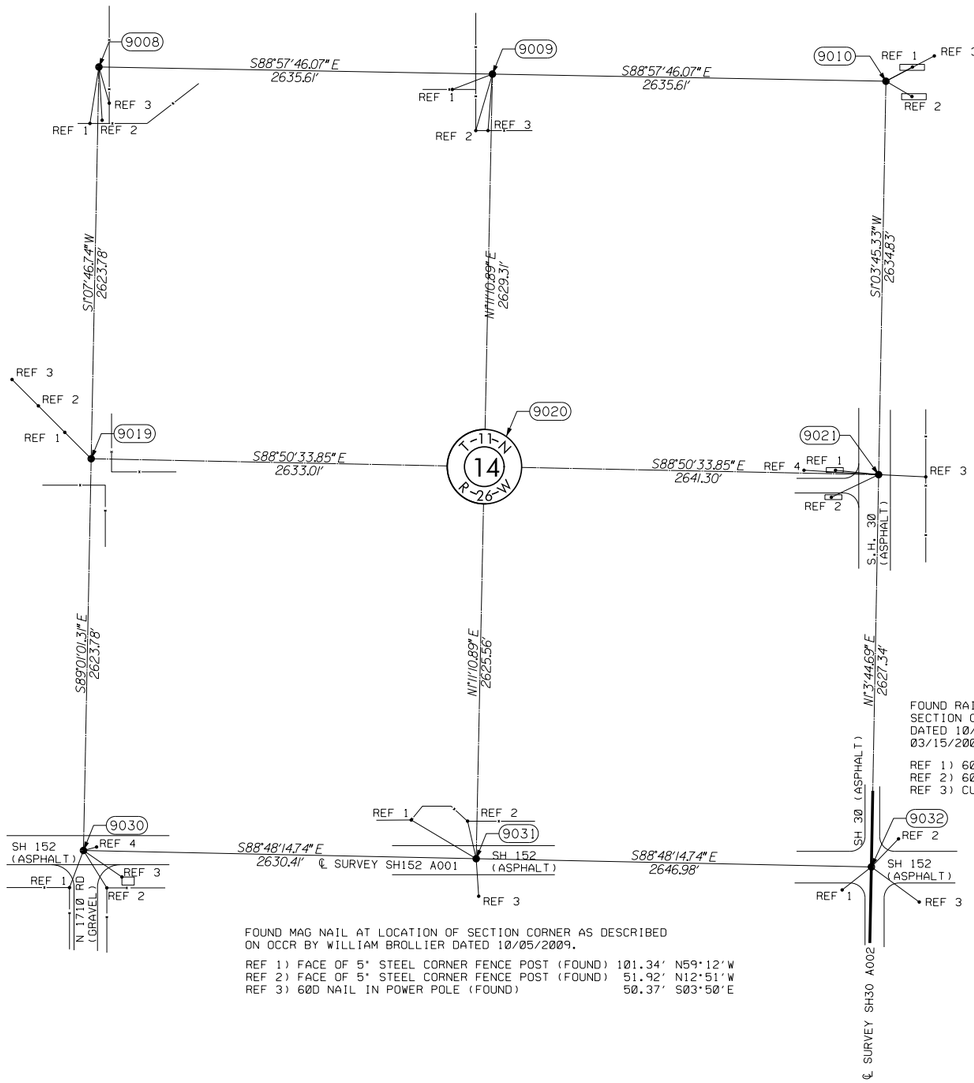
REF 1) 60D NAIL IN POWER POLE (FOUND) 49.91' S51°47'W
REF 2) 60D NAIL IN LIGHT POLE (FOUND) 52.33' N44°00'E
REF 3) CUT "X" ON WEST END OF PUMP ISLAND (FOUND) 79.42' S53°46'E

SET PK NAIL W/ TAG "OKCA2483" AT LOCATION OF SECTION CORNER.

REF 1) 60D NAIL IN FENCE CORNER POST (FOUND) 53.05' S20°37'W
REF 2) 60D NAIL IN FENCE CORNER POST (FOUND) 59.05' S32°00'E
REF 3) FACE OF 2" GUARD RAIL CORNER POST ON INLET (FOUND) 62.56' S55°25'E
REF 4) MAG NAIL IN ASPHALT (FOUND) 4.77' N75°01'E

FOUND MAG NAIL AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009.

REF 1) FACE OF 5" STEEL CORNER FENCE POST (FOUND) 101.34' N59°12'W
REF 2) FACE OF 5" STEEL CORNER FENCE POST (FOUND) 51.92' N12°51'W
REF 3) 60D NAIL IN POWER POLE (FOUND) 50.37' S03°50'E



SCALE:
1" = 500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (J) PROJECT NO. 29530(04) SHEET NO. S022

SDS 22 OF 26

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

REVISIONS	
DESCRIPTION	DATE

FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

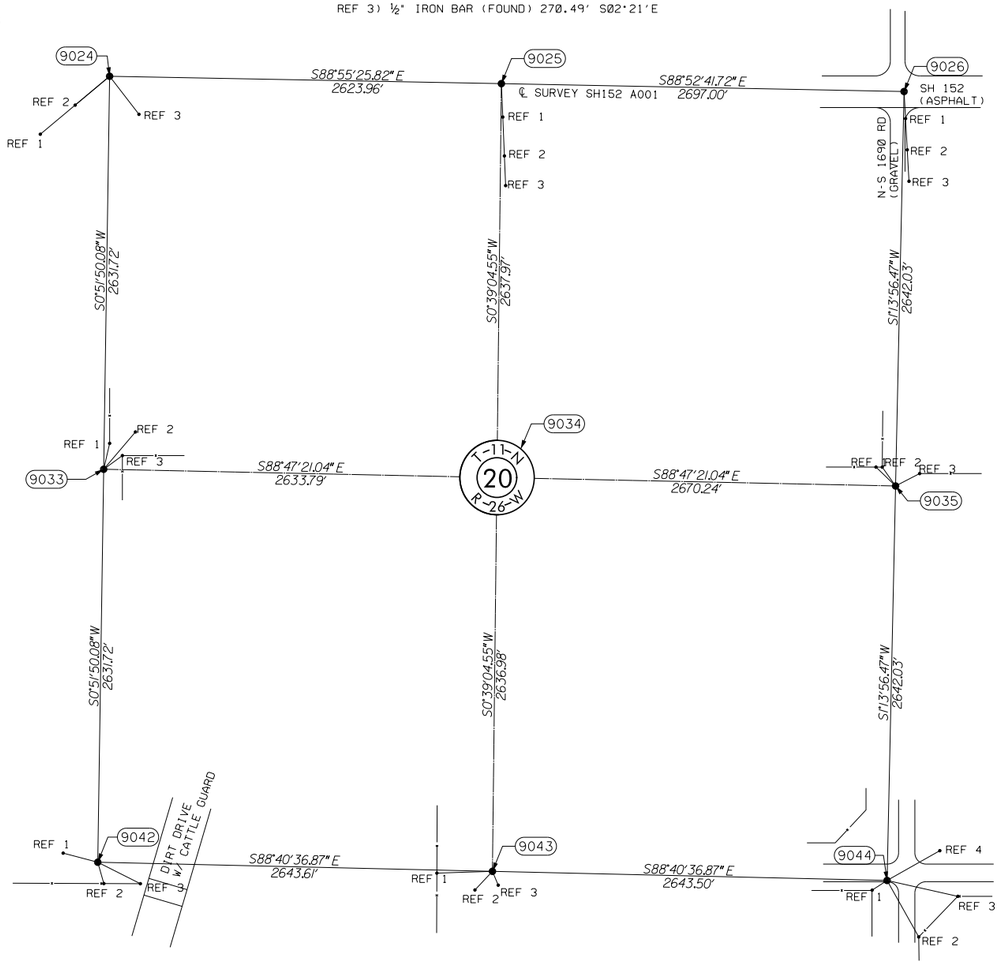
REF 1) BRASS CAP SET IN CONCRETE POST "B-5-434" (FOUND) 120.93' S50°03'W
REF 2) ½" IRON BAR (FOUND) 60.28' S50°03'W
REF 3) 60D NAIL IN POWER POLE (FOUND) 64.34' S37°41'E

SET ½" IRON BAR W/ CAP "OKCA2483" AT THE LOCATION OF THE SECTION CORNER FROM FOUND REFERENCE MONUMENTS AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND SWO 4533(1).

REF 1) ½" IRON BAR (FOUND) 90.48' S02°21'E
REF 2) ½" IRON BAR (FOUND) 180.47' S02°21'E
REF 3) ½" IRON BAR (FOUND) 270.49' S02°21'E

SET PK NAIL W/ SHINER "OKCA2483" AT THE LOCATION OF SECTION CORNER FROM FOUND REFERENCE MONUMENTS AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND SWO 4533(1).

REF 1) ½" IRON BAR (FOUND) 95.39' S03°10'E
REF 2) ½" IRON BAR (FOUND) 190.41' S03°10'E
REF 3) ½" IRON BAR (FOUND) 285.49' S03°10'E



FOUND ½" IRON BAR W/ CAP "LS1444" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY ANTHONY FELDER DATED 06/07/2010.

REF 1) FACE OF 4" STEEL GATE POST (FOUND) 35.55' N13°00'E
REF 2) ½" IRON BAR W/ CAP "PLS1463" (FOUND) 65.62' N40°24'E
REF 3) FACE OF 4" STEEL GATE POST (FOUND) 11.39' N53°49'E

FOUND ½" IRON BAR W/ CAP "RLS 1463" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) PK NAIL CORNER FENCE POST (FOUND) 36.47' N45°59'W
REF 2) PK NAIL IN FENCE BRACE POST (FOUND) 30.90' N35°16'W
REF 3) FACE OF 4" STEEL GATE POST (FOUND) 36.26' N62°40'E

FOUND ½" IRON BAR AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY ANTHONY FELDER DATED 12/15/1998 AND ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) TOP OF 1" GAS VALVE (FOUND) 15.15' N75°40'W
REF 2) FACE OF 6" STEEL CORNER POST (FOUND) 9.56' S15°54'E
REF 3) FACE OF 6" STEEL GATE POST (FOUND) 21.72' S63°02'E

FOUND ½" IRON BAR W/ CAP "LS1463" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) FACE OF 4" STEEL FENCE CORNER POST (FOUND) 23.83' S57°02'W
REF 2) FACE OF 4" STEEL FENCE CORNER POST (FOUND) 86.70' S29°16'E
REF 3) FACE OF 4" STEEL FENCE CORNER POST (FOUND) 97.02' S77°20'E
REF 4) 60D NAIL IN POWER POLE (FOUND) 81.09' N60°33'E

FOUND ½" IRON BAR W/ CAP "LS1463" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) FACE OF 3" STEEL FENCE CORNER POST (FOUND) 74.43' S88°10'W
REF 2) PK NAIL IN OLD WOOD POST (FOUND) 22.90' S43°11'W
REF 3) MAG NAIL IN TOP OF WOOD POST (FOUND) 7.27' S22°53'E

SCALE:
1"=500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

SDS 23 OF 26

PLS	NSS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	CRT		SURVEY DATA SHEET
CHECKED	NSS		
APPROVED	NSS		
CREW	BENNETT		SWO 5126 (I) PROJECT NO. 29530(04) SHEET NO. S023

8-87

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

REVISIONS	
DESCRIPTION	DATE

SET PK NAIL W/ SHINER "OKCA2483" AT THE LOCATION OF SECTION CORNER FROM FOUND REFERENCE MONUMENTS AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010 AND SWO 4533(1).

REF 1) ½" IRON BAR (FOUND) 95.39' S03°10'E
REF 2) ½" IRON BAR (FOUND) 190.41' S03°10'E
REF 3) ½" IRON BAR (FOUND) 285.49' S03°10'E

FOUND MAG NAIL W/ SHINER AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) ½" IRON BAR (FOUND) 90.09' S19°26'W
REF 2) ½" IRON BAR (FOUND) 180.12' S19°26'W
REF 3) ½" IRON BAR (FOUND) 270.09' S19°26'W

FOUND MAG NAIL AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) ½" IRON BAR (FOUND) 94.96'S24°12'W
REF 2) ½" IRON BAR (FOUND) 189.95'S24°12'W
REF 3) ½" IRON BAR (FOUND) 284.97'S24°12'W

FOUND ½" IRON BAR W/ CAP "RLS 1463" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) PK NAIL CORNER FENCE POST (FOUND) 36.47' N45°59'W
REF 2) PK NAIL IN FENCE BRACE POST (FOUND) 30.90' N35°16'W
REF 3) FACE OF 4" STEEL GATE POST (FOUND) 36.26' N62°40'E

FOUND ½" IRON BAR W/ CAP "LS 1444" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) FACE OF T-POST (FOUND) 40.71' N55°31'W
REF 2) FACE OF T-POST (FOUND) 34.68' S19°26'W
REF 3) FACE OF T-POST (FOUND) 49.48' S44°48'W

FOUND ½" IRON BAR W/ CAP "LS1463"AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

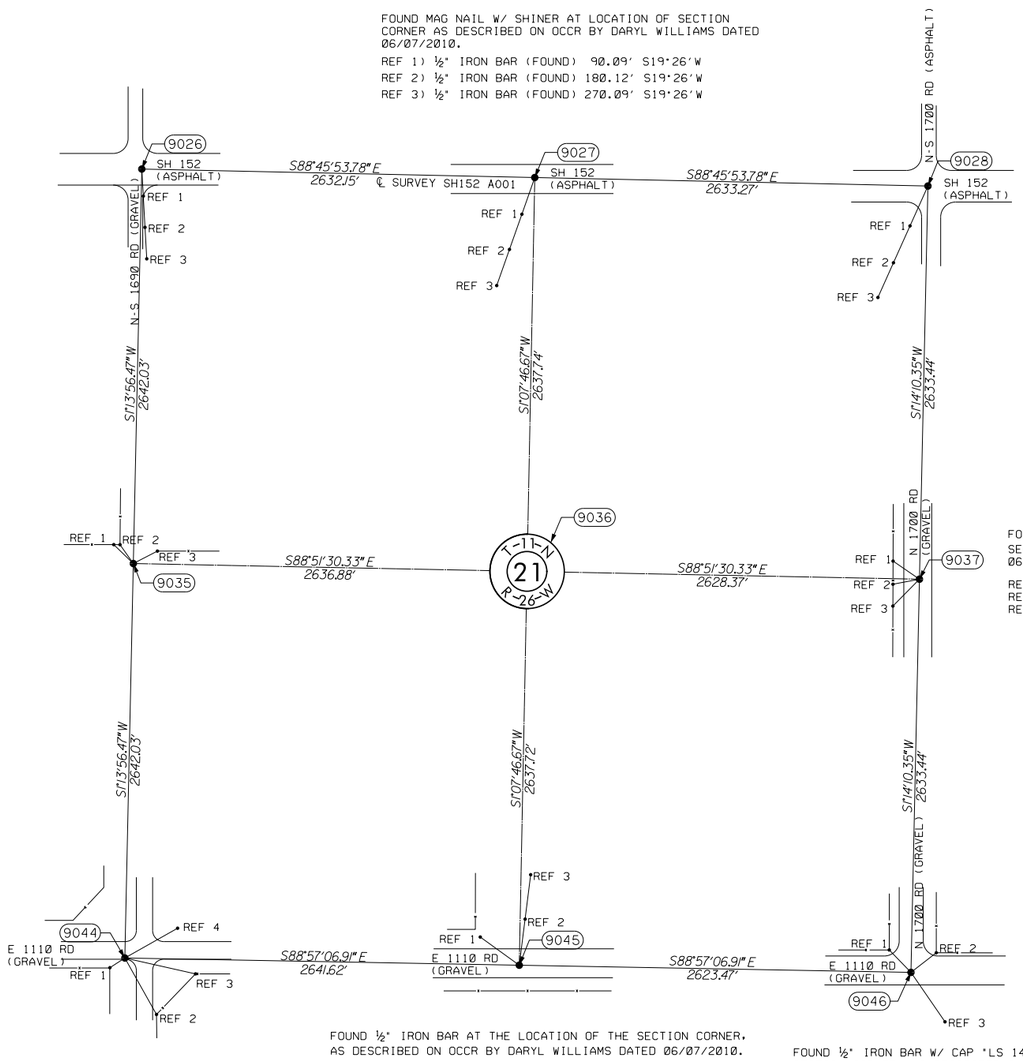
REF 1) FACE OF 4" STEEL FENCE CORNER POST (FOUND) 23.83' S57°02'W
REF 2) FACE OF 4" STEEL FENCE CORNER POST (FOUND) 86.70' S29°16'E
REF 3) FACE OF 4" STEEL FENCE CORNER POST (FOUND) 97.02' S77°20'E
REF 4) 60D NAIL IN POWER POLE (FOUND) 81.09' N60°33'E

FOUND ½" IRON BAR AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) 60D NAIL IN POWER POLE (FOUND) 64.46' N54°08'W
REF 2) ½" IRON BAR (FOUND) 62.22' N07°15'E
REF 3) 60D NAIL IN POWER POLE (FOUND) 122.18' N07°15'E

FOUND ½" IRON BAR W/ CAP "LS 1444" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) 60D NAIL IN FENCE CORNER POST (FOUND) 41.79' N44°06'W
REF 2) FACE OF 3" STEEL FENCE CORNER POST (FOUND) 42.89' N52°14'E
REF 3) 60D NAIL IN 28" TREE (FOUND) 80.41' S34°33'E



SCALE:
1"=500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

PLS	NSS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	CRT		
CHECKED	NSS		SURVEY DATA SHEET
APPROVED	NSS		
CREW	BENNETT		SWO 5126 (1) PROJECT NO. 29530(04) SHEET NO. S024

SDS 24 OF 26

8-87

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

REVISIONS	
DESCRIPTION	DATE

SET MAG NAIL W/ TAG "OKCA2483" AT LOCATION OF SECTION CORNER BY SINGLE PROPORTION FROM FOUND SOUTHEAST AND SOUTHWEST SECTION CORNERS.

REF 1) PK NAIL (SET) 1.60' N00°04'E
REF 2) ½" IRON BAR (SET) 51.60' N01°09'E
REF 3) ½" IRON BAR (SET) 101.60' N01°09'E
REF 4) ½" IRON BAR (SET) 151.60' N01°09'E

FOUND MAG NAIL AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) ½" IRON BAR (FOUND) 94.96'S24°12'W
REF 2) ½" IRON BAR (FOUND) 189.95'S24°12'W
REF 3) ½" IRON BAR (FOUND) 284.97'S24°12'W

SET PK NAIL W/ TAG "OKCA2483" AT LOCATION OF SECTION CORNER FROM REFERENCES SET BY WILLIAM BROLLIER AND ODOT HIGHWAY PLANS FAP F-408(1).

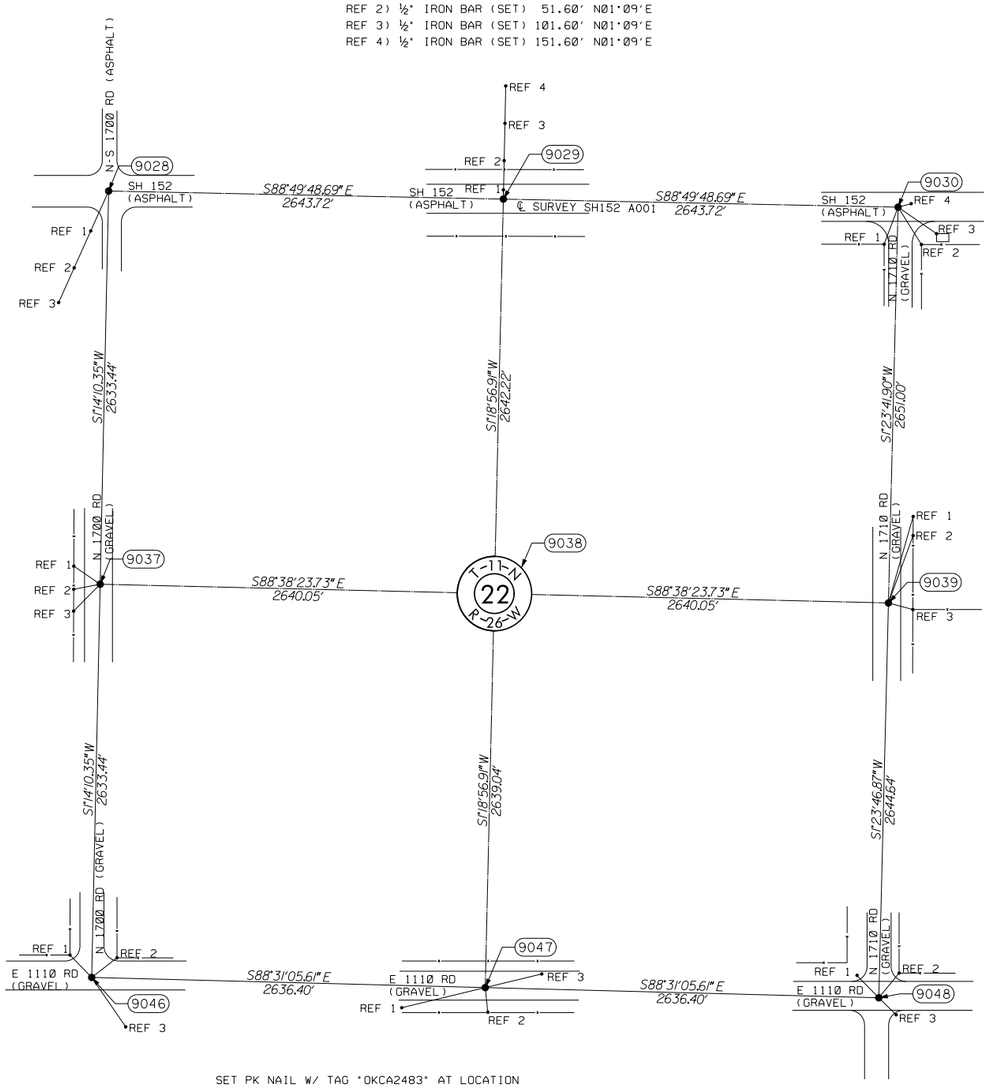
REF 1) 60D NAIL IN FENCE CORNER POST (FOUND) 53.20' S20°37'W
REF 2) 60D NAIL IN FENCE CORNER POST (FOUND) 59.02' S32°00'E
REF 3) FACE OF 2" GUARD RAIL CORNER POST ON INLET (FOUND) 62.56' S55°25'E
REF 4) MAG NAIL IN ASPHALT (FOUND) 4.77' N75°01'E

FOUND ½" IRON BAR W/ CAP "LS 1444" AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) FACE OF T-POST (FOUND) 40.71' N55°31'W
REF 2) FACE OF T-POST (FOUND) 34.68' S19°26'W
REF 3) FACE OF T-POST (FOUND) 49.48' S44°48'W

FOUND 3/8" IRON BAR W/ CAP "CA 234" AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009.

REF 1) SW FACE OF 3" STEEL GATE POST (FOUND) 109.10' N05°57'E
REF 2) SW FACE OF 3" STEEL GATE POST (FOUND) 87.67' N20°07'E
REF 3) NW FACE OF 2" STEEL CORNER POST (FOUND) 24.65' S74°55'E



FOUND ½" IRON BAR W/ CAP "LS 1444" AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY DARYL WILLIAMS DATED 06/07/2010.

REF 1) 60D NAIL IN FENCE CORNER POST (FOUND) 41.79' N44°06'W
REF 2) FACE OF 3" STEEL FENCE CORNER POST (FOUND) 42.89' N52°14'E
REF 3) 60D NAIL IN 28" TREE (FOUND) 80.41' S34°33'E

SET PK NAIL W/ TAG "OKCA2483" AT LOCATION OF SECTION CORNER BY SINGLE PROPORTION FROM FOUND SOUTHEAST AND SOUTHWEST SECTION CORNERS AND SET REFERENCES.

REF 1) SET ½" IRON BAR (SET) 115.00' N76°27'E
REF 2) FACE OF 3" STEEL FENCE POST (SET) 32.93' S05°54'E
REF 3) SET ½" IRON BAR (SET) 77.85' S76°27'W

FOUND ½" IRON BAR AT THE LOCATION OF THE SECTION CORNER. AS DESCRIBED ON OCCR BY BRIAN OAKLEY DATED 03/15/2006 AND ON OCCR BY GARY JONES DATED 03/27/2006.

REF 1) 60D NAIL IN POWER POLE (FOUND) 44.06' N44°31'W
REF 2) FACE OF 3" FENCE CORNER POST (FOUND) 42.78' N39°23'E
REF 3) 60D NAIL IN TELPED GUARD POST (FOUND) 32.51' S45°30'E

SCALE:
1"=500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

PLS	NSS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	CRT		
CHECKED	NSS		**SURVEY DATA SHEET**
APPROVED	NSS		
CREW	BENNETT		SWO 5126 (J) PROJECT NO. 29530(04) SHEET NO. S025

SDS 25 OF 26

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

REVISIONS	
DESCRIPTION	DATE

SET PK NAIL W/ TAG "OKCA2483" AT LOCATION OF SECTION CORNER FROM REFERENCES SET BY WILLIAM BROLLIER AND ODOT HIGHWAY PLANS FAP F-408(1).

REF 1) 60D NAIL IN FENCE CORNER POST (FOUND)	53.20′	S20°37′W
REF 2) 60D NAIL IN FENCE CORNER POST (FOUND)	59.02′	S32°00′E
REF 3) FACE OF 2" GUARD RAIL CORNER POST ON INLET (FOUND)	62.56′	S55°25′E
REF 4) MAG NAIL IN ASPHALT (FOUND)	4.77′	N75°01′E

FOUND MAG NAIL AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009.

REF 1) FACE OF 5" STEEL CORNER FENCE POST (FOUND)	101.34′	N59°12′W
REF 2) FACE OF 5" STEEL CORNER FENCE POST (FOUND)	51.92′	N12°51′W
REF 3) 60D NAIL IN POWER POLE (FOUND)	50.37′	S03°50′E

FOUND RAILROAD SPIKE 6" BELOW PAVEMENT AT LOCATION OF SECTION CORNER AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009 AND ON OCCR BY BRIAN OAKLEY DATED 03/15/2006.

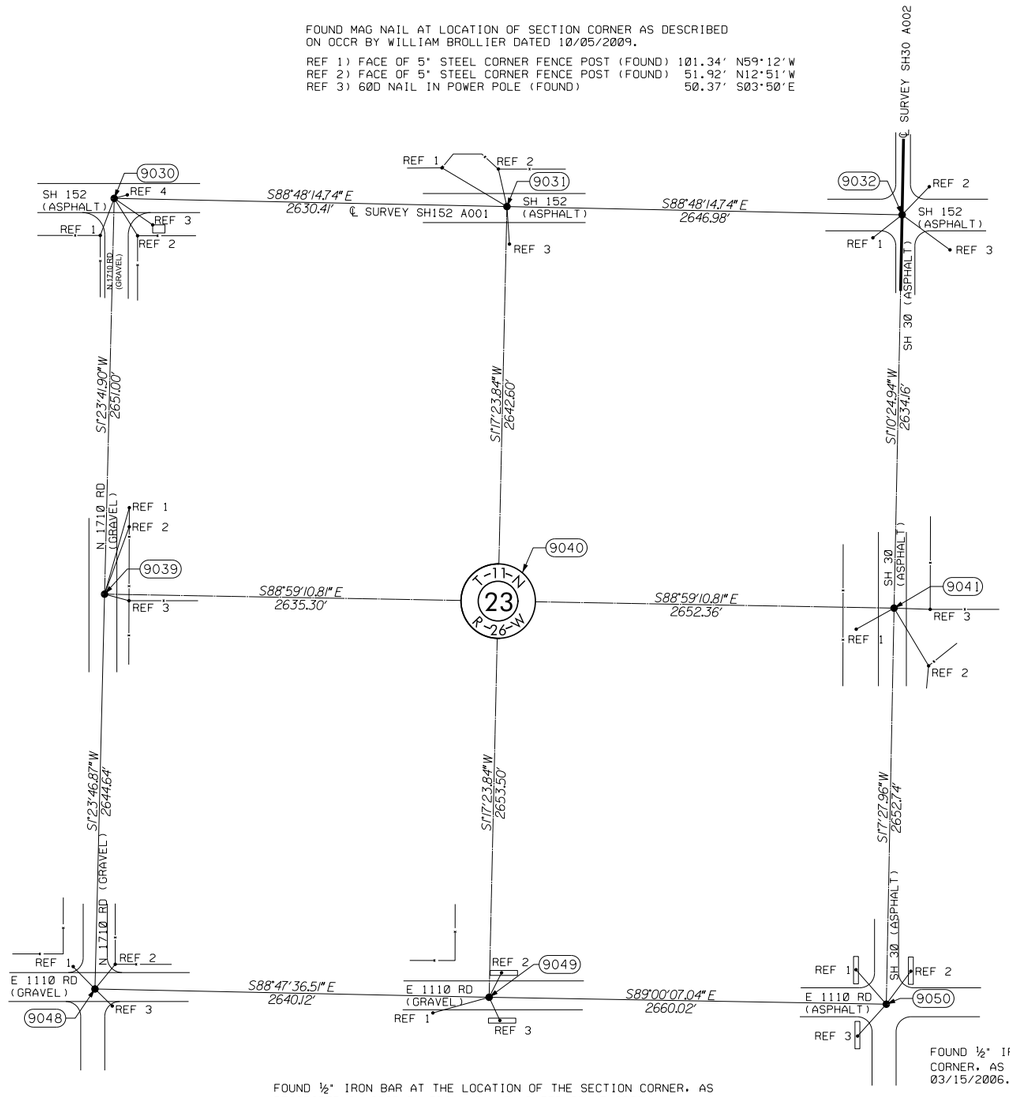
REF 1) 60D NAIL IN POWER POLE (FOUND)	49.91′	S51°47′W
REF 2) 60D NAIL IN LIGHT POLE (FOUND)	52.33′	N44°00′E
REF 3) CUT "X" ON WEST END OF PUMP ISLAND (FOUND)	79.42′	S53°46′E

FOUND 3/8" IRON BAR W/ CAP "CA 234" AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 10/05/2009.

REF 1) SW FACE OF 3" STEEL GATE POST (FOUND)	109.10′	N05°57′E
REF 2) SW FACE OF 3" STEEL GATE POST (FOUND)	87.67′	N20°07′E
REF 3) NW FACE OF 2" STEEL CORNER POST (FOUND)	24.65′	S74°55′E

FOUND MAG NAIL AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY WILLIAM BROLLIER DATED 11/11/2009 AND ON OCCR BY BRIAN OAKLEY DATED 03/15/2006.

REF 1) 60D NAIL IN POWER POLE (FOUND)	58.05′	S60°52′W
REF 2) NW FACE OF 6" STEEL CORNER POST (FOUND)	90.07′	S30°54′E
REF 3) WEST FACE OF 2" STEEL CORNER POST (FOUND)	48.37′	S88°02′E



FOUND ½" IRON BAR AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY BRIAN OAKLEY DATED 03/15/2006 AND ON OCCR BY GARY JONES DATED 03/27/2006.

REF 1) 60D NAIL IN POWER POLE (FOUND)	44.06′	N44°31′W
REF 2) FACE OF 3" FENCE CORNER POST (FOUND)	42.78′	N39°23′E
REF 3) 60D NAIL IN TELPED GUARD POST (FOUND)	32.51′	S45°30′E

FOUND ½" IRON BAR AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY BRIAN OAKLEY DATED 03/15/2006.

REF 1) FACE OF TELPED (FOUND)	78.17′	S74°28′W
REF 2) CUT "X" ON HEADWALL (FOUND)	17.27′	N26°56′E
REF 3) CUT "X" ON HEADWALL (FOUND)	17.23′	S24°52′E

FOUND ½" IRON BAR AT THE LOCATION OF THE SECTION CORNER, AS DESCRIBED ON OCCR BY BRIAN OAKLEY DATED 03/15/2006.

REF 1) CUT "X" ON TOP OF HEADWALL (SET)	28.80′	N41°20′W
REF 2) CUT "X" ON TOP OF HEADWALL (SET)	26.35′	N36°41′E
REF 3) CUT "X" ON TOP OF HEADWALL (SET)	31.57′	S42°01′W

SCALE:
1"=500'

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

SDS 26 OF 26

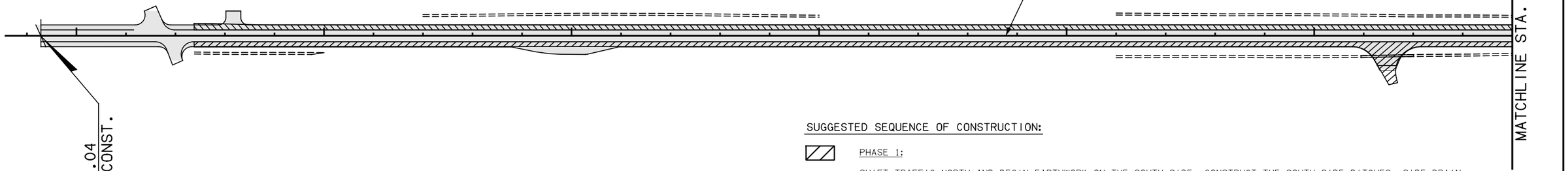
PLS	NSS	
DRAWN	CRT	
CHECKED	NSS	
APPROVED	NSS	
CREW	BENNETT	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5126 (I) PROJECT NO. 29530(04) SHEET NO. S026

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



EDGE DROP OFF ADVISORY NOTE :

SPECIAL ATTENTION SHOULD BE DIRECTED TO ROADWAY STANDARD DRAWING PDT-1-(LATEST REVISION) WHEN EDGE DROP OFF IS WITHIN THE RECOMMENDED CLEAR ZONE DISTANCE FOR CONSTRUCTION WORK ZONES.

SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE 1:

SHIFT TRAFFIC NORTH AND BEGIN EARTHWORK ON THE SOUTH SIDE. CONSTRUCT THE SOUTH SIDE DITCHES, SIDE DRAIN STRUCTURES, RCB EXTENSIONS, DRIVEWAYS, AND SOUTHBOUND CROSSROAD STRUCTURES. USE PORTABLE LONGITUDINAL BARRIER AS NECESSARY WHEN EXTENDING STRUCTURES. CONSTRUCT THE SUBGRADE AND ASPHALT WIDENING TO MATCH THE EXISTING GRADE AT EDGE OF EXISTING SHOULDER (STA 69+28.04 TO STA 120+00.00 & 184+31.07 TO 342+28.56). CONSTRUCTION SHALL BE RESTRICTED TO 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 1 LANE TRAFFIC CONTROL WITH FLAGGERS DURING WORKING HOURS TO MAINTAIN 11' MINIMUM (12' PREFERRED) WIDTH LANE THROUGHOUT. OUTSIDE OF WORKING HOURS: PROVIDE 2-WAY, 2-LANE TRAFFIC CONTROL WITH 11' MINIMUM WIDTH LANES AND DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

PHASE 2:

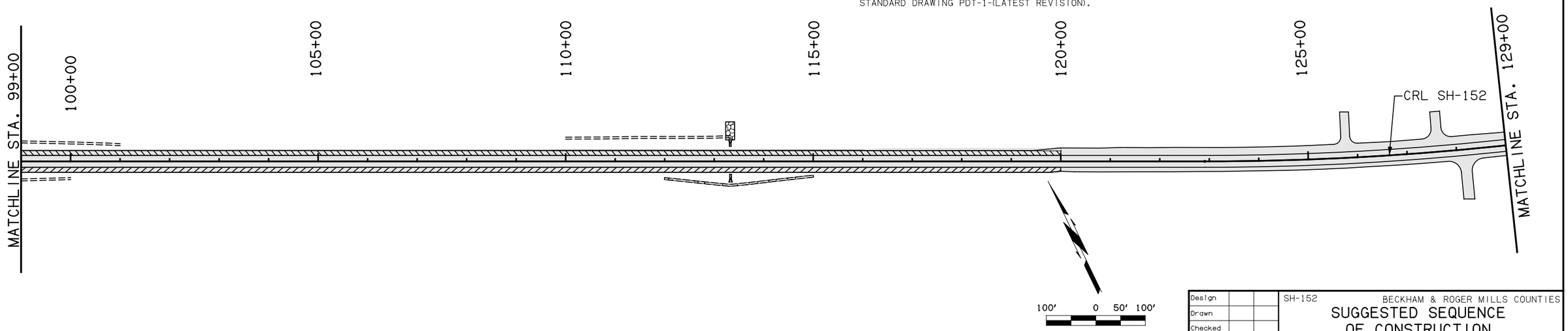
SHIFT TRAFFIC SOUTH AND BEGIN EARTHWORK ON THE NORTH SIDE. CONSTRUCT THE NORTH SIDE DITCHES, SIDE DRAIN STRUCTURES, RCB EXTENSIONS, DRIVEWAYS, AND NORTHBOUND CROSSROADS. USE PORTABLE LONGITUDINAL BARRIER TO PROTECT TRAFFIC WHEN EXTENDING STRUCTURES. CONSTRUCT THE SUBGRADE AND ASPHALT WIDENING TO MATCH THE EXISTING GRADE 12' LEFT OF ℄ OR CRL (STA 69+28.04 TO STA 120+00.00 & 184+31.07 TO 342+28.56). CONSTRUCTION SHALL BE RESTRICTED TO 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 2 LANE TRAFFIC CONTROL AND MAINTAIN 11' MINIMUM (12' PREFERRED) WIDTH LANES THROUGHOUT WITH DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

PHASE 3:

MILL NOTCH FOR LEVELING COURSE AT PROFILE TRANSITIONS. CONSTRUCT ALL S3 LIFTS PRIOR TO CONSTRUCTING ANY OF THE S4 LIFTS. PERFORM CONSTRUCTION IN 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 1-LANE TRAFFIC CONTROL WITH FLAGGERS OR SET UP A PILOT CAR SYSTEM DURING WORK HOURS. MAINTAIN 11' MINIMUM (12' PREFERRED) WIDTH LANE THROUGHOUT. OUTSIDE OF WORKING HOURS: PROVIDE 2-WAY, 2-LANE TRAFFIC CONTROL WITH 12' PREFERRED (11' MINIMUM) WIDTH LANES AND DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).



Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

SUGGESTED SEQUENCE OF CONSTRUCTION

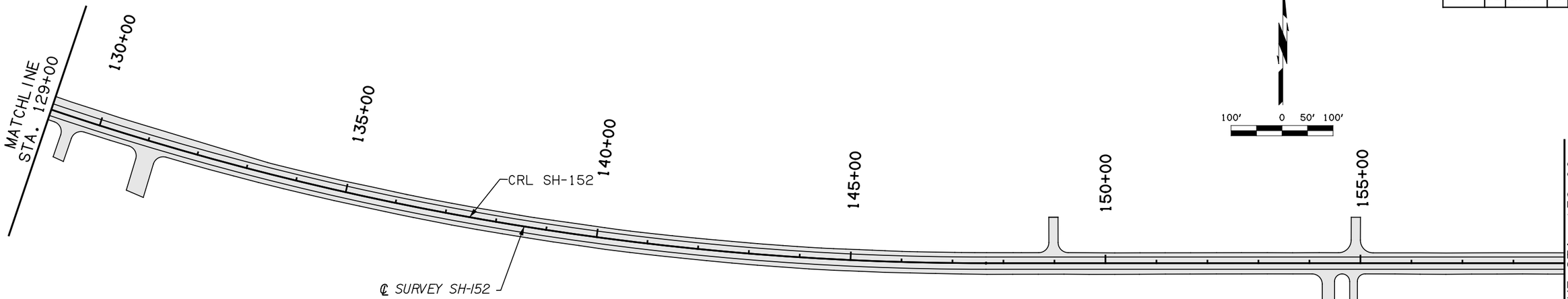
(SHEET 1 OF 5)

State Job No. 29530(04) Sheet No. T001

7/27/2022 12:09:50 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\CONSTSE001_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



EDGE DROP OFF ADVISORY NOTE :

SPECIAL ATTENTION SHOULD BE DIRECTED TO ROADWAY STANDARD DRAWING PDT-1-(LATEST REVISION) WHEN EDGE DROP OFF IS WITHIN THE RECOMMENDED CLEAR ZONE DISTANCE FOR CONSTRUCTION WORK ZONES.

SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE 1:

SHIFT TRAFFIC NORTH AND BEGIN EARTHWORK ON THE SOUTH SIDE. CONSTRUCT THE SOUTH SIDE DITCHES, SIDE DRAIN STRUCTURES, RCB EXTENSIONS, DRIVEWAYS, AND SOUTHBOUND CROSSROAD STRUCTURES. USE PORTABLE LONGITUDINAL BARRIER AS NECESSARY WHEN EXTENDING STRUCTURES. CONSTRUCT THE SUBGRADE AND ASPHALT WIDENING TO MATCH THE EXISTING GRADE AT EDGE OF EXISTING SHOULDER (STA 69+28.04 TO STA 120+00.00 & 184+31.07 TO 342+28.56). CONSTRUCTION SHALL BE RESTRICTED TO 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 1 LANE TRAFFIC CONTROL WITH FLAGGERS DURING WORKING HOURS TO MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANE THROUGHOUT. OUTSIDE OF WORKING HOURS: PROVIDE 2-WAY, 2-LANE TRAFFIC CONTROL WITH 11′ MINIMUM WIDTH LANES AND DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

PHASE 2:

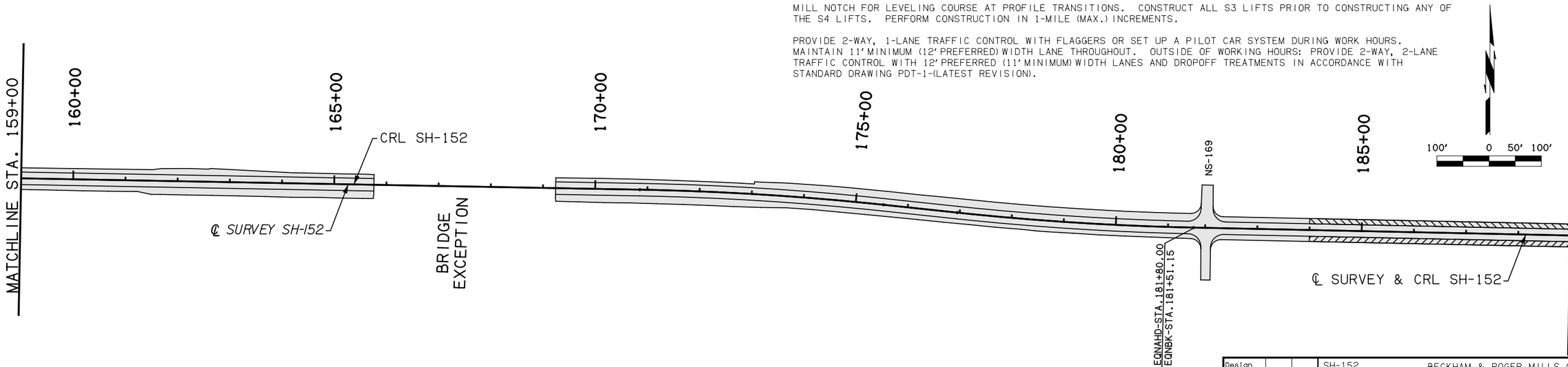
SHIFT TRAFFIC SOUTH AND BEGIN EARTHWORK ON THE NORTH SIDE. CONSTRUCT THE NORTH SIDE DITCHES, SIDE DRAIN STRUCTURES, RCB EXTENSIONS, DRIVEWAYS, AND NORTHBOUND CROSSROADS. USE PORTABLE LONGITUDINAL BARRIER TO PROTECT TRAFFIC WHEN EXTENDING STRUCTURES. CONSTRUCT THE SUBGRADE AND ASPHALT WIDENING TO MATCH THE EXISTING GRADE 12′ LEFT OF ℄ OR CRL (STA 69+28.04 TO STA 120+00.00 & 184+31.07 TO 342+28.56). CONSTRUCTION SHALL BE RESTRICTED TO 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 2 LANE TRAFFIC CONTROL AND MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANES THROUGHOUT WITH DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

PHASE 3:

MILL NOTCH FOR LEVELING COURSE AT PROFILE TRANSITIONS. CONSTRUCT ALL S3 LIFTS PRIOR TO CONSTRUCTING ANY OF THE S4 LIFTS. PERFORM CONSTRUCTION IN 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 1-LANE TRAFFIC CONTROL WITH FLAGGERS OR SET UP A PILOT CAR SYSTEM DURING WORK HOURS. MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANE THROUGHOUT. OUTSIDE OF WORKING HOURS: PROVIDE 2-WAY, 2-LANE TRAFFIC CONTROL WITH 12′ PREFERRED (11′ MINIMUM) WIDTH LANES AND DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).



Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

SUGGESTED SEQUENCE OF CONSTRUCTION

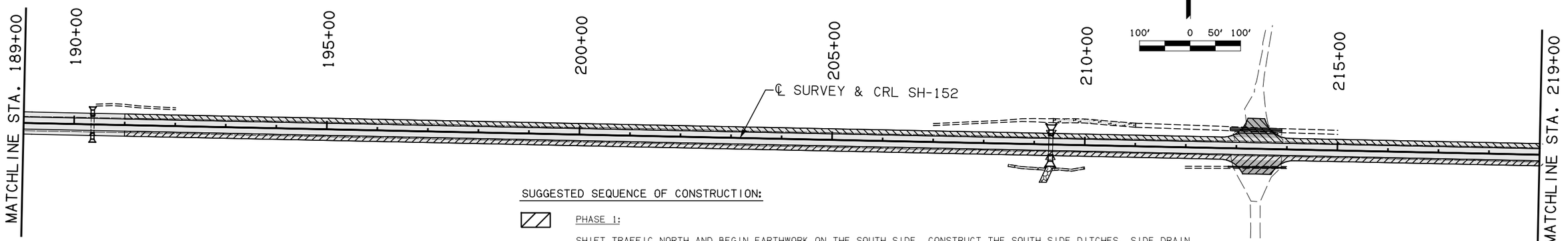
(SHEET 2 OF 5)

State Job No. 29530(04) Sheet No. T002

7/27/2022 12:09:50 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\CONSTSEQ02_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***



EDGE DROP OFF ADVISORY NOTE :

SPECIAL ATTENTION SHOULD BE DIRECTED TO ROADWAY STANDARD DRAWING PDT-1-(LATEST REVISION) WHEN EDGE DROP OFF IS WITHIN THE RECOMMENDED CLEAR ZONE DISTANCE FOR CONSTRUCTION WORK ZONES.

SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE 1:

SHIFT TRAFFIC NORTH AND BEGIN EARTHWORK ON THE SOUTH SIDE. CONSTRUCT THE SOUTH SIDE DITCHES, SIDE DRAIN STRUCTURES, RCB EXTENSIONS, DRIVEWAYS, AND SOUTHBOUND CROSSROAD STRUCTURES. USE PORTABLE LONGITUDINAL BARRIER AS NECESSARY WHEN EXTENDING STRUCTURES. CONSTRUCT THE SUBGRADE AND ASPHALT WIDENING TO MATCH THE EXISTING GRADE AT EDGE OF EXISTING SHOULDER (STA 69+28.04 TO STA 120+00.00 & 184+31.07 TO 342+28.56). CONSTRUCTION SHALL BE RESTRICTED TO 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 1 LANE TRAFFIC CONTROL WITH FLAGGERS DURING WORKING HOURS TO MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANE THROUGHOUT. OUTSIDE OF WORKING HOURS: PROVIDE 2-WAY, 2-LANE TRAFFIC CONTROL WITH 11′ MINIMUM WIDTH LANES AND DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

PHASE 2:

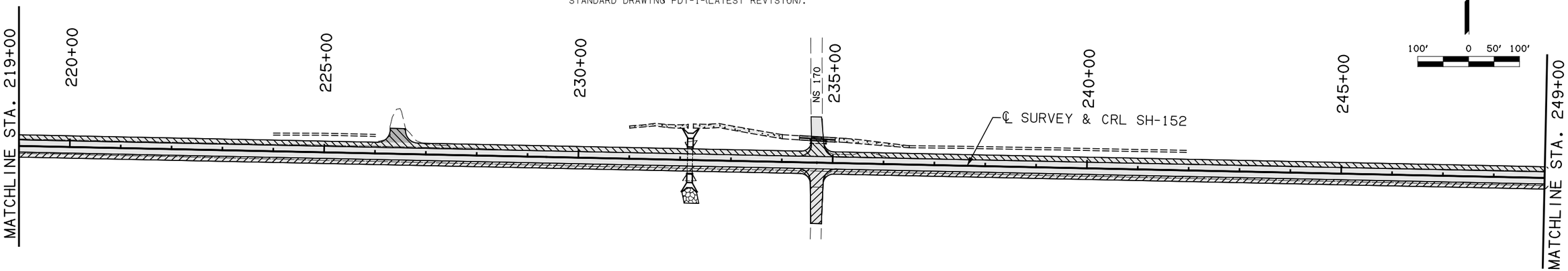
SHIFT TRAFFIC SOUTH AND BEGIN EARTHWORK ON THE NORTH SIDE. CONSTRUCT THE NORTH SIDE DITCHES, SIDE DRAIN STRUCTURES, RCB EXTENSIONS, DRIVEWAYS, AND NORTHBOUND CROSSROADS. USE PORTABLE LONGITUDINAL BARRIER TO PROTECT TRAFFIC WHEN EXTENDING STRUCTURES. CONSTRUCT THE SUBGRADE AND ASPHALT WIDENING TO MATCH THE EXISTING GRADE 12′ LEFT OF ℄ OR CRL (STA 69+28.04 TO STA 120+00.00 & 184+31.07 TO 342+28.56). CONSTRUCTION SHALL BE RESTRICTED TO 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 2 LANE TRAFFIC CONTROL AND MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANES THROUGHOUT WITH DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

PHASE 3:

MILL NOTCH FOR LEVELING COURSE AT PROFILE TRANSITIONS. CONSTRUCT ALL S3 LIFTS PRIOR TO CONSTRUCTING ANY OF THE S4 LIFTS. PERFORM CONSTRUCTION IN 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 1-LANE TRAFFIC CONTROL WITH FLAGGERS OR SET UP A PILOT CAR SYSTEM DURING WORK HOURS. MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANE THROUGHOUT. OUTSIDE OF WORKING HOURS: PROVIDE 2-WAY, 2-LANE TRAFFIC CONTROL WITH 12′ PREFERRED (11′ MINIMUM) WIDTH LANES AND DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).



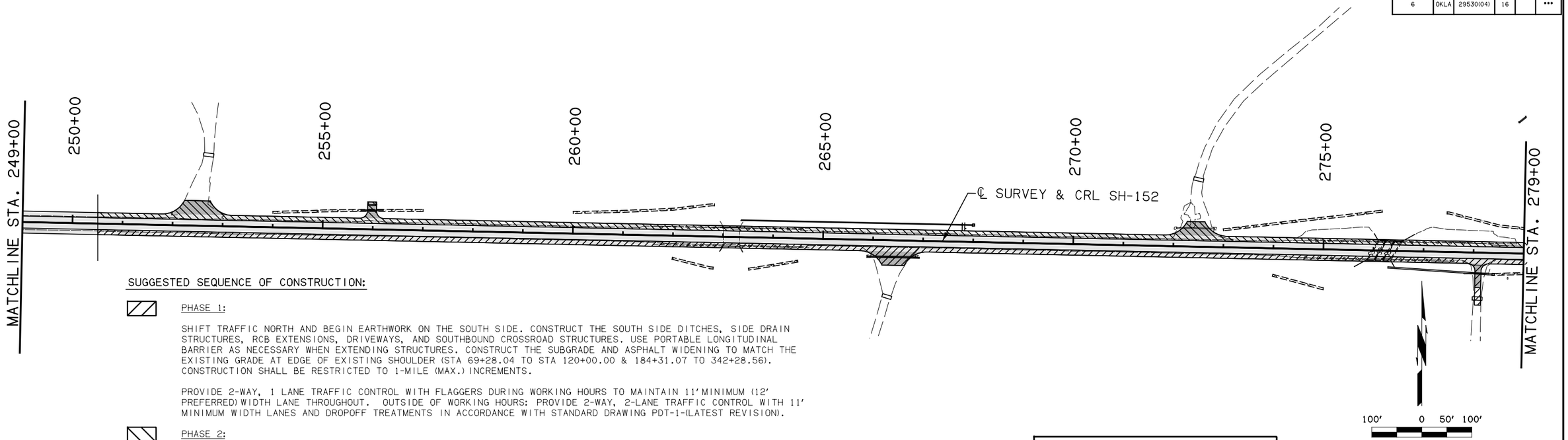
Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

SUGGESTED SEQUENCE OF CONSTRUCTION

(SHEET 3 OF 5)

State Job No. 29530(04) Sheet No. T003



SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE 1:

SHIFT TRAFFIC NORTH AND BEGIN EARTHWORK ON THE SOUTH SIDE. CONSTRUCT THE SOUTH SIDE DITCHES, SIDE DRAIN STRUCTURES, RCB EXTENSIONS, DRIVEWAYS, AND SOUTHBOUND CROSSROAD STRUCTURES. USE PORTABLE LONGITUDINAL BARRIER AS NECESSARY WHEN EXTENDING STRUCTURES. CONSTRUCT THE SUBGRADE AND ASPHALT WIDENING TO MATCH THE EXISTING GRADE AT EDGE OF EXISTING SHOULDER (STA 69+28.04 TO STA 120+00.00 & 184+31.07 TO 342+28.56). CONSTRUCTION SHALL BE RESTRICTED TO 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 1 LANE TRAFFIC CONTROL WITH FLAGGERS DURING WORKING HOURS TO MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANE THROUGHOUT. OUTSIDE OF WORKING HOURS: PROVIDE 2-WAY, 2-LANE TRAFFIC CONTROL WITH 11′ MINIMUM WIDTH LANES AND DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

PHASE 2:

SHIFT TRAFFIC SOUTH AND BEGIN EARTHWORK ON THE NORTH SIDE. CONSTRUCT THE NORTH SIDE DITCHES, SIDE DRAIN STRUCTURES, RCB EXTENSIONS, DRIVEWAYS, AND NORTHBOUND CROSSROADS. USE PORTABLE LONGITUDINAL BARRIER TO PROTECT TRAFFIC WHEN EXTENDING STRUCTURES. CONSTRUCT THE SUBGRADE AND ASPHALT WIDENING TO MATCH THE EXISTING GRADE 12′ LEFT OF ℄ OR CRL (STA 69+28.04 TO STA 120+00.00 & 184+31.07 TO 342+28.56). CONSTRUCTION SHALL BE RESTRICTED TO 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 2 LANE TRAFFIC CONTROL AND MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANES THROUGHOUT WITH DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

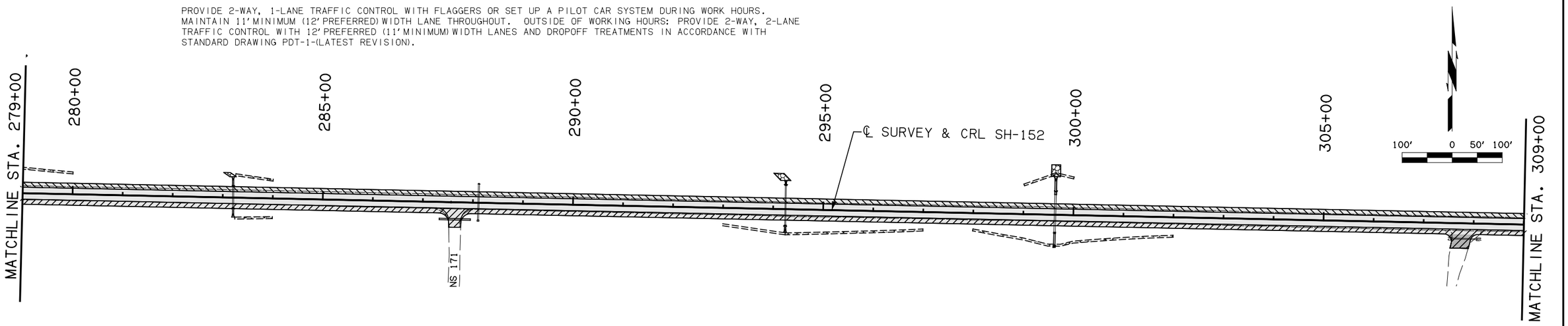
PHASE 3:

MILL NOTCH FOR LEVELING COURSE AT PROFILE TRANSITIONS. CONSTRUCT ALL S3 LIFTS PRIOR TO CONSTRUCTING ANY OF THE S4 LIFTS. PERFORM CONSTRUCTION IN 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 1-LANE TRAFFIC CONTROL WITH FLAGGERS OR SET UP A PILOT CAR SYSTEM DURING WORK HOURS. MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANE THROUGHOUT. OUTSIDE OF WORKING HOURS: PROVIDE 2-WAY, 2-LANE TRAFFIC CONTROL WITH 12′ PREFERRED (11′ MINIMUM) WIDTH LANES AND DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

EDGE DROP OFF ADVISORY NOTE :

SPECIAL ATTENTION SHOULD BE DIRECTED TO ROADWAY STANDARD DRAWING PDT-1-(LATEST REVISION) WHEN EDGE DROP OFF IS WITHIN THE RECOMMENDED CLEAR ZONE DISTANCE FOR CONSTRUCTION WORK ZONES.



Design		
Drawn		
Checked		
Approved		
Squad	olsson	

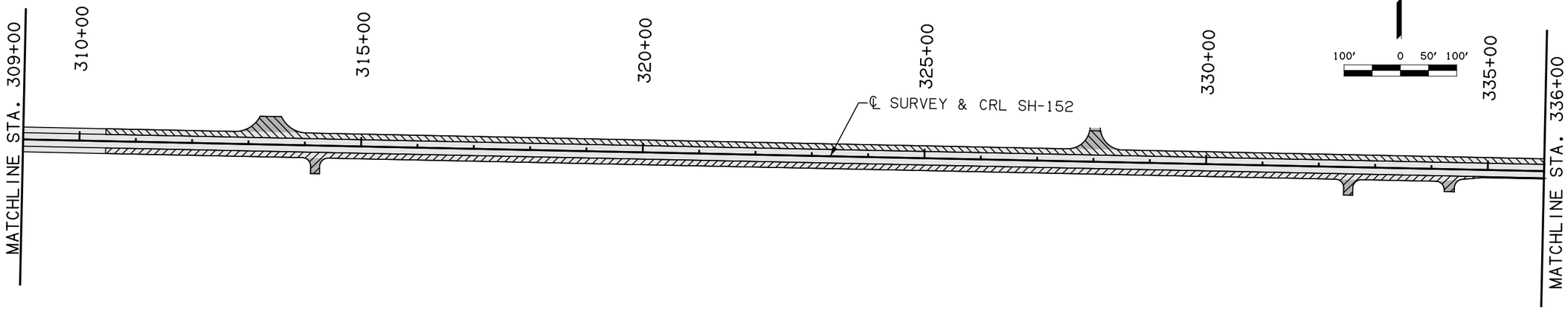
SH-152 BECKHAM & ROGER MILLS COUNTIES

SUGGESTED SEQUENCE OF CONSTRUCTION

(SHEET 4 OF 5)

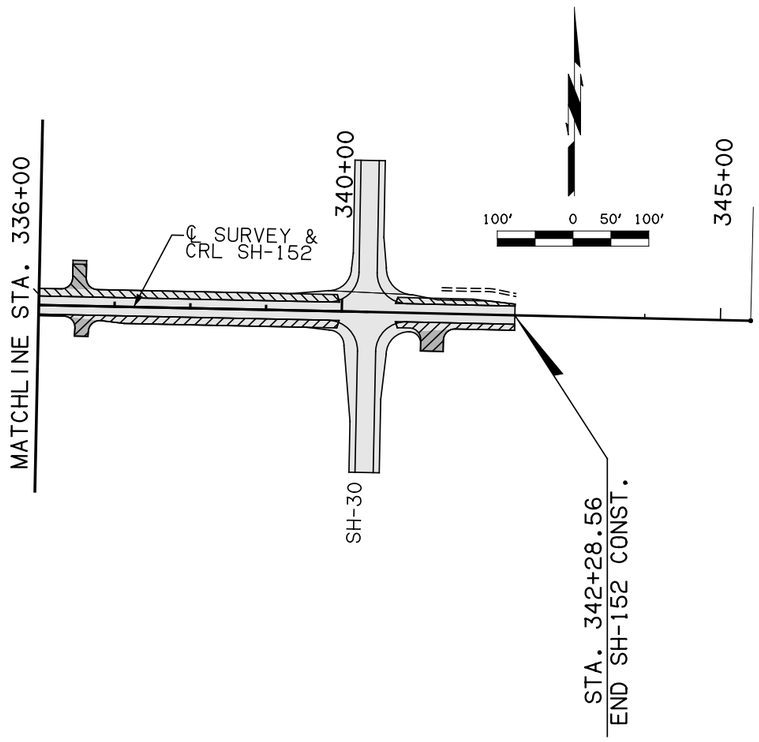
State Job No. 29530(04) Sheet No. T004

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



EDGE DROP OFF ADVISORY NOTE :

SPECIAL ATTENTION SHOULD BE DIRECTED TO ROADWAY STANDARD DRAWING PDT-1-(LATEST REVISION) WHEN EDGE DROP OFF IS WITHIN THE RECOMMENDED CLEAR ZONE DISTANCE FOR CONSTRUCTION WORK ZONES.



SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE 1:

SHIFT TRAFFIC NORTH AND BEGIN EARTHWORK ON THE SOUTH SIDE. CONSTRUCT THE SOUTH SIDE DITCHES, SIDE DRAIN STRUCTURES, RCB EXTENSIONS, DRIVEWAYS, AND SOUTHBOUND CROSSROAD STRUCTURES. USE PORTABLE LONGITUDINAL BARRIER AS NECESSARY WHEN EXTENDING STRUCTURES. CONSTRUCT THE SUBGRADE AND ASPHALT WIDENING TO MATCH THE EXISTING GRADE AT EDGE OF EXISTING SHOULDER (STA 69+28.04 TO STA 120+00.00 & 184+31.07 TO 342+28.56). CONSTRUCTION SHALL BE RESTRICTED TO 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 1 LANE TRAFFIC CONTROL WITH FLAGGERS DURING WORKING HOURS TO MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANE THROUGHOUT. OUTSIDE OF WORKING HOURS: PROVIDE 2-WAY, 2-LANE TRAFFIC CONTROL WITH 11′ MINIMUM WIDTH LANES AND DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

PHASE 2:

SHIFT TRAFFIC SOUTH AND BEGIN EARTHWORK ON THE NORTH SIDE. CONSTRUCT THE NORTH SIDE DITCHES, SIDE DRAIN STRUCTURES, RCB EXTENSIONS, DRIVEWAYS, AND NORTHBOUND CROSSROADS. USE PORTABLE LONGITUDINAL BARRIER TO PROTECT TRAFFIC WHEN EXTENDING STRUCTURES. CONSTRUCT THE SUBGRADE AND ASPHALT WIDENING TO MATCH THE EXISTING GRADE 12′ LEFT OF ℄ OR CRL (STA 69+28.04 TO STA 120+00.00 & 184+31.07 TO 342+28.56). CONSTRUCTION SHALL BE RESTRICTED TO 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 2 LANE TRAFFIC CONTROL AND MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANES THROUGHOUT WITH DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

PHASE 3:

MILL NOTCH FOR LEVELING COURSE AT PROFILE TRANSITIONS. CONSTRUCT ALL S3 LIFTS PRIOR TO CONSTRUCTING ANY OF THE S4 LIFTS. PERFORM CONSTRUCTION IN 1-MILE (MAX.) INCREMENTS.

PROVIDE 2-WAY, 1-LANE TRAFFIC CONTROL WITH FLAGGERS OR SET UP A PILOT CAR SYSTEM DURING WORK HOURS. MAINTAIN 11′ MINIMUM (12′ PREFERRED) WIDTH LANE THROUGHOUT. OUTSIDE OF WORKING HOURS: PROVIDE 2-WAY, 2-LANE TRAFFIC CONTROL WITH 12′ PREFERRED (11′ MINIMUM) WIDTH LANES AND DROPOFF TREATMENTS IN ACCORDANCE WITH STANDARD DRAWING PDT-1-(LATEST REVISION).

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

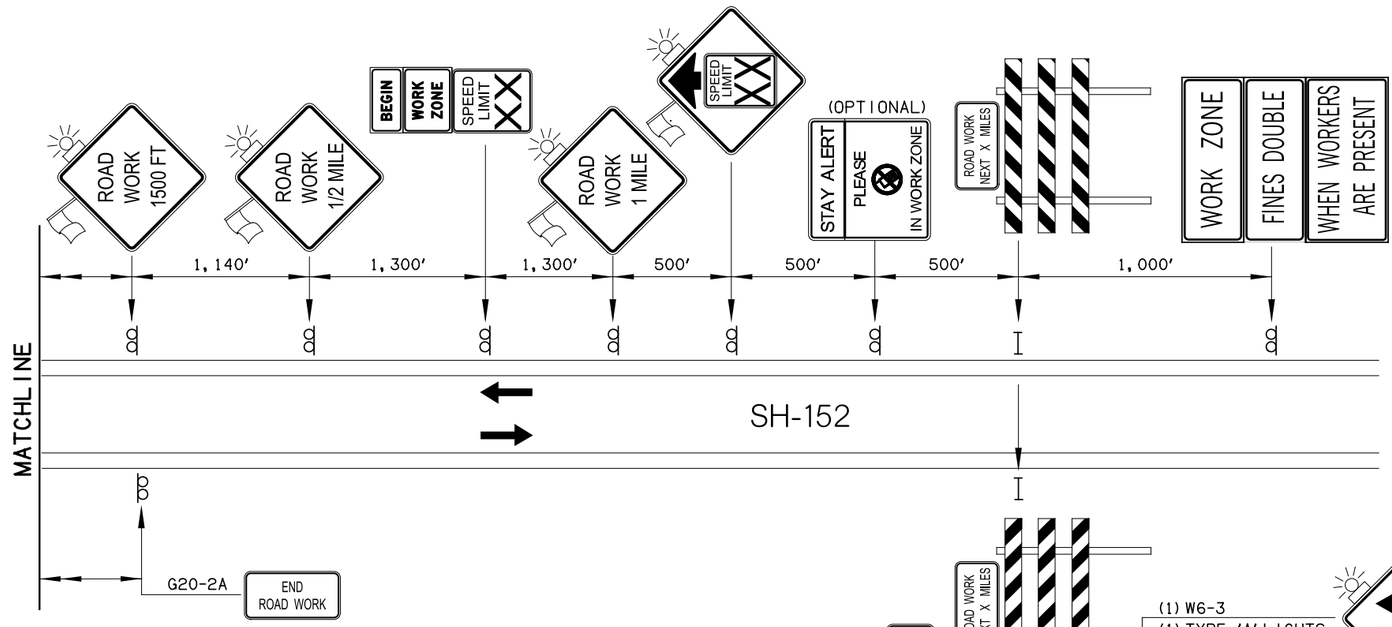
SUGGESTED SEQUENCE OF CONSTRUCTION

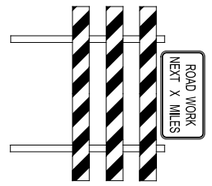
(SHEET 5 OF 5)

State Job No. 29530(04) Sheet No. T005

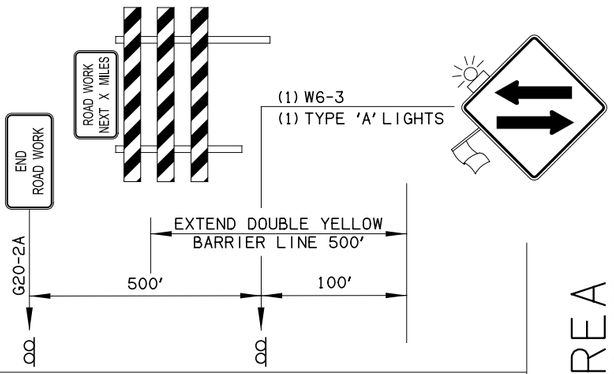
7/27/2022 12:09:54 PM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\CONSTSE005_29530.dgn

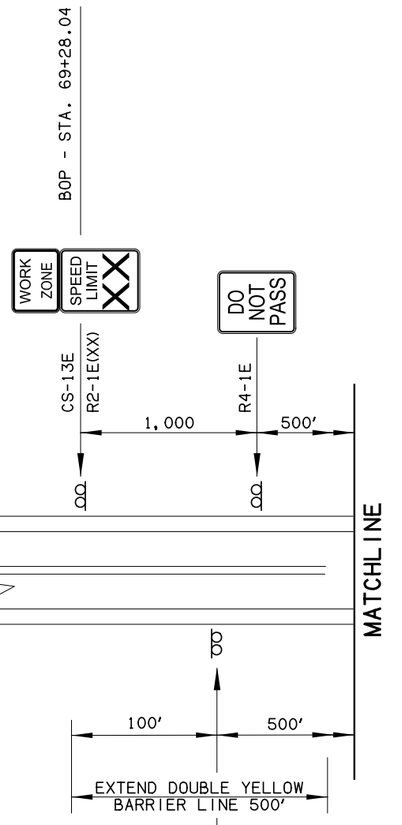
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



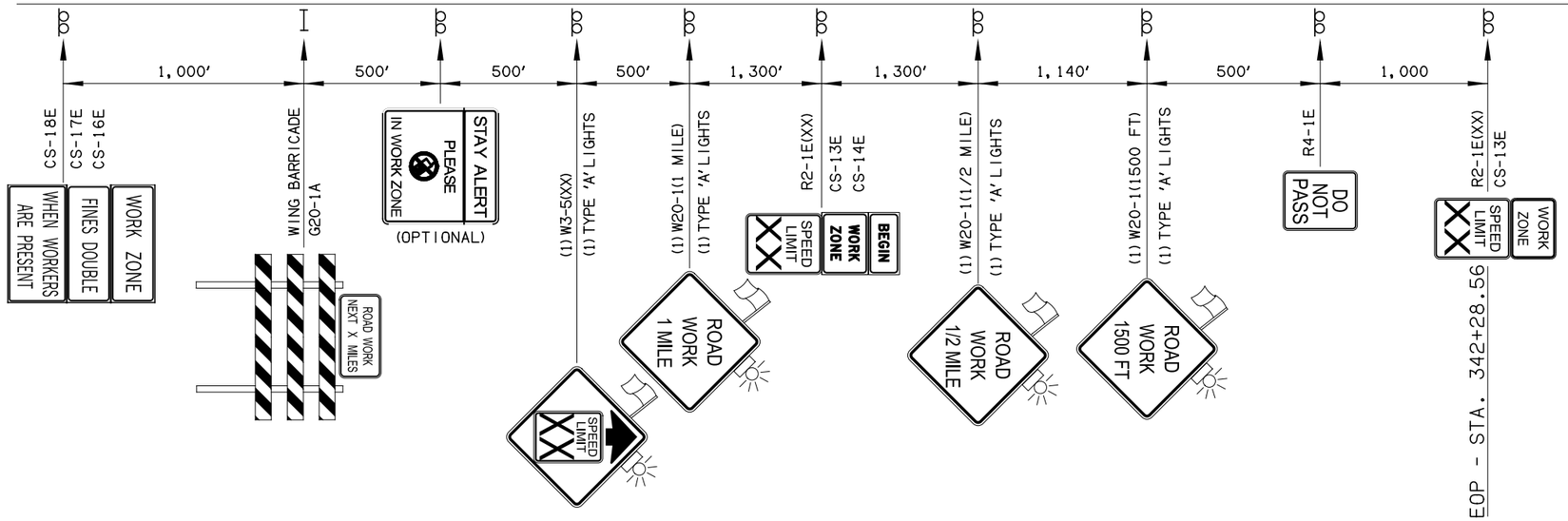


ADVANCE SIGNING FOR TWO-LANE TWO-WAY PHASED CONSTRUCTION





WORK AREA
SEE TRAFFIC CONTROL DETAIL SHEETS FOR PHASED CONTROL



DRAWING NOT TO SCALE

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

SUGGESTED CONSTRUCTION TRAFFIC CONTROL

(SHEET 1 OF 3)

State Job No. 29530(04) Sheet No. T006

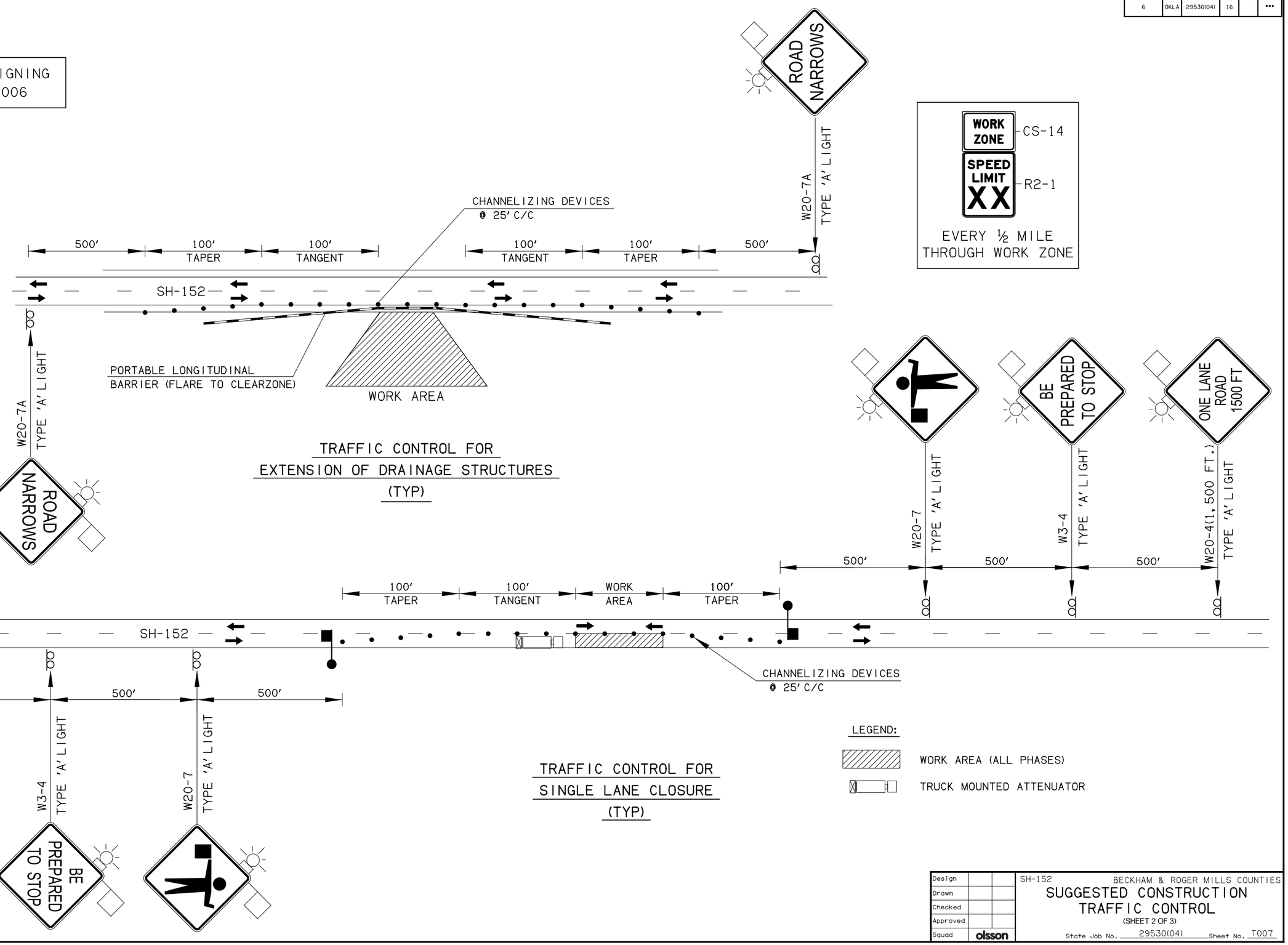
7/27/2022

12:12:33 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CTRAFCONDL29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

FOR ADVANCE SIGNING
SEE SHEET T006

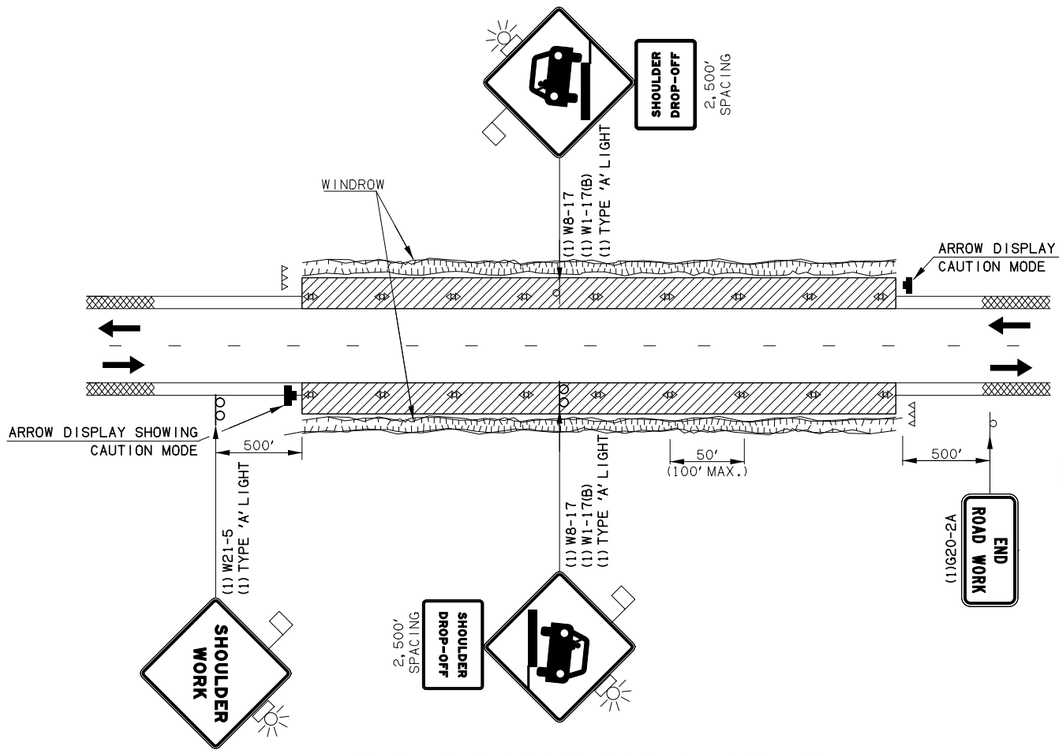


Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES
SUGGESTED CONSTRUCTION TRAFFIC CONTROL
(SHEET 2 OF 3)
State Job No. 29530(04) Sheet No. T007

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

KEY:
- SIGN
- WORK AREA
- VERTICAL PANEL
- TYPE III BARRICADE
- ARROW DISPLAY



TYPICAL SIGNING FOR PHASE ONE AND TWO

PHASE ONE - EXCAVATION FOR WIDENING

(A) FLAGGING OPERATION MAY BE REQUIRED.

(B) CONTRACTOR MAY BE LIMITED ON THE EXTENT OF OPEN TRENCH ALLOWED IN THIS OPERATION.

PHASE TWO - ASPHALT WIDENING

(A) FLAGGING OPERATION MAY BE REQUIRED.

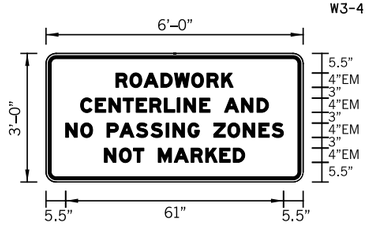
(B) SIGNING WILL REMAIN THE SAME AS SHOWN IN PHASE ONE.

NOTES:
PAVEMENT MARKINGS SEPARATING TWO WAY TRAFFIC SHALL CONSIST OF A SOLID DOUBLE YELLOW BARRIER LINE. IF A TWO WAY TRAFFIC CONDITION WILL BE IN EFFECT FOR TWO WEEKS OR LESS, ABBREVIATED PAVEMENT MARKINGS MAY BE USED. THESE SHALL CONSIST OF A 4' STRIPE WITH A 41' GAP (PAINT OR TAPE) OR A 6' STRIPE (CONSISTING OF 4 (FOUR) FLEX-TABS ON A 2' C/C) WITH A 39' GAP. SIGNING SHOWN IS FOR ONE APPROACH ONLY.

FOR WIDENING AND 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 REVIEW, AND APPROVAL BEFORE OPERATIONS BEGIN.

EXCAVATION FOR PAVEMENT WIDENING, EXTENSION OF ROADWAY STRUCTURES, AND ASPHALT LAYING OPERATIONS THAT PRESENT AN EDGE DROP-OFF OF GREATER THAN 2 (TWO) INCHES SHALL BE LIMITED TO ONE SIDE AT A TIME. ONLY THAT AMOUNT OF OPEN TRENCH WILL BE ALLOWED THAT CAN BE SURFACED IN 2 (TWO) DAYS TIME, WITHOUT APPROVAL OF THE ENGINEER. LIGHTS, SIGNS, AND BARRICADES SHALL BE MOVED AS WORK PROGRESSES.

OPTIONAL SIGNS



BORDER
R=2.25"
TH=0.88"
IN=0.59"

Panel Style: WZ RECT..ssi
M.U.T.C.D.: 2009 Edition

Dimensions are in inches.tenths

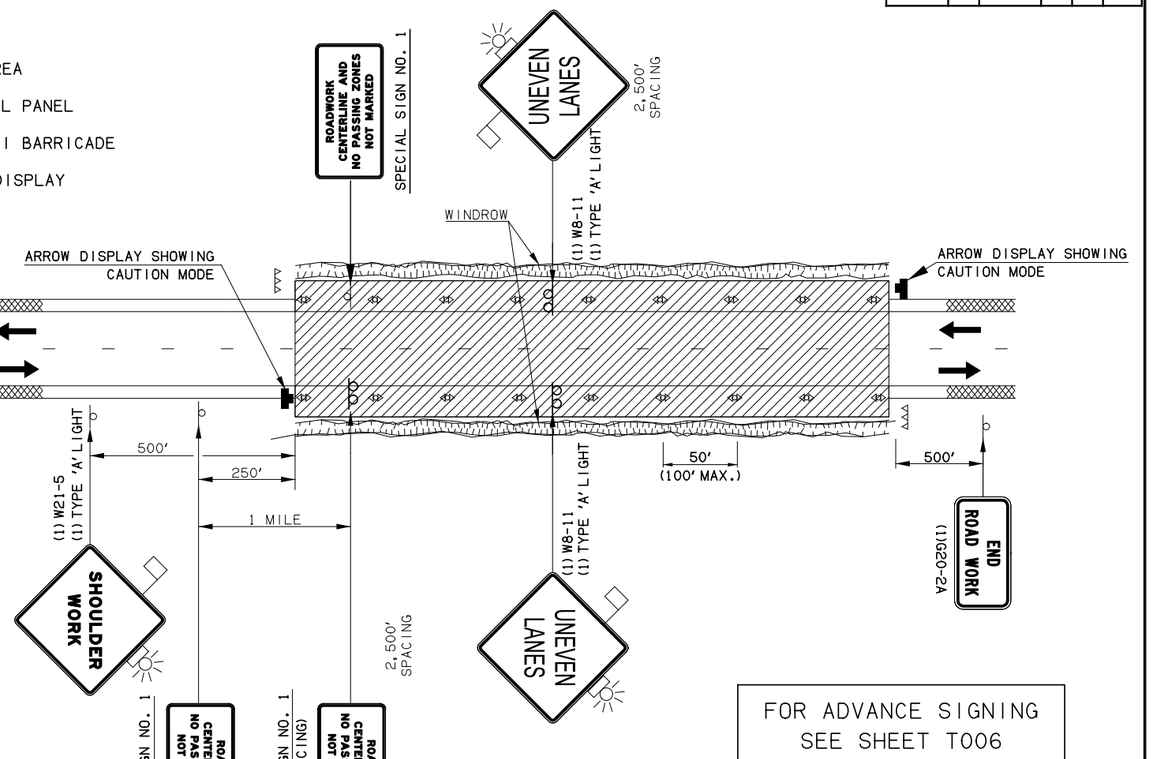
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)																					LENGTH	SERIES/SIZE
R	O	A	D	W	O	R	K															EM 2000
19.6	23.5	27.4	32.2	36	40.8	45.1	49.2														32.9	4
C	E	N	T	E	R	L	I	N	E		A	N	D									EM 2000
9.7	13.8	17.6	21.6	25.2	29	33.1	36.7	38.6	43	46	50	54.7	59.1								52.6	4
N	O		P	A	S	S	I	N	G		Z	O	N	E	S							EM 2000
5.5	9.7	13.1	17.1	20.6	25.3	29.4	33.6	35.5	39.7	43	47	50.9	55.2	59.6	63.3						61	4
N	O	T		M	A	R	K	E	D													EM 2000
16.3	20.5	24.5	27.4	31.4	35.9	40.6	44.7	48.6	52.4												39.3	4

SPECIAL SIGN NO. 1

SIGN NUMBER	SPECIAL SIGN NO. 1
WIDTH x HGHT.	6'-0" x 3'-0"
BORDER WIDTH	0.88"
CORNER RADIUS	2.25"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Orange
LEGEND/BORDER	TYPE: Non-reflective
	COLOR: Black /Black

SYMBOL	ROT	X	Y	WID	HT



FOR ADVANCE SIGNING SEE SHEET T006

TYPICAL SIGNING FOR PHASE THREE

PHASE THREE - ASPHALT OVERLAY

(A) REMOVE "SHOULDER DROP-OFF" SIGNS AND REPLACE WITH "UNEVEN LANES" SIGNS.

(B) FLAGGERS WITH TWO-WAY RADIO COMMUNICATION, BATON TRANSFER, OR PILOT CAR SHALL BE REQUIRED IN THE HANDLING OF TRAFFIC.

(C) TEMPORARY PAVEMENT MARKING SHALL BE INSTALLED PRIOR TO END OF WORK EACH DAY.

(D) DRUMS MAY BE SUBSTITUTED FOR VERTICAL PANELS AS APPROVED BY THE ENGINEER.

PHASE FOUR - SHOULDER UP OPERATION

(A) REMOVE VERTICAL PANEL SIGNS OR DRUMS AS WORK PROGRESSES.

TYPICAL APPLICATION SHOULDER WIDENING AND OVERLAY

EDGE DROP OFF ADVISORY NOTE :

SPECIAL ATTENTION SHOULD BE DIRECTED TO ROADWAY STANDARD DRAWING PDT-1-(LATEST REVISION) WHEN EDGE DROP OFF IS WITHIN THE RECOMMENDED CLEAR ZONE DISTANCE FOR CONSTRUCTION WORK ZONES.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

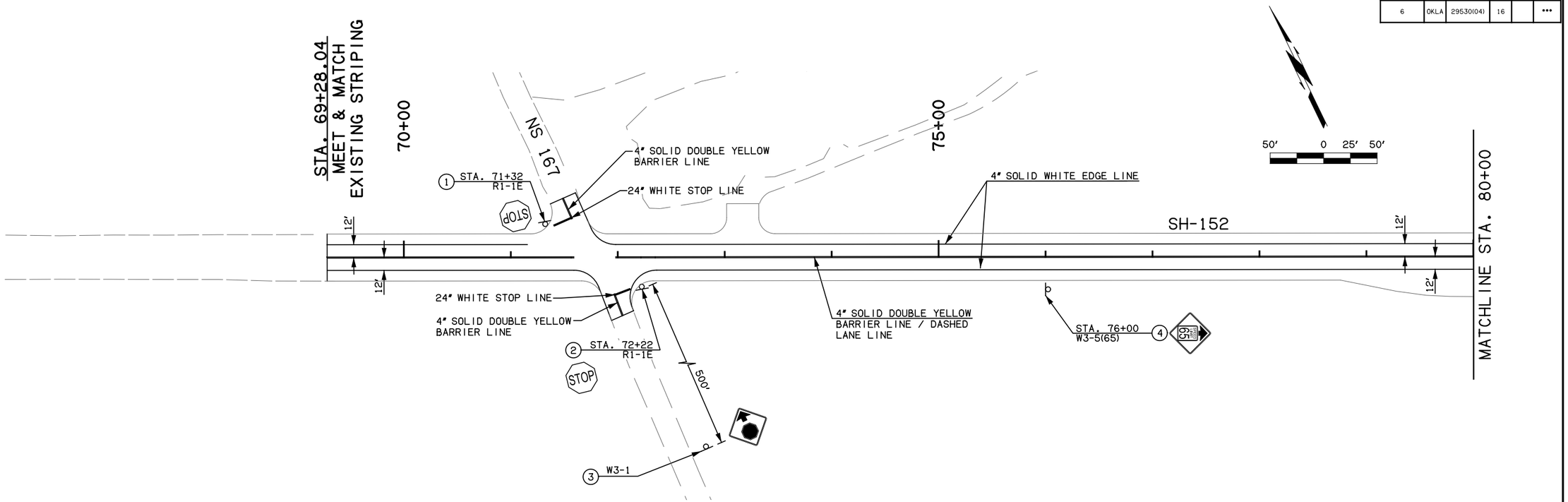
SH-152 BECKHAM & ROGER MILLS COUNTIES

SUGGESTED CONSTRUCTION TRAFFIC CONTROL

(SHEET 3 OF 3)

State Job No. 29530(04) Sheet No. T008

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



NOTE: PASSING ZONES WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO STRIPING OPERATIONS.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

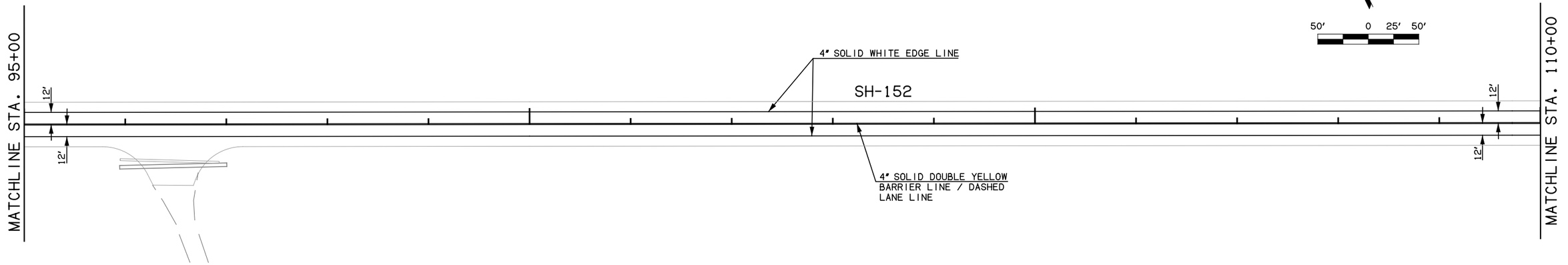
SH-152 BECKHAM & ROGER MILLS COUNTIES

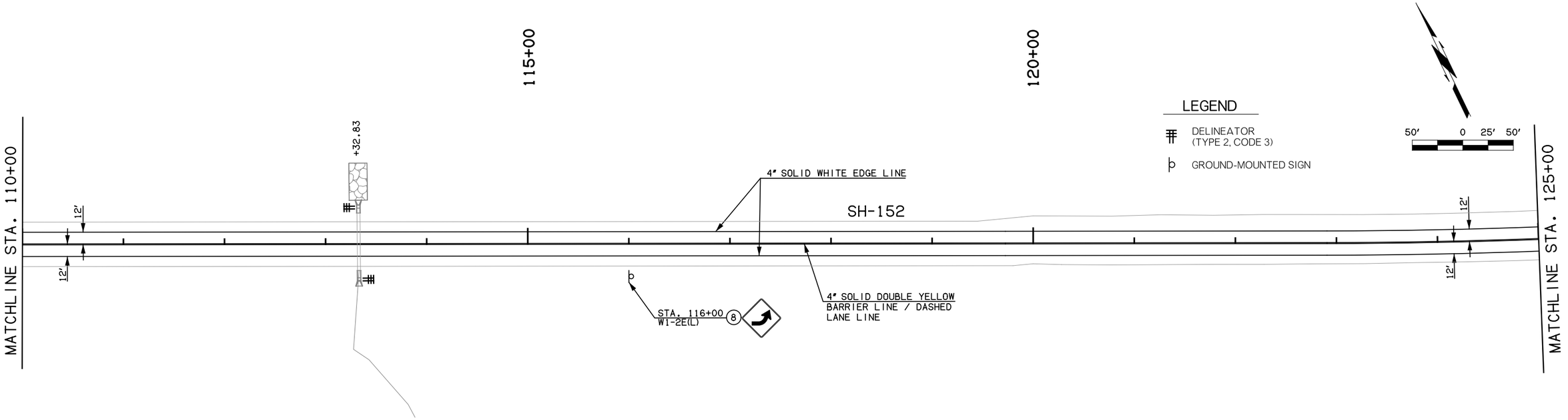
SIGNING & STRIPING

(SHEET 1 OF 12)

State Job No. 29530(04) Sheet No. T009

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		***





NOTE: PASSING ZONES WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO STRIPING OPERATIONS.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

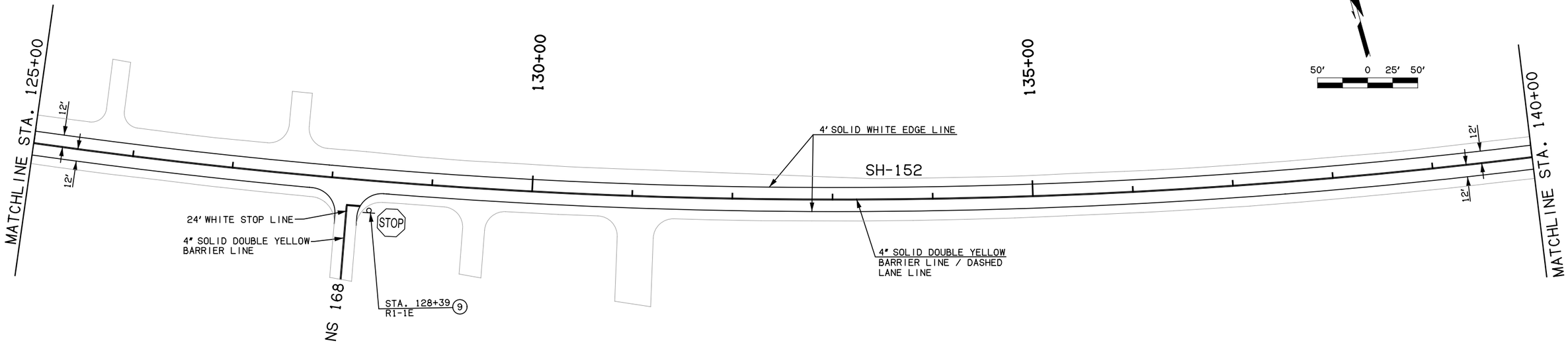
SIGNING & STRIPING

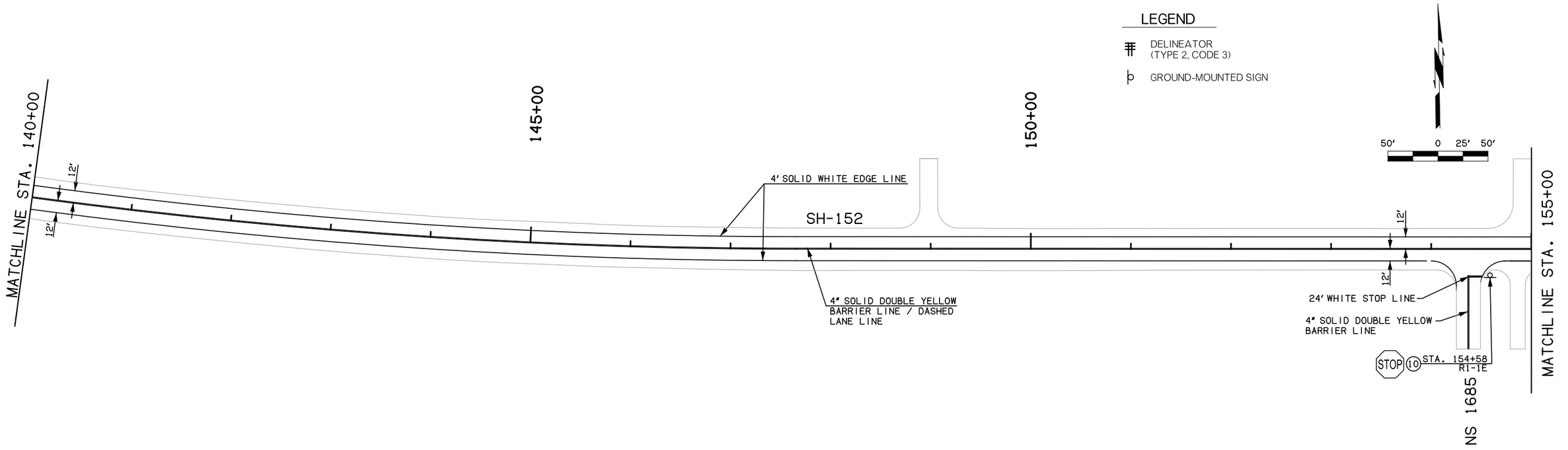
(SHEET 2 OF 12)

State Job No. 29530(04) Sheet No. T010

7/27/2022 12:14:56 PM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\SIGNSTRIP02_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••





NOTE: PASSING ZONES WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO STRIPING OPERATIONS.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

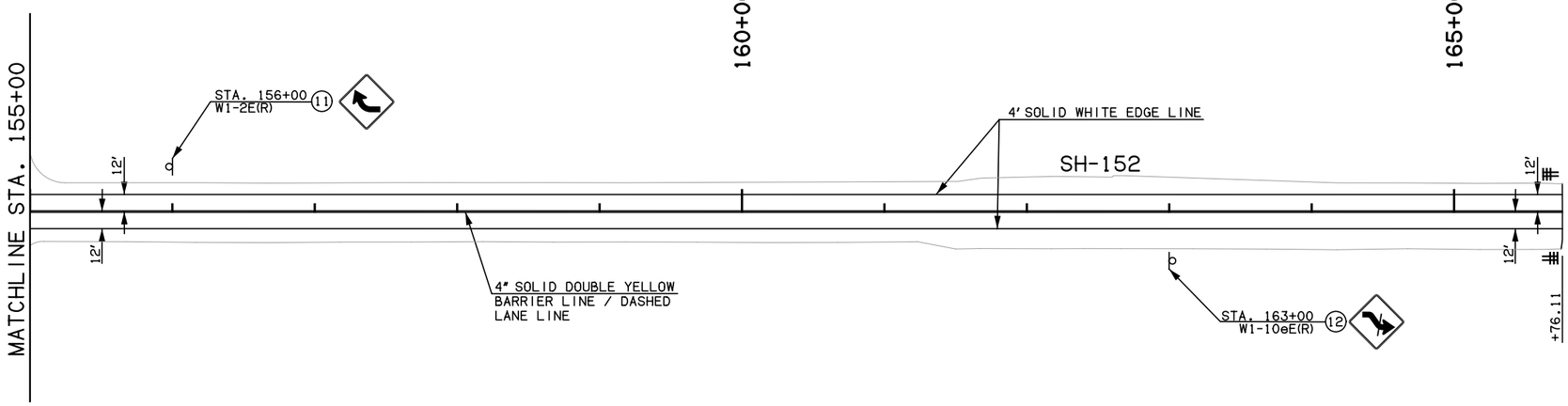
SH-152 BECKHAM & ROGER MILLS COUNTIES

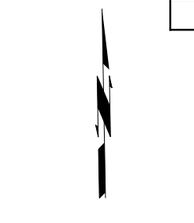
SIGNING & STRIPING

(SHEET 3 OF 12)

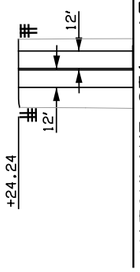
State Job No. 29530(04) Sheet No. T011

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



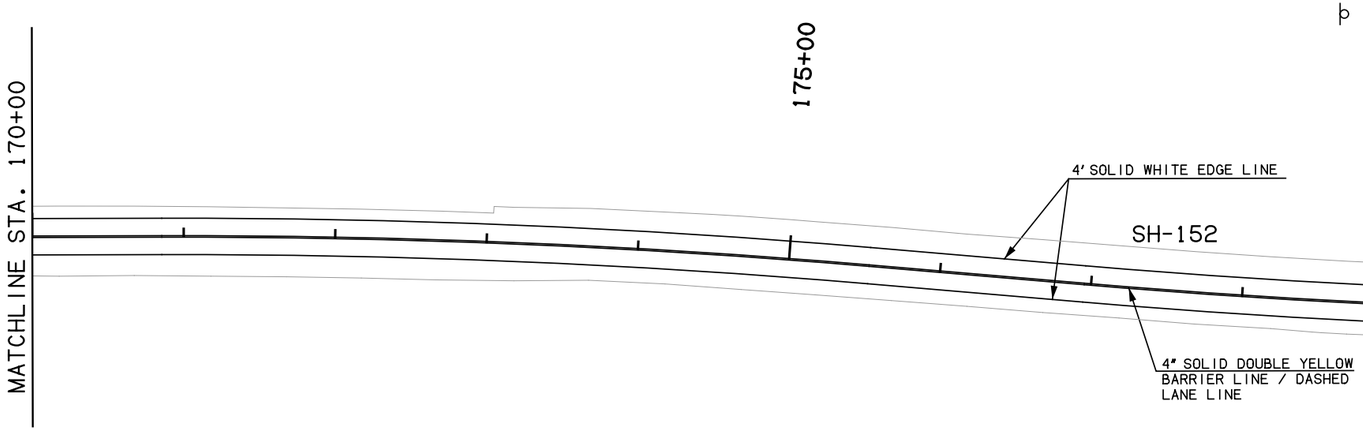


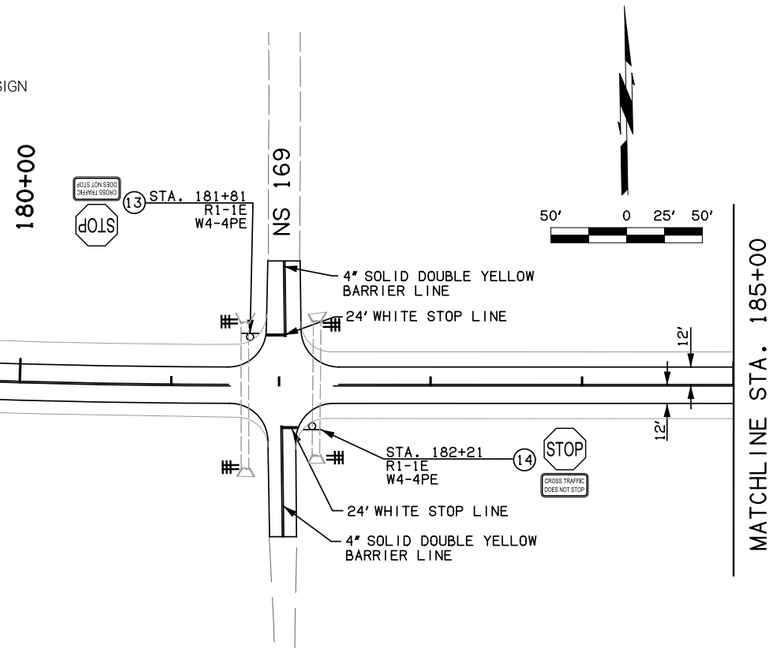
BRIDGE EXCEPTION



LEGEND

- DELINEATOR (TYPE 2, CODE 3)
- GROUND-MOUNTED SIGN





NOTE: PASSING ZONES WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO STRIPING OPERATIONS.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

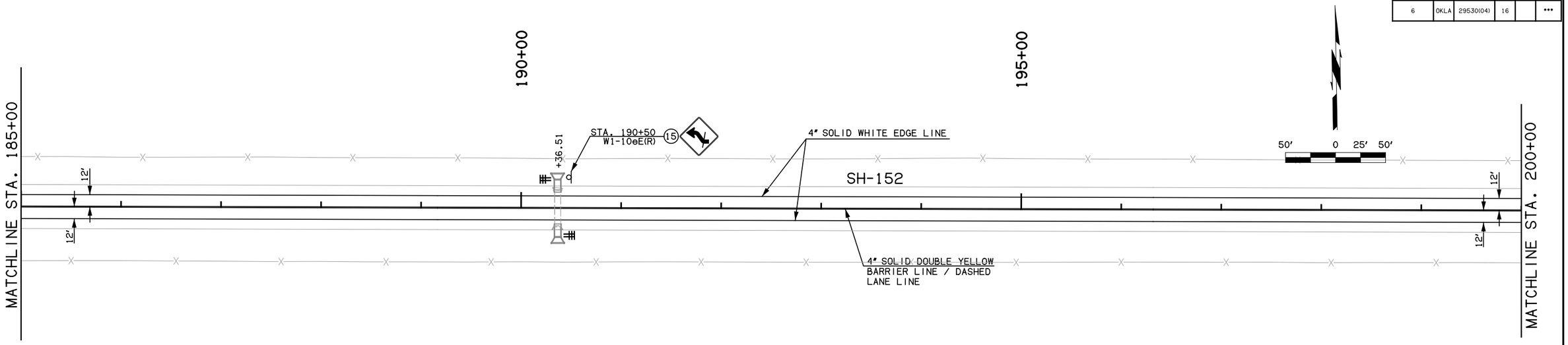
SH-152 BECKHAM & ROGER MILLS COUNTIES

SIGNING & STRIPING

(SHEET 4 OF 12)

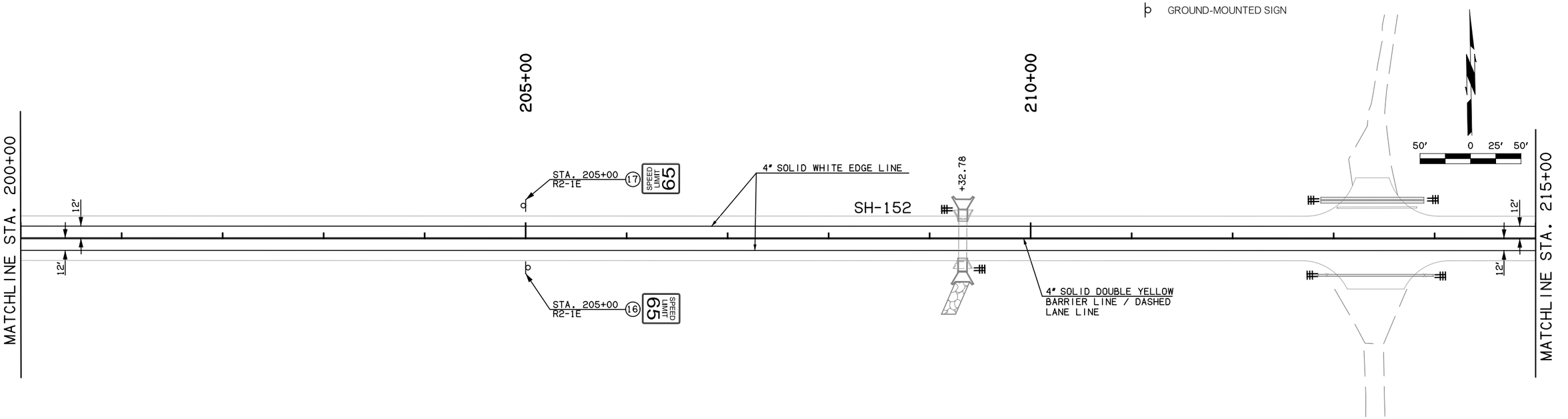
State Job No. 29530(04) Sheet No. T012

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



LEGEND

- DELINEATOR (TYPE 2, CODE 3)
- GROUND-MOUNTED SIGN



NOTE: PASSING ZONES WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO STRIPING OPERATIONS.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

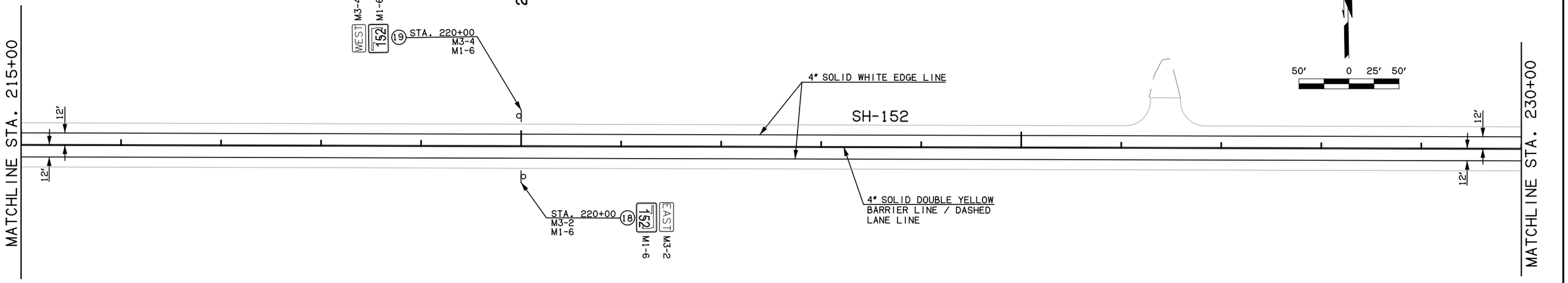
SIGNING & STRIPING

(SHEET 5 OF 12)

State Job No. 29530(04) Sheet No. T013

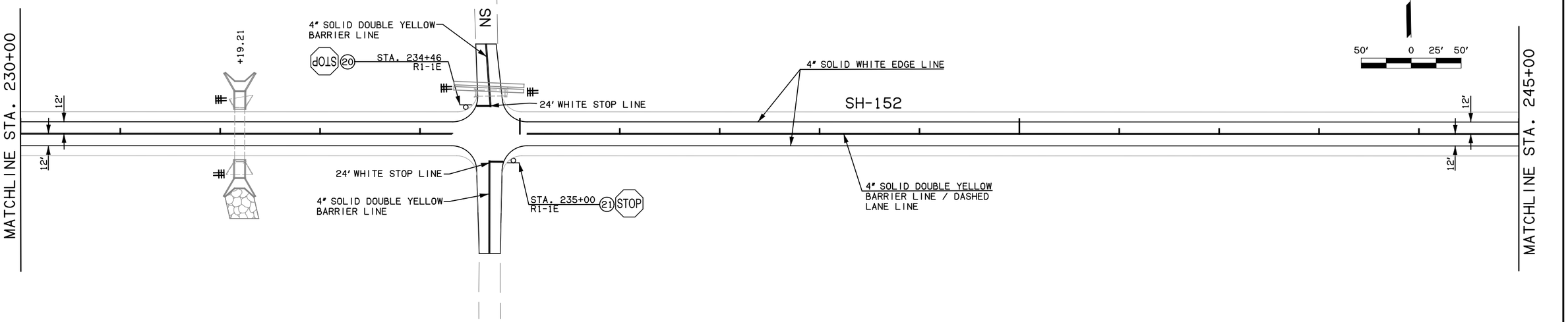
7/27/2022 12:15:01 PM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\SIGNSTRIP05_29530.dgn

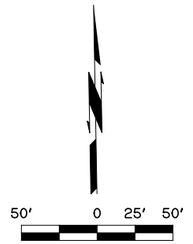
FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



LEGEND

- DELINEATOR (TYPE 2, CODE 3)
- GROUND-MOUNTED SIGN





NOTE: PASSING ZONES WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO STRIPING OPERATIONS.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

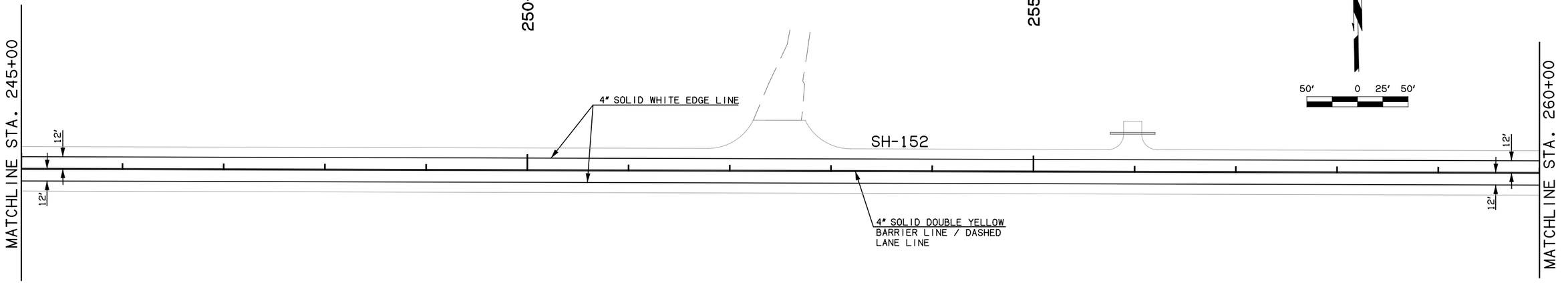
SIGNING & STRIPING

(SHEET 6 OF 12)

State Job No. 29530(04) Sheet No. T014

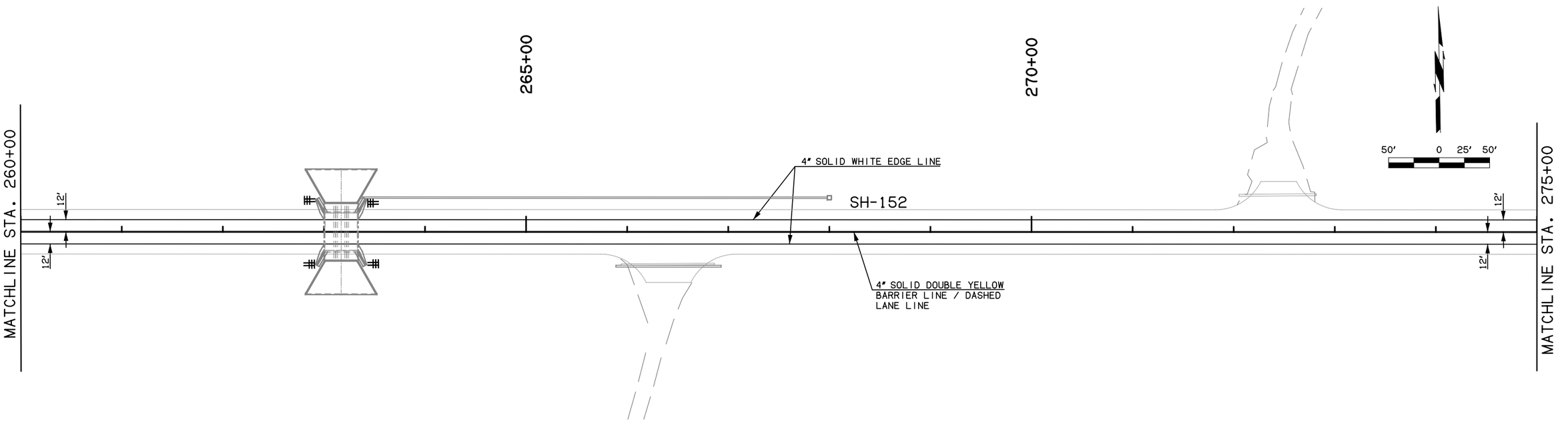
7/27/2022 12:15:02 PM F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\SIGNSTRIP06_29530.dgn

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



LEGEND

- DELINEATOR (TYPE 2, CODE 3)
- GROUND-MOUNTED SIGN



NOTE: PASSING ZONES WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO STRIPING OPERATIONS.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

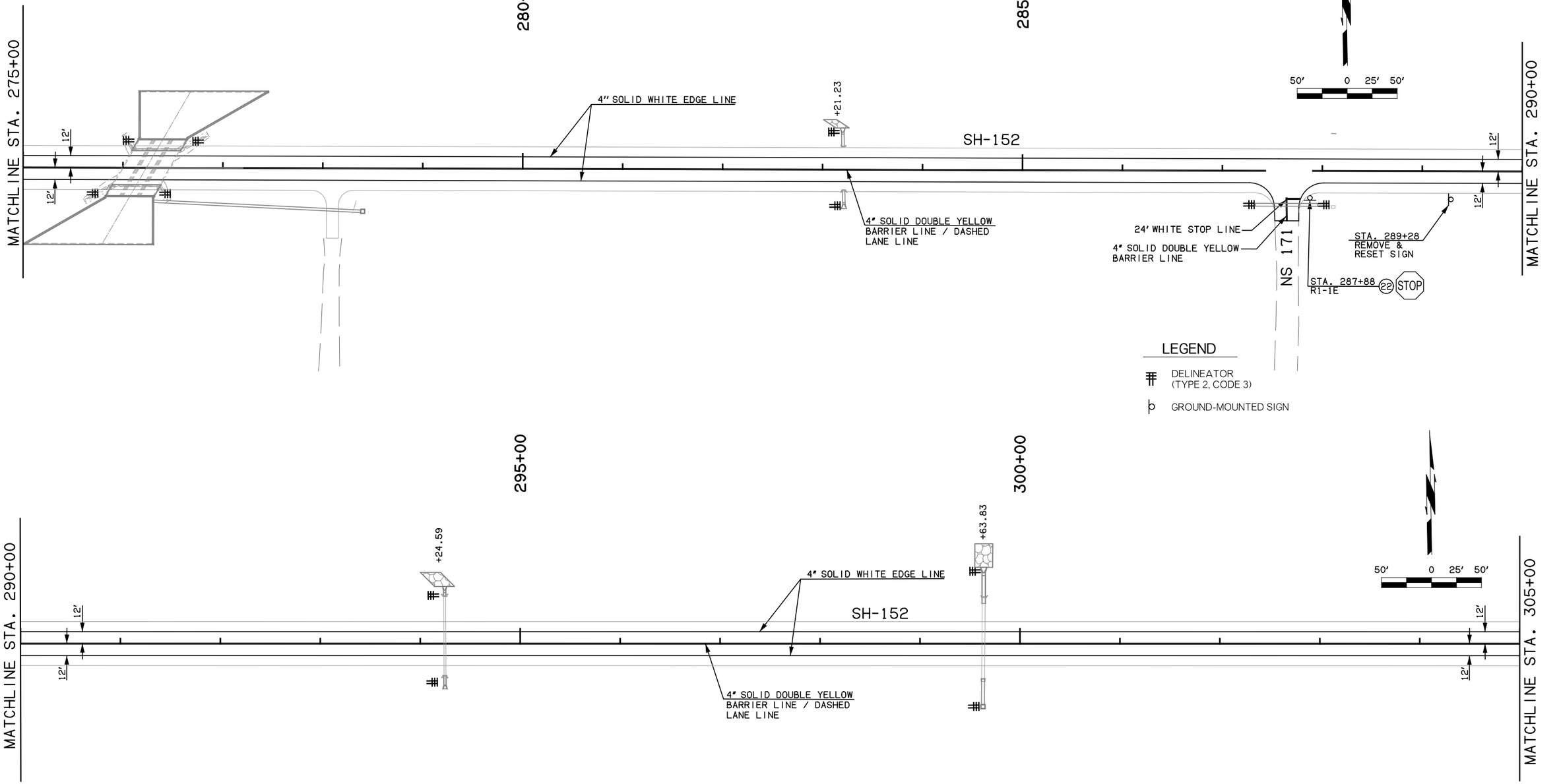
SH-152 BECKHAM & ROGER MILLS COUNTIES

SIGNING & STRIPING

(SHEET 7 OF 12)

State Job No. 29530(04) Sheet No. T015

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••



LEGEND

- DELINEATOR (TYPE 2, CODE 3)
- GROUND-MOUNTED SIGN

NOTE: PASSING ZONES WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO STRIPING OPERATIONS.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

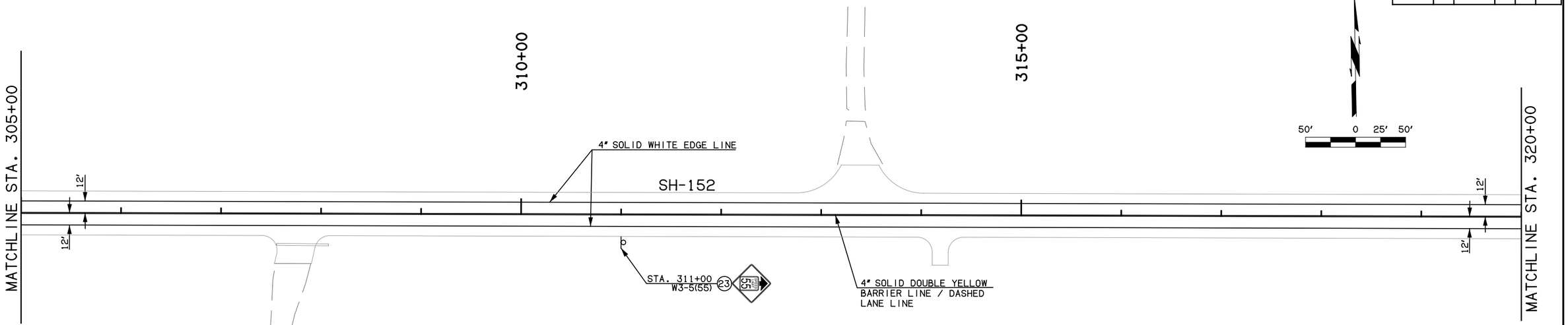
SH-152 BECKHAM & ROGER MILLS COUNTIES

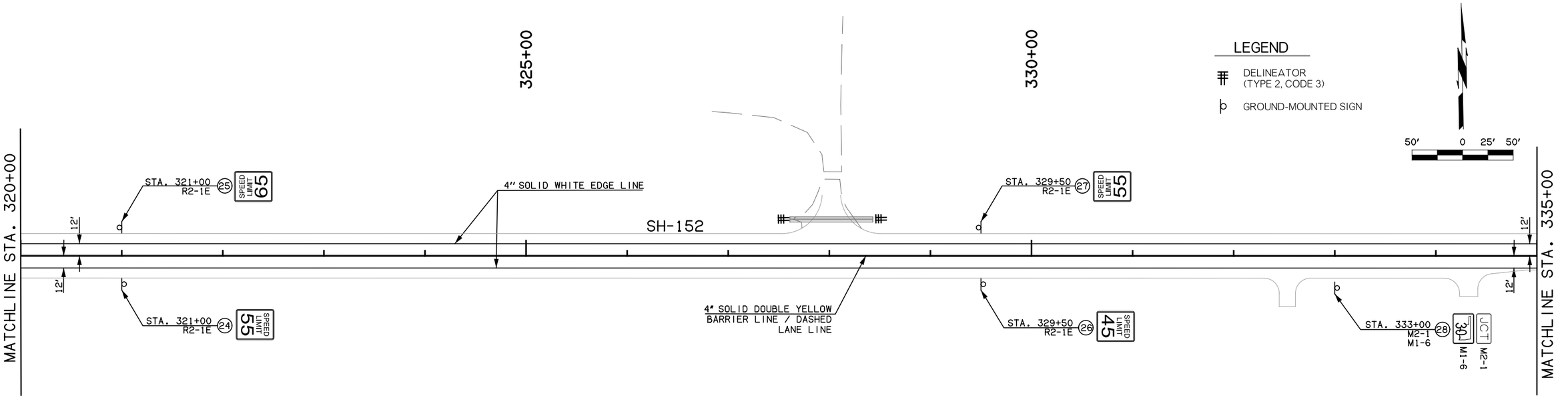
SIGNING & STRIPING

(SHEET 8 OF 12)

State Job No. 29530(04) Sheet No. T016

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••





NOTE: PASSING ZONES WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO STRIPING OPERATIONS.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

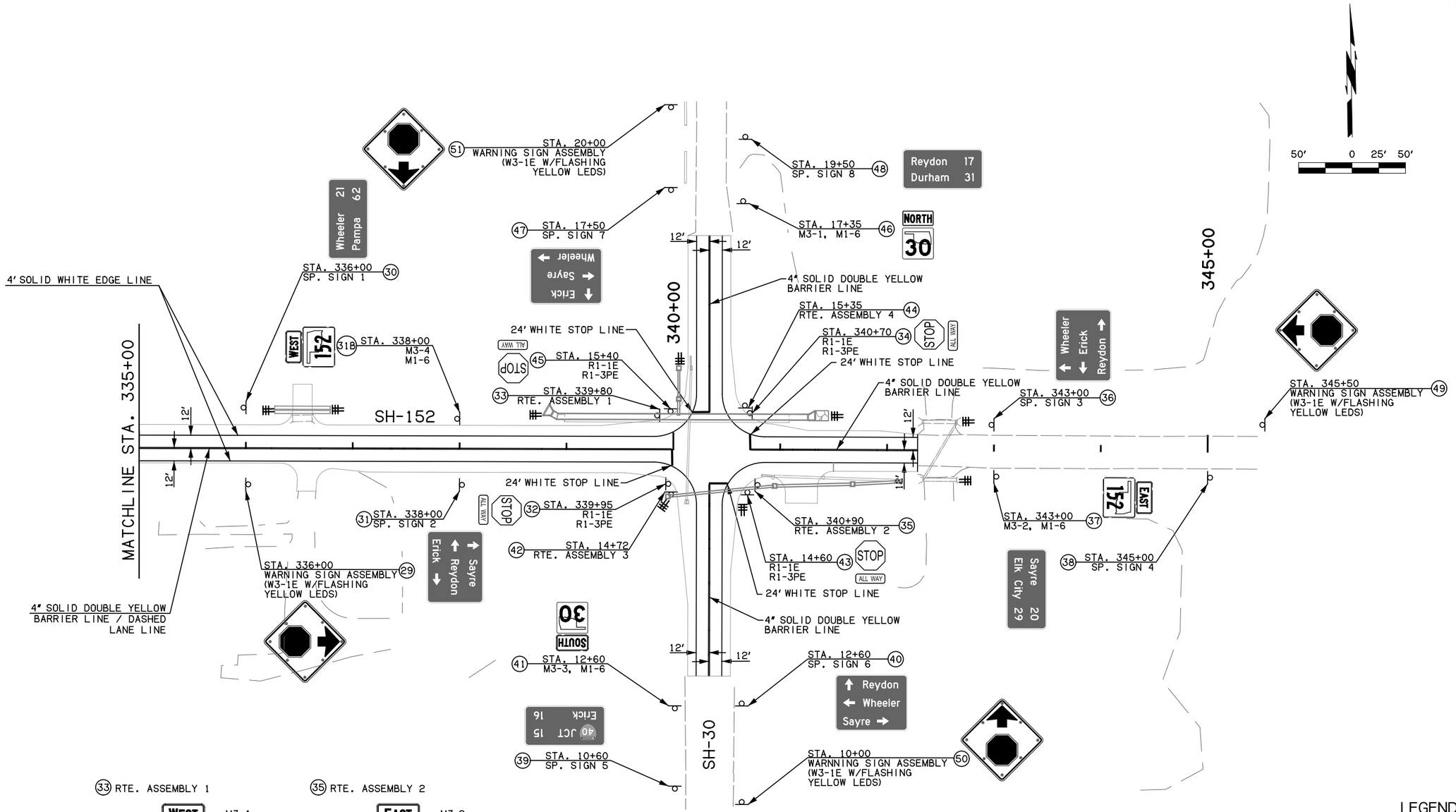
SH-152 BECKHAM & ROGER MILLS COUNTIES

SIGNING & STRIPING

(SHEET 9 OF 12)

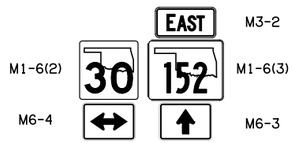
State Job No. 29530(04) Sheet No. T017

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

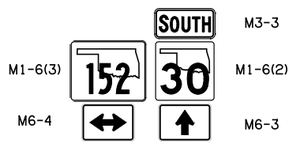


(33) RTE. ASSEMBLY 1

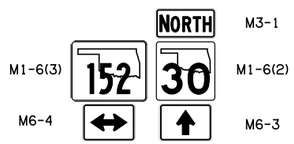
(35) RTE. ASSEMBLY 2



(42) RTE. ASSEMBLY 3



(44) RTE. ASSEMBLY 4



LEGEND

DELINEATOR (TYPE 2, CODE 3)

GROUND-MOUNTED SIGN

NOTE: PASSING ZONES WILL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO STRIPING OPERATIONS.

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

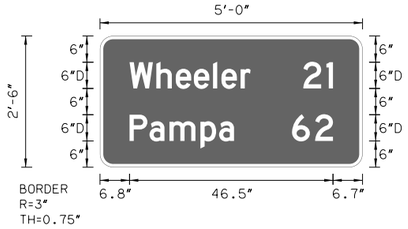
SIGNING & STRIPING

(SHEET 10 OF 12)

State Job No. 29530(04) Sheet No. T018

FED ROAD DIST NO	STATE	J/P PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	OKLA	29530(04)	16		•••

SIGN DETAIL



SIGN NUMBER	SP. SIGN 1
WIDTH x HGHT.	5'-0" x 2'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	3"
MOUNTING	Ground
SIGN AREA	12.5 Sq.Ft.
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White

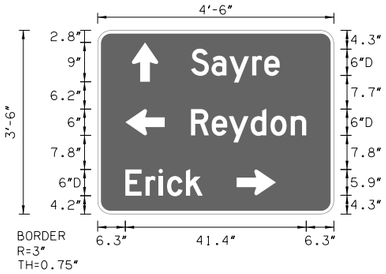
SYMBOL	X	Y	WID	HT

Dimensions are in inches.tenths Letter locations are paneledge to lower left corner

LETTER POSITIONS (X)																						LENGTH	SERIES-SIZE
W	h	e	e	l	e	r	2	l															D 2000
6.8	12.9	17.3	21.5	25.8	27.8	32.1	46.5	51.8														46.5	
P	a	m	p	a	6	2																	D 2000
6.8	11.3	15.9	23	27.2	43.9	49.2																46.5	

SPECIAL SIGN 1

SIGN DETAIL



SIGN NUMBER	SP. SIGN 2
WIDTH x HGHT.	4'-6" x 3'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	3"
MOUNTING	Ground
SIGN AREA	15.8 Sq.Ft.
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White

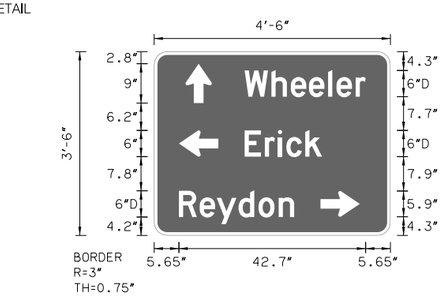
SYMBOL	X	Y	WID	HT
AR_Type D	7.8	30.2	6	9
AR_Type D	6.3	18	6	9
AR_Type D	31.8	4.3	5.9	9

Dimensions are in inches.tenths Letter locations are paneledge to lower left corner

LETTER POSITIONS (X)																						LENGTH	SERIES-SIZE
S	a	y	r	e																			D 2000
21.3	26	30.1	35.3	38.1																		20.3	
R	e	y	d	o	n																		D 2000
21.3	26.1	30	35	39.5	44.1																	26.3	
E	r	i	c	k																			D 2000
6.3	10.9	13.9	15.9	20.2																		17.7	

SPECIAL SIGN 2

SIGN DETAIL



SIGN NUMBER	SP. SIGN 3
WIDTH x HGHT.	4'-6" x 3'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	3"
MOUNTING	Ground
SIGN AREA	15.8 Sq.Ft.
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White

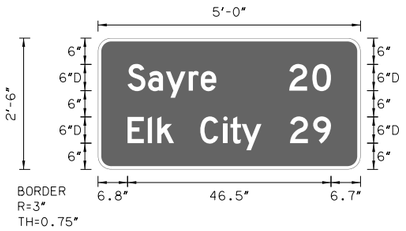
SYMBOL	X	Y	WID	HT
AR_Type D	7.2	30.3	6	9
AR_Type D	5.7	18	6	9
AR_Type D	38	4.3	5.9	9

Dimensions are in inches.tenths Letter locations are paneledge to lower left corner

LETTER POSITIONS (X)																						LENGTH	SERIES-SIZE
W	h	e	e	l	e	r																	D 2000
20.7	26.8	31.2	35.4	39.8	41.7	46.1																27.7	
E	r	i	c	k																			D 2000
20.7	25.3	28.3	30.2	34.5																		17.7	
R	e	y	d	o	n																		D 2000
5.7	10.4	14.3	19.3	23.8	28.5																	26.3	

SPECIAL SIGN 3

SIGN DETAIL



SIGN NUMBER	SP. SIGN 4
WIDTH x HGHT.	5'-0" x 2'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	3"
MOUNTING	Ground
SIGN AREA	12.5 Sq.Ft.
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White

SYMBOL	X	Y	WID	HT

Dimensions are in inches.tenths Letter locations are paneledge to lower left corner

LETTER POSITIONS (X)																						LENGTH	SERIES-SIZE
S	a	y	r	e	2	0																	D 2000
6.8	11.4	15.5	20.7	23.5	43.7	49																46.5	
E	l	k		C	i	t	y	2	9														D 2000
6.8	11.4	13.5	17.4	23.4	28.7	30.3	32.9	43.9	49.2													46.5	

SPECIAL SIGN 4

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

SIGNING & STRIPING

(SHEET 11 OF 12)

State Job No. 29530(04) Sheet No. T019

7/27/2022

12:15:09 PM

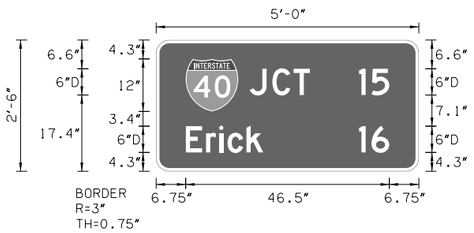
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\SIGNSTRIPE_29530.dgn

7/27/2022

12:15:11 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\SIGNSTRIP12_29530.dgn

SIGN DETAIL



SIGN NUMBER	SP. SIGN 5
WIDTH x HGHT.	5'-0" x 2'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	3"
MOUNTING	Ground
SIGN AREA	12.5 Sq.Ft.
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White

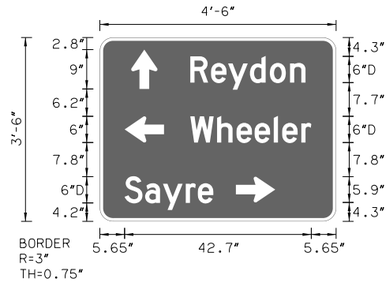
SYMBOL	X	Y	WID	HT
MI_I	6.7	13.7	12	12

Dimensions are in inches.tenths Letter locations are paneledge to lower left corner

LETTER POSITIONS (X)																						LENGTH	SERIES/SIZE
J	C	T	I	5																			D 2000
21.4	26.6	31.4	46.4	49.2																		31.9	
E	r	i	c	k	I	6																	D 2000
6.8	11.4	14.4	16.3	20.6	46.4	49.2																46.5	

SPECIAL SIGN 5

SIGN DETAIL



SIGN NUMBER	SP. SIGN 6
WIDTH x HGHT.	4'-6" x 3'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	3"
MOUNTING	Ground
SIGN AREA	15.8 Sq.Ft.
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White

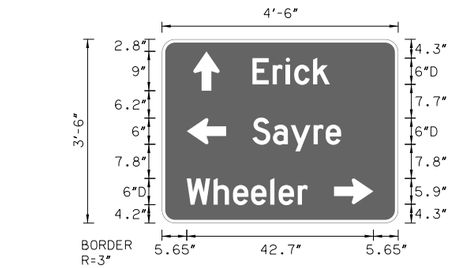
SYMBOL	X	Y	WID	HT
AR_Type D	7.2	30.3	6	9
AR_Type D	5.7	18	6	9
AR_Type D	31.1	4.3	5.9	9

Dimensions are in inches.tenths Letter locations are paneledge to lower left corner

LETTER POSITIONS (X)																						LENGTH	SERIES/SIZE
R	e	y	d	o	n																		D 2000
20.7	25.4	29.3	34.3	38.9	43.5																	26.3	
W	h	e	e	l	e	r																	D 2000
20.7	26.8	31.2	35.4	39.8	41.7	46.1																27.7	
S	a	y	r	e																			D 2000
5.7	10.3	14.4	19.6	22.4																		20.3	

SPECIAL SIGN 6

SIGN DETAIL



SIGN NUMBER	SP. SIGN 7
WIDTH x HGHT.	4'-6" x 3'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	3"
MOUNTING	Ground
SIGN AREA	15.8 Sq.Ft.
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White

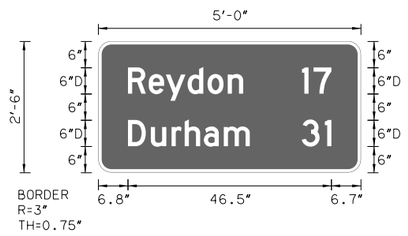
SYMBOL	X	Y	WID	HT
AR_Type D	7.2	30.3	6	9
AR_Type D	5.7	18	6	9
AR_Type D	39.3	4.3	5.9	9

Dimensions are in inches.tenths Letter locations are paneledge to lower left corner

LETTER POSITIONS (X)																						LENGTH	SERIES/SIZE
E	r	i	c	k																			D 2000
20.7	25.3	28.3	30.2	34.5																		17.7	
S	a	y	r	e																			D 2000
20.7	25.4	29.4	34.7	37.4																		20.3	
W	h	e	e	l	e	r																	D 2000
5.7	11.8	16.2	20.4	24.8	26.7	31.1																27.7	

SPECIAL SIGN 7

SIGN DETAIL



SIGN NUMBER	SP. SIGN 8
WIDTH x HGHT.	5'-0" x 2'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	3"
MOUNTING	Ground
SIGN AREA	12.5 Sq.Ft.
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White

SYMBOL	X	Y	WID	HT

Dimensions are in inches.tenths Letter locations are paneledge to lower left corner

LETTER POSITIONS (X)																						LENGTH	SERIES/SIZE
R	e	y	d	o	n	I	7																D 2000
6.8	11.5	15.4	20.4	24.9	29.6	46.5	49.2															46.5	
D	u	r	h	a	m	3	I																D 2000
6.8	12	16.7	19.7	24.1	28.7	46.5	51.8															46.5	

SPECIAL SIGN 8

Design		
Drawn		
Checked		
Approved		
Squad	olsson	

SH-152 BECKHAM & ROGER MILLS COUNTIES

SIGNING & STRIPING

(SHEET 12 OF 12)

State Job No. 29530(04) Sheet No. T020

7/27/2022

12:18:13 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC01_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 6.21 S.F.
FILL AREA = 0.71 S.F.

CUT VOL. = 1.83 C.Y.
FILL VOL. = 0.26 C.Y.

PRES.R/W

℄ SURVEY /CRL SH-152

PRES.R/W

EX.FIBER OPTIC

EX.TUG

72+00.00
F.G.= 2202.65

CUT AREA = 6.10 S.F.
FILL AREA = 1.05 S.F.

CUT VOL. = 6.51 C.Y.
FILL VOL. = 3.84 C.Y.

PRES.R/W

℄ SURVEY /CRL SH-152

0.7%

PRES.R/W

EX.FIBER OPTIC

EX.TUG

71+91.99
SECTION LINE RETURN RT.
F.G.= 2202.64

CUT AREA = 6.18 S.F.
FILL AREA = 6.21 S.F.

CUT VOL. = 11.32 C.Y.
FILL VOL. = 8.32 C.Y.

PRES.R/W

℄ SURVEY /CRL SH-152

4.3%

PRES.R/W

EX.FIBER OPTIC

EX.TUG

71+63.38
SECTION LINE RETURN LT.
F.G.= 2202.66

CUT AREA = 3.46 S.F.
FILL AREA = 0.88 S.F.

CUT VOL. = 14.56 C.Y.
FILL VOL. = 5.22 C.Y.

PRES.R/W

PRES.R/W

℄ SURVEY /CRL SH-152

PRES.R/W

EX.TUG

71+00.00
F.G.= 2202.87

CUT AREA = 4.40 S.F.
FILL AREA = 1.94 S.F.

CUT VOL. = 18.72 C.Y.
FILL VOL. = 2.59 C.Y.

PRES.R/W

℄ SURVEY /CRL SH-152

PRES.R/W

EX.TUG

70+00.00
F.G.= 2202.94

CUT AREA = 9.65 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

PRES.R/W

℄ SURVEY /CRL SH-152

PRES.R/W

EX.TUG

69+28.04
BEGIN SH-152 CONSTRUCTION JP# 29530(04)
F.G.= 2203.03

2210 2205 2200 2195 2190 2215

150 100 50 0 50 100 150

SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X001

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 4.85 S.F.
FILL AREA = 18.31 S.F.

CUT VOL. = 74.61 C.Y.
FILL VOL. = 34.02 C.Y.

PRES.R/W
℄ SURVEY /CRL SH-152
℄= 2199.34
EX.TUG
EX.TUG EX.FIBER OPTIC
PRES.R/W

75+00.00
F.G.= 2202.28

CUT AREA = 35.44 S.F.
FILL AREA = 0.06 S.F.

CUT VOL. = 2.58 C.Y.
FILL VOL. = 0.00 C.Y.

PRES.R/W
℄ SURVEY /CRL SH-152
℄= 2199.55
℄= 2199.03
1:2.5
EX.TUG
EX.TUG EX.FIBER OPTIC
EX.FIBER OPTIC EX.TUG
EX.TUG
EX.FIBER OPTIC
PRES.R/W

74+00.00
F.G.= 2202.49

CUT AREA = 36.12 S.F.
FILL AREA = 0.05 S.F.

CUT VOL. = 135.82 C.Y.
FILL VOL. = 20.97 C.Y.

PRES.R/W
℄ SURVEY /CRL SH-152
℄= 2199.56
℄= 2199.04
1:2.5
EX.TUG
EX.TUG EX.FIBER OPTIC EX.TUG
FO
FO
PRES.R/W

73+98.05
℄ FIBER OPTIC UTILITY LINE CROSSING
(3°06'41.40" RT. FWD. SKEW)
F.G.= 2202.50

CUT AREA = 54.24 S.F.
FILL AREA = 13.90 S.F.

CUT VOL. = 35.06 C.Y.
FILL VOL. = 4.38 C.Y.

PRES.R/W
℄ SURVEY /CRL SH-152
4.6%
℄= 2199.28
1:2.5
EX.TUG
EX.FIBER OPTIC
PRES.R/W

STA. 73+16.89
CONST. 30' ASPH. DR.
AS DIKE

73+16.89
CONST. ASPH. DRIVE LT.
F.G.= 2202.77

CUT AREA = 57.85 S.F.
FILL AREA = 0.10 S.F.

CUT VOL. = 118.63 C.Y.
FILL VOL. = 1.49 C.Y.

PRES.R/W
℄ SURVEY /CRL SH-152
℄= 2199.33
1:2.5
EX.TUG
EX.FIBER OPTIC
PRES.R/W

73+00.00
F.G.= 2202.78

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X002

150 100 50 0 50 100 150

7/27/2022

12:8:6 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC03_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 113.73 S.F.
FILL AREA = 3.98 S.F.

CUT VOL. = 458.53 C.Y.
FILL VOL. = 13.92 C.Y.

R/W | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.TUG | EX.FIBER OPTIC | ℄= 2195.52 | EX.PUG

80+00.00
F.G.= 2201.62

CUT AREA = 133.88 S.F.
FILL AREA = 3.54 S.F.

CUT VOL. = 338.51 C.Y.
FILL VOL. = 46.74 C.Y.

R/W | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.TUG | EX.FIBER OPTIC | ℄= 2195.90 | EX.PUG

79+00.00
F.G.= 2201.75

CUT AREA = 48.91 S.F.
FILL AREA = 21.70 S.F.

CUT VOL. = 102.64 C.Y.
FILL VOL. = 139.20 C.Y.

R/W | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.TUG | EX.FIBER OPTIC | ℄= 2196.27

78+00.00
F.G.= 2201.71

CUT AREA = 6.51 S.F.
FILL AREA = 53.47 S.F.

CUT VOL. = 20.89 C.Y.
FILL VOL. = 193.24 C.Y.

PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.TUG | EX.FIBER OPTIC | ℄= 2196.64

77+00.00
F.G.= 2201.86

CUT AREA = 4.76 S.F.
FILL AREA = 50.88 S.F.

CUT VOL. = 17.80 C.Y.
FILL VOL. = 128.14 C.Y.

PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.TUG | EX.FIBER OPTIC

76+00.00
F.G.= 2202.12

2215 2210 2205 2200 2195 2190 2185

150 100 50 0 50 100 150

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X003

7/27/2022

12:18:18 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC04_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

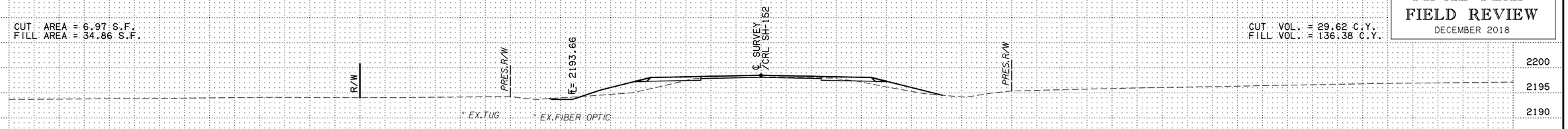
DECEMBER 2018

85+00.00

F.G.= 2198.48

CUT AREA = 6.97 S.F.
FILL AREA = 34.86 S.F.

CUT VOL. = 29.62 C.Y.
FILL VOL. = 136.38 C.Y.

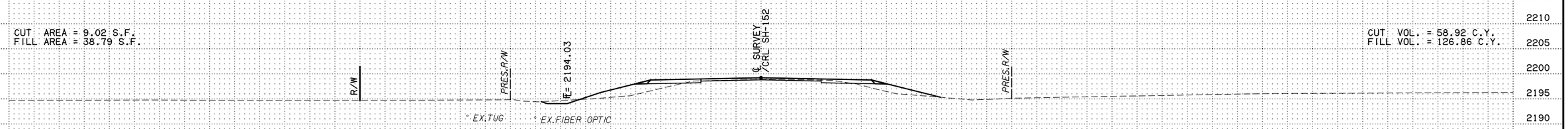


84+00.00

F.G.= 2199.19

CUT AREA = 9.02 S.F.
FILL AREA = 38.79 S.F.

CUT VOL. = 58.92 C.Y.
FILL VOL. = 126.86 C.Y.

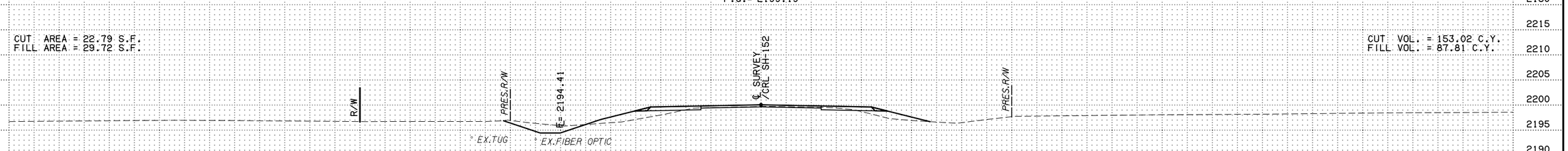


83+00.00

F.G.= 2200.03

CUT AREA = 22.79 S.F.
FILL AREA = 29.72 S.F.

CUT VOL. = 153.02 C.Y.
FILL VOL. = 87.81 C.Y.

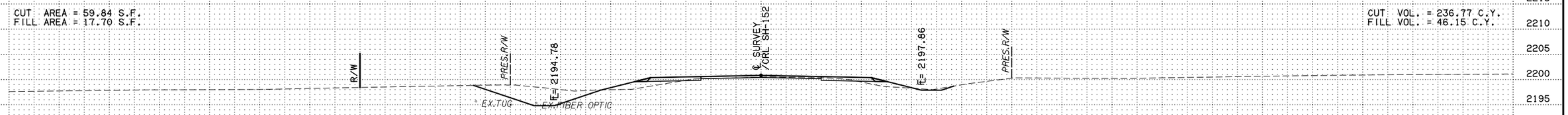


82+00.00

F.G.= 2200.80

CUT AREA = 59.84 S.F.
FILL AREA = 17.70 S.F.

CUT VOL. = 236.77 C.Y.
FILL VOL. = 46.15 C.Y.

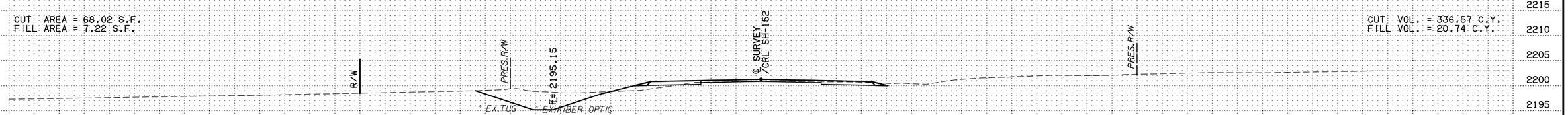


81+00.00

F.G.= 2201.25

CUT AREA = 68.02 S.F.
FILL AREA = 7.22 S.F.

CUT VOL. = 336.57 C.Y.
FILL VOL. = 20.74 C.Y.



SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X004

150 100 50 0 50 100 150

7/27/2022

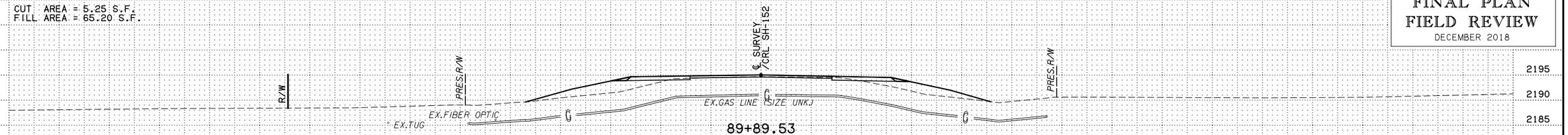
12:18:20 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\XSEC05.29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

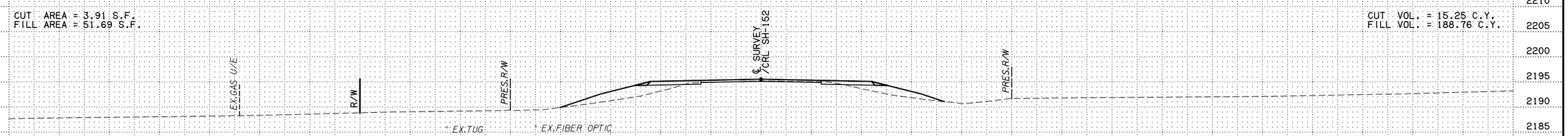
CUT AREA = 5.25 S.F.
FILL AREA = 65.20 S.F.



89+89.53
℄ GAS UTILITY LINE CROSSING
(32°00'51.53" RT. FWD. SKEW)
F.G.= 2195.01

CUT AREA = 3.91 S.F.
FILL AREA = 51.69 S.F.

CUT VOL. = 15.25 C.Y.
FILL VOL. = 188.76 C.Y.



89+00.00
F.G.= 2195.52

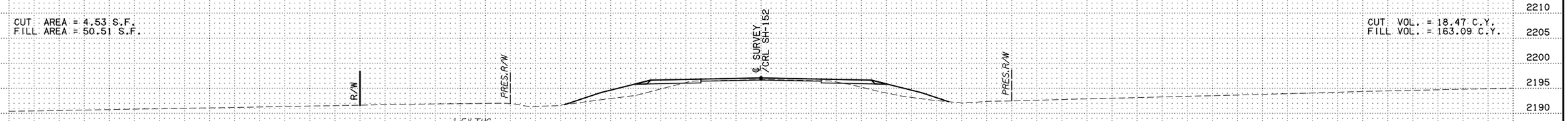
CUT AREA = 4.32 S.F.
FILL AREA = 50.24 S.F.

CUT VOL. = 16.39 C.Y.
FILL VOL. = 186.59 C.Y.

88+00.00
F.G.= 2196.24

CUT AREA = 4.53 S.F.
FILL AREA = 50.51 S.F.

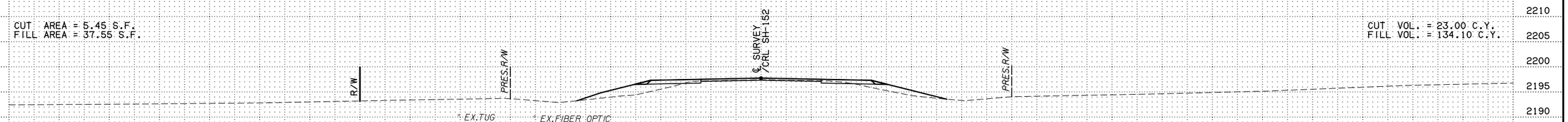
CUT VOL. = 18.47 C.Y.
FILL VOL. = 163.09 C.Y.



87+00.00
F.G.= 2197.05

CUT AREA = 5.45 S.F.
FILL AREA = 37.55 S.F.

CUT VOL. = 23.00 C.Y.
FILL VOL. = 134.10 C.Y.



86+00.00
F.G.= 2197.73

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X005

150 100 50 0 50 100 150

7/27/2022

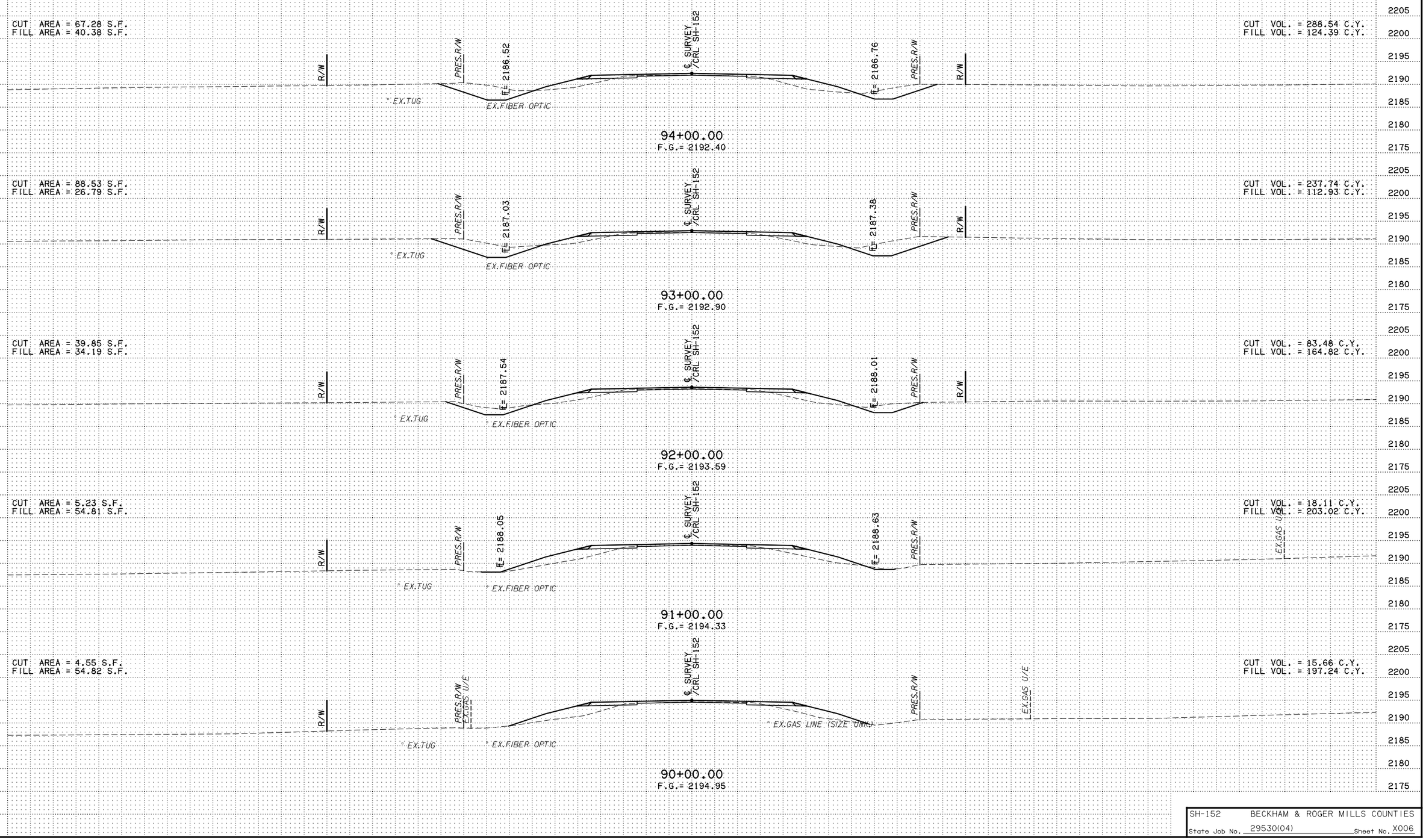
12:18:21 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\XSEC06_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



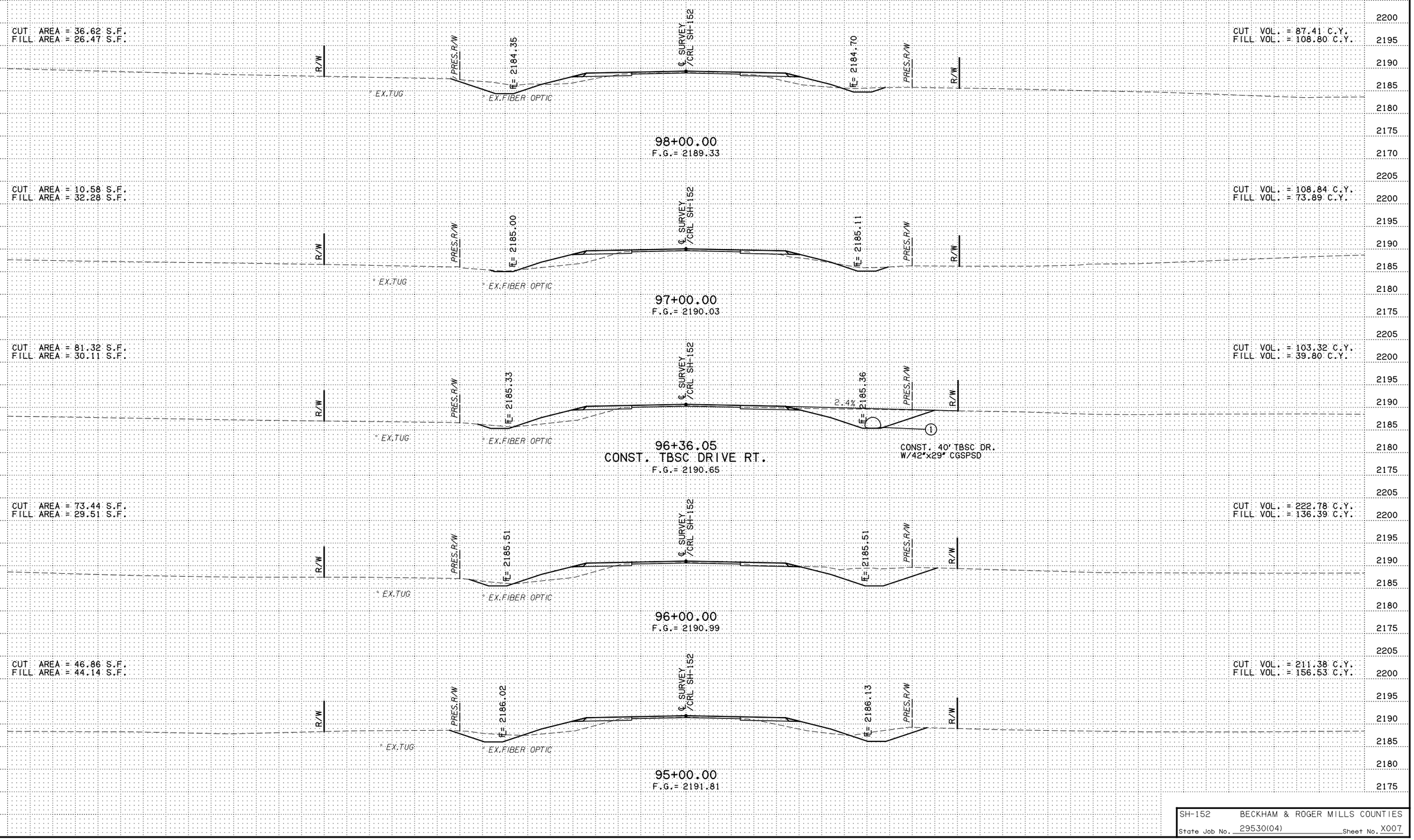
SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X006

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X007

7/27/2022

12:18:25 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC08_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 9.15 S.F.
FILL AREA = 23.67 S.F.

CUT VOL. = 35.82 C.Y.
FILL VOL. = 73.79 C.Y.

R/W | PRES.R/W | FE= 2177.58 | ℄ SURVEY /CRL SH-152 | PRES.R/W | R/W

EX.TUG | EX.FIBER OPTIC

103+00.00
F.G.= 2180.52

CUT AREA = 10.19 S.F.
FILL AREA = 16.18 S.F.

CUT VOL. = 73.43 C.Y.
FILL VOL. = 46.67 C.Y.

R/W | PRES.R/W | FE= 2179.99 | ℄ SURVEY /CRL SH-152 | FE= 2179.99 | PRES.R/W | R/W

EX.TUG | EX.FIBER OPTIC

102+00.00
F.G.= 2182.93

CUT AREA = 29.46 S.F.
FILL AREA = 9.03 S.F.

CUT VOL. = 286.82 C.Y.
FILL VOL. = 31.16 C.Y.

R/W | PRES.R/W | FE= 2182.40 | ℄ SURVEY /CRL SH-152 | FE= 2182.37 | PRES.R/W | R/W

EX.TUG | EX.FIBER OPTIC

101+00.00
F.G.= 2185.31

CUT AREA = 125.42 S.F.
FILL AREA = 7.80 S.F.

CUT VOL. = 457.86 C.Y.
FILL VOL. = 34.99 C.Y.

R/W | PRES.R/W | FE= 2183.05 | ℄ SURVEY /CRL SH-152 | FE= 2183.90 | PRES.R/W | R/W

EX.TUG | EX.FIBER OPTIC

100+00.00
F.G.= 2187.08

CUT AREA = 121.82 S.F.
FILL AREA = 11.10 S.F.

CUT VOL. = 293.41 C.Y.
FILL VOL. = 69.57 C.Y.

R/W | PRES.R/W | FE= 2183.70 | ℄ SURVEY /CRL SH-152 | FE= 2184.30 | PRES.R/W | R/W

EX.TUG | EX.FIBER OPTIC

99+00.00
F.G.= 2188.41

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X008

150 100 50 0 50 100 150

7/27/2022

12:18:26 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC09_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 3.26 S.F.
FILL AREA = 71.00 S.F.

CUT VOL. = 12.45 C.Y.
FILL VOL. = 226.24 C.Y.

R/W | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W

* EX.TUG

* EX.FIBER OPTIC

108+00.00
F.G.= 2172.03

CUT AREA = 3.46 S.F.
FILL AREA = 51.17 S.F.

CUT VOL. = 11.49 C.Y.
FILL VOL. = 171.63 C.Y.

R/W | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W

* EX.TUG

* EX.FIBER OPTIC

107+00.00
F.G.= 2172.74

CUT AREA = 2.74 S.F.
FILL AREA = 41.51 S.F.

CUT VOL. = 15.74 C.Y.
FILL VOL. = 141.06 C.Y.

R/W | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W

* EX.TUG

* EX.FIBER OPTIC

106+00.00
F.G.= 2174.09

CUT AREA = 5.76 S.F.
FILL AREA = 34.66 S.F.

CUT VOL. = 23.08 C.Y.
FILL VOL. = 121.76 C.Y.

R/W | PRES.R/W | FE= 2173.12 | ℄ SURVEY /CRL SH-152 | PRES.R/W

* EX.TUG

* EX.FIBER OPTIC

105+00.00
F.G.= 2176.06

CUT AREA = 6.70 S.F.
FILL AREA = 31.09 S.F.

CUT VOL. = 29.37 C.Y.
FILL VOL. = 101.41 C.Y.

R/W | PRES.R/W | FE= 2175.30 | ℄ SURVEY /CRL SH-152 | PRES.R/W

* EX.TUG

* EX.FIBER OPTIC

104+00.00
F.G.= 2178.24

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X009

150 100 50 0 50 100 150

7/27/2022

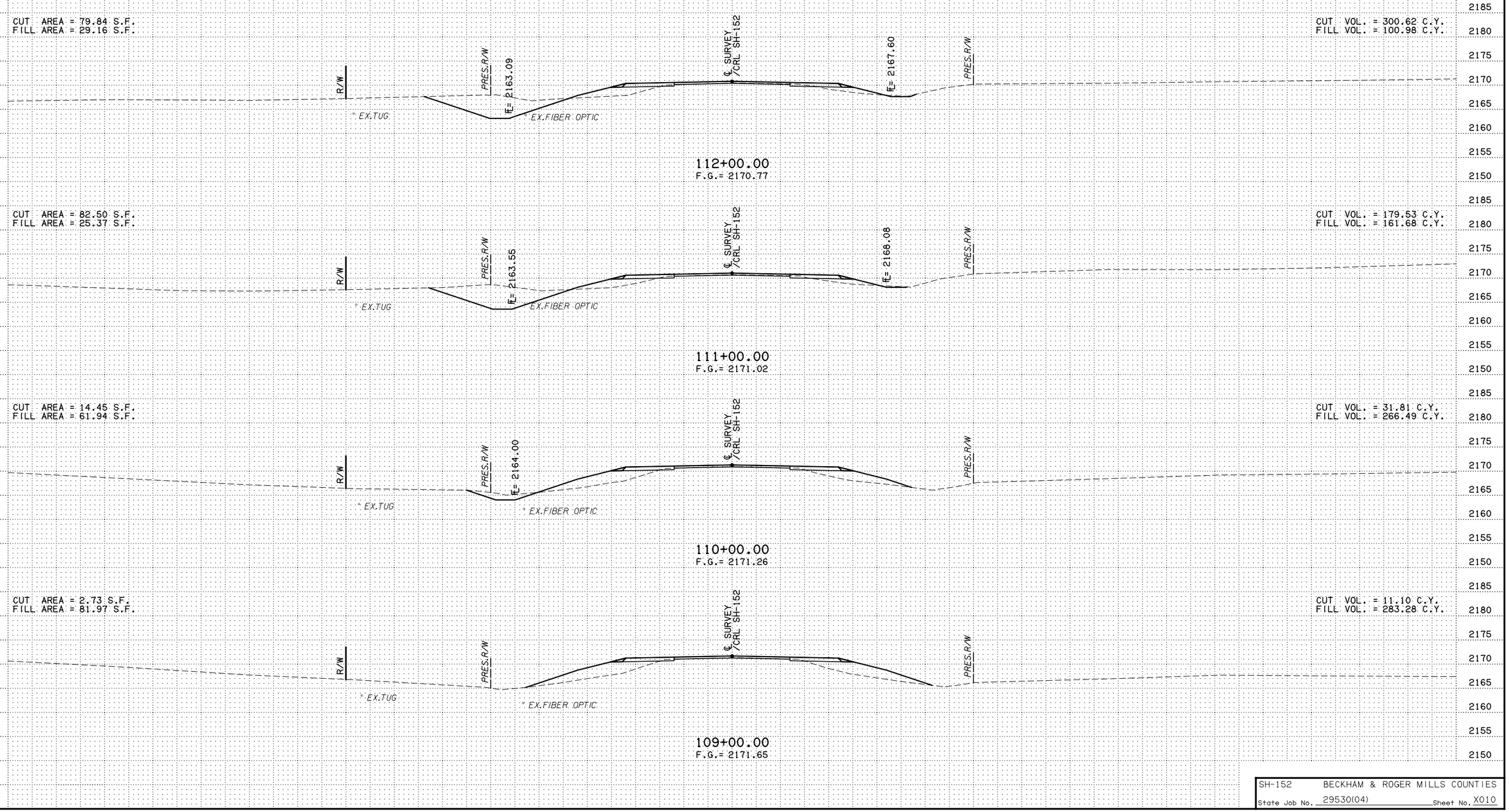
12:18:28 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\XSEC\0_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X010

150 100 50 0 50 100 150

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 4.55 S.F.
FILL AREA = 14.70 S.F.

CUT VOL. = 36.04 C.Y.
FILL VOL. = 96.48 C.Y.

R/W — PRES.R/W — ℄ SURVEY /CRL SH-152 — FL= 2167.25 — PRES.R/W — R/W

EX.TUG — EX.FIBER OPTIC

115+00.00
F.G.= 2169.16

CUT AREA = 14.91 S.F.
FILL AREA = 37.40 S.F.

CUT VOL. = 31.06 C.Y.
FILL VOL. = 168.32 C.Y.

R/W — PRES.R/W — ℄ SURVEY /CRL SH-152 — FL= 2165.10 — 1:2 — PRES.R/W — R/W

EX.TUG — EX.FIBER OPTIC

114+00.00
F.G.= 2169.85

CUT AREA = 10.06 S.F.
FILL AREA = 97.92 S.F.

CUT VOL. = 18.48 C.Y.
FILL VOL. = 102.67 C.Y.

R/W — PRES.R/W — ② — ℄ SURVEY /CRL SH-152 — 1:6 — FL= 2163.66 — PRES.R/W — R/W

FL ELEV. = 2162.49 — FL ELEV.= 2162.61 — FL ELEV.= 2163.46 — FL ELEV. = 2163.66

EX.TUG — EX.FIBER OPTIC

113+32.83
EXTEND EXISTING 36" RCP
F.G.= 2170.22

CUT AREA = 20.33 S.F.
FILL AREA = 70.97 S.F.

CUT VOL. = 185.49 C.Y.
FILL VOL. = 185.42 C.Y.

R/W — PRES.R/W — FL= 2162.64 — ℄ SURVEY /CRL SH-152 — FL= 2164.63 — PRES.R/W — R/W

EX.TUG — EX.FIBER OPTIC

113+00.00
F.G.= 2170.38

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X011

7/27/2022

12:18:30 PM

F:\Projects\0j5-0552\40-Design\Microstation\SH-152\DGN\C\XSECIL_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 4.09 S.F.
FILL AREA = 1.01 S.F.

PRES.R/W

℄ SURVEY /CRL SH-152

PRES.R/W

CUT VOL. = 24.46 C.Y.
FILL VOL. = 5.97 C.Y.

120+00.00
END WIDENING - BEGIN OVERLAY
F.G.= 2164.74

CUT AREA = 9.12 S.F.
FILL AREA = 2.21 S.F.

R/W

PRES.R/W

℄ SURVEY /CRL SH-152

PRES.R/W

CUT VOL. = 45.81 C.Y.
FILL VOL. = 12.45 C.Y.

119+00.00
F.G.= 2165.64

CUT AREA = 15.62 S.F.
FILL AREA = 4.51 S.F.

R/W

PRES.R/W

℄ SURVEY /CRL SH-152

E= 2163.56

PRES.R/W

CUT VOL. = 48.49 C.Y.
FILL VOL. = 15.90 C.Y.

EX.TUG

EX.FIBER OPTIC

118+00.00
F.G.= 2166.50

CUT AREA = 10.56 S.F.
FILL AREA = 4.07 S.F.

R/W

PRES.R/W

℄ SURVEY /CRL SH-152

E= 2164.44

PRES.R/W

CUT VOL. = 43.28 C.Y.
FILL VOL. = 24.79 C.Y.

EX.TUG

EX.FIBER OPTIC

117+00.00
F.G.= 2167.38

CUT AREA = 12.81 S.F.
FILL AREA = 9.31 S.F.

R/W

PRES.R/W

℄ SURVEY /CRL SH-152

E= 2165.37

PRES.R/W

CUT VOL. = 32.15 C.Y.
FILL VOL. = 44.46 C.Y.

EX.TUG

EX.FIBER OPTIC

116+00.00
F.G.= 2168.31

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X012

150 100 50 0 50 100 150

7/27/2022 12:18:31 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\06NC\XSEC\2_29530.dgn

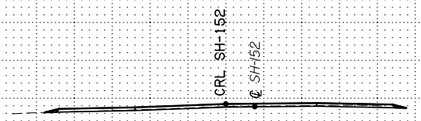
OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 4.02 S.F.
FILL AREA = 0.02 S.F.

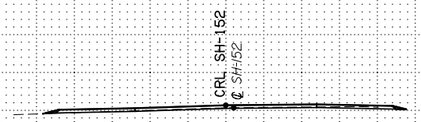
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



125+00.00
F.G.= 2159.21

CUT AREA = 3.85 S.F.
FILL AREA = 0.18 S.F.

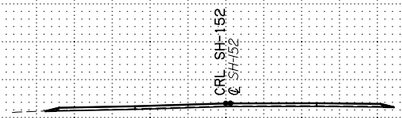
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



124+00.00
F.G.= 2160.65

CUT AREA = 3.78 S.F.
FILL AREA = 0.00 S.F.

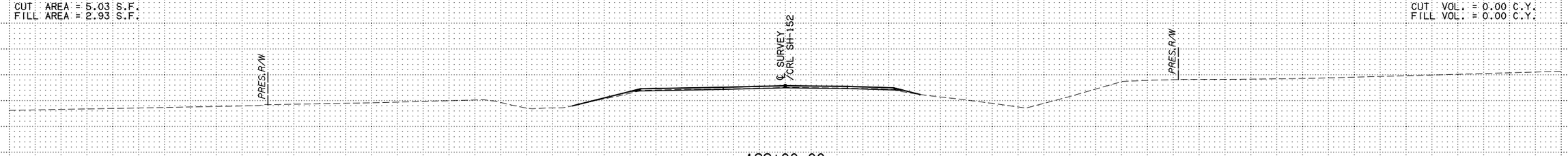
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



123+00.00
F.G.= 2161.83

CUT AREA = 5.03 S.F.
FILL AREA = 2.93 S.F.

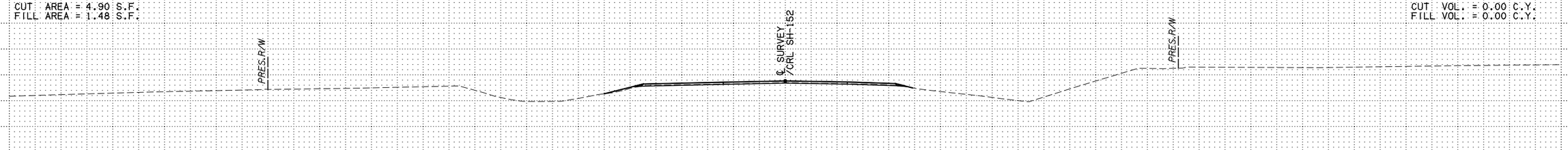
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



122+00.00
F.G.= 2162.85

CUT AREA = 4.90 S.F.
FILL AREA = 1.48 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



121+00.00
F.G.= 2163.79

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X013

150 100 50 0 50 100 150

7/27/2022 12:18:33 PM

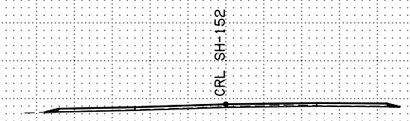
F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\CrXSEC\3_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 4.07 S.F.
FILL AREA = 0.03 S.F.

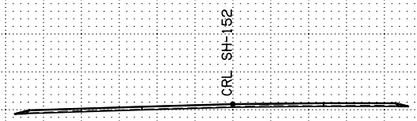
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



131+00.00
F.G.= 2149.22

CUT AREA = 5.40 S.F.
FILL AREA = 0.00 S.F.

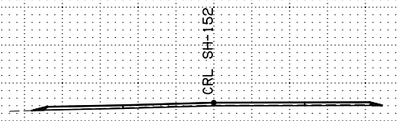
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



130+00.00
F.G.= 2150.71

CUT AREA = 3.34 S.F.
FILL AREA = 0.07 S.F.

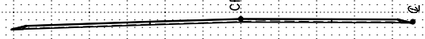
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



129+00.00
F.G.= 2152.37

CUT AREA = 4.86 S.F.
FILL AREA = 0.00 S.F.

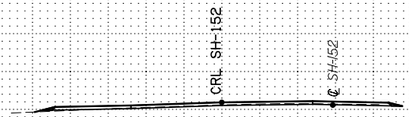
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



128+00.00
F.G.= 2154.08

CUT AREA = 3.58 S.F.
FILL AREA = 0.73 S.F.

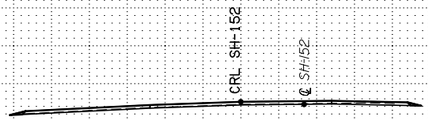
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



127+00.00
F.G.= 2155.90

CUT AREA = 5.30 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



126+00.00
F.G.= 2157.57

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X014

150 100 50 0 50 100 150

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 3.70 S.F.
FILL AREA = 0.15 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

137+00.00
F.G.= 2145.38

CUT AREA = 4.74 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

136+00.00
F.G.= 2146.28

CUT AREA = 4.79 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

135+00.00
F.G.= 2146.92

CUT AREA = 4.71 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

134+00.00
F.G.= 2147.36

CUT AREA = 4.30 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

133+00.00
F.G.= 2147.81

CUT AREA = 5.50 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

132+00.00
F.G.= 2148.35

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X015

7/27/2022

12:18:38 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\XSEC\6_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CRL SH-152

℄ SH-152

143+00.00
F.G.= 2140.29

CUT AREA = 3.62 S.F.
FILL AREA = 0.04 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

142+00.00
F.G.= 2140.42

CUT AREA = 4.73 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

141+00.00
F.G.= 2141.05

CUT AREA = 4.15 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

140+00.00
F.G.= 2142.03

CUT AREA = 3.92 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

139+00.00
F.G.= 2143.12

CUT AREA = 4.80 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

138+00.00
F.G.= 2144.26

CUT AREA = 4.01 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

2150 2145 2140 2135 2130 2125 2155

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X016

150 100 50 0 50 100 150

CUT AREA = 4.16 S.F.
FILL AREA = 0.00 S.F.

CRL SH-152

℄ SH-152

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

149+00.00
F.G.= 2137.59

CUT AREA = 4.04 S.F.
FILL AREA = 0.00 S.F.

CRL SH-152

℄ SH-152

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

148+00.00
F.G.= 2138.84

CUT AREA = 4.19 S.F.
FILL AREA = 0.00 S.F.

CRL SH-152

℄ SH-152

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

147+00.00
F.G.= 2139.67

CUT AREA = 3.91 S.F.
FILL AREA = 0.00 S.F.

CRL SH-152

℄ SH-152

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

146+00.00
F.G.= 2139.92

CUT AREA = 4.33 S.F.
FILL AREA = 0.00 S.F.

CRL SH-152

℄ SH-152

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

145+00.00
F.G.= 2140.00

CUT AREA = 4.83 S.F.
FILL AREA = 0.00 S.F.

CRL SH-152

℄ SH-152

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

144+00.00
F.G.= 2140.20

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X017

7/27/2022 12:18:40 PM
F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC17_29530.dgn

150 100 50 0 50 100 150

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 3.55 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

155+00.00
F.G.= 2125.70

CUT AREA = 3.65 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

154+00.00
F.G.= 2127.72

CUT AREA = 3.88 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

153+00.00
F.G.= 2129.78

CUT AREA = 3.56 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

152+00.00
F.G.= 2131.80

CUT AREA = 3.78 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

151+00.00
F.G.= 2133.91

CUT AREA = 3.53 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

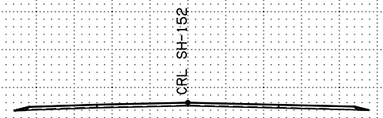
150+00.00
F.G.= 2135.89

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X018

150 100 50 0 50 100 150

CUT AREA = 3.72 S.F.
FILL AREA = 0.00 S.F.

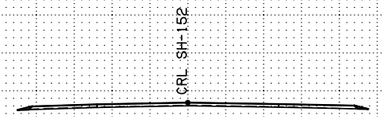
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



161+00.00
F.G.= 2117.97

CUT AREA = 3.78 S.F.
FILL AREA = 0.00 S.F.

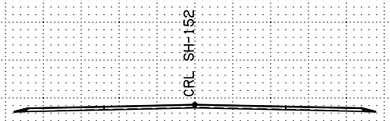
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



160+00.00
F.G.= 2118.40

CUT AREA = 3.14 S.F.
FILL AREA = 0.00 S.F.

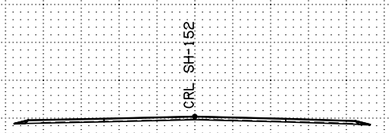
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



159+00.00
F.G.= 2119.09

CUT AREA = 3.71 S.F.
FILL AREA = 0.00 S.F.

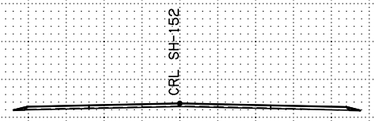
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



158+00.00
F.G.= 2120.18

CUT AREA = 3.40 S.F.
FILL AREA = 0.03 S.F.

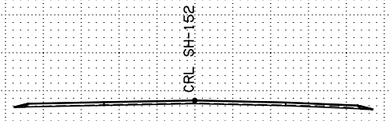
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



157+00.00
F.G.= 2121.80

CUT AREA = 4.12 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



156+00.00
F.G.= 2123.68

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X019

150 100 50 0 50 100 150

CUT AREA = 0.00 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

165+76.11
BEGIN BRIDGE EXCEPTION
F.G.= 2115.09

CUT AREA = 6.08 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

℄ SH-152

CRL SH-152

165+00.00
F.G.= 2115.69

CUT AREA = 3.97 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

℄ SH-152

CRL SH-152

164+00.00
F.G.= 2116.22

CUT AREA = 4.67 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

℄ SH-152

CRL SH-152

163+00.00
F.G.= 2116.79

CUT AREA = 6.32 S.F.
FILL AREA = 0.02 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

℄ SH-152

CRL SH-152

162+00.00
F.G.= 2117.36

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X020

7/27/2022 12:18:45 PM
F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC20_29530.dgn

150 100 50 0 50 100 150

CUT AREA = 6.60 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

173+00.00
F.G.= 2111.92

CUT AREA = 6.12 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

172+00.00
F.G.= 2112.32

CUT AREA = 4.96 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152

℄ SH-152

171+00.00
F.G.= 2112.78

CUT AREA = 5.77 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

EXIGAS U/E
CRL SH-152

℄ SH-152

170+00.00
F.G.= 2113.28

CUT AREA = 0.00 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

169+24.24
END BRIDGE EXCEPTION
F.G.= 2113.59

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X021

7/27/2022 12:18:47 PM
F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC2L29530.dgn

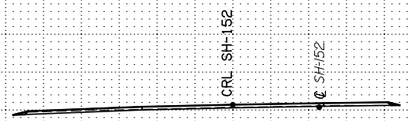
150 100 50 0 50 100 150

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 5.53 S.F.
FILL AREA = 0.00 S.F.

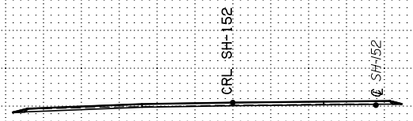
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



178+00.00
F.G.= 2110.67

CUT AREA = 5.93 S.F.
FILL AREA = 0.00 S.F.

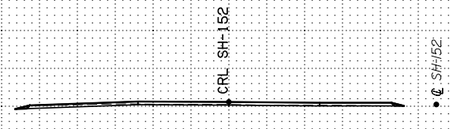
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



177+00.00
F.G.= 2110.44

CUT AREA = 5.73 S.F.
FILL AREA = 0.00 S.F.

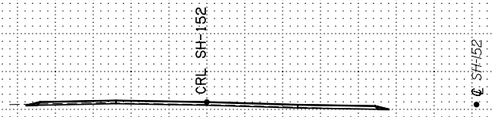
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



176+00.00
F.G.= 2110.54

CUT AREA = 4.27 S.F.
FILL AREA = 0.00 S.F.

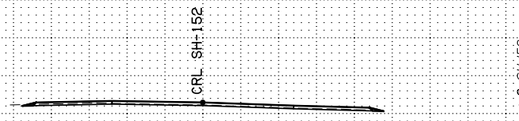
CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



175+00.00
F.G.= 2110.94

CUT AREA = 5.25 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.



174+00.00
F.G.= 2111.44

2125 2120 2115 2110 2105 2100 2095

150 100 50 0 50 100 150

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X022

7/27/2022

12:48:50 PM

F:\Projects\0l5-0552\40-Design\Microstation\SH-152\DGN\C\XSEC23_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 4.46 S.F.
FILL AREA = 0.08 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

EX.WATER U/E

EX.WATER U/E

℄ SURVEY
/CRL SH-152

° EX.FIBER OPTIC

° EX.WATER LINE (SIZE UNK)

182+00.00
F.G.= 2112.42

CUT AREA = 4.85 S.F.
FILL AREA = 0.21 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

EX.WATER U/E

EX.WATER U/E

CRL SH-152
℄ SH-152

° EX.FIBER OPTIC

° EX.WATER LINE (SIZE UNK)

ft. ELEV.= 2107.39

EX.5'X3' RCB

ft. ELEV.= 2104.07

181+48.59
EXISTING 5'X3' RCB
F.G.= 2112.34

CUT AREA = 4.59 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152
℄ SH-152

181+00.00
F.G.= 2112.19

CUT AREA = 3.87 S.F.
FILL AREA = 0.09 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152
℄ SH-152

180+00.00
F.G.= 2111.74

CUT AREA = 5.16 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

CRL SH-152
SH-152

179+00.00
F.G.= 2111.23

2125 2120 2115 2110 2105 2100 2095

150 100 50 0 50 100 150

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X023

7/27/2022

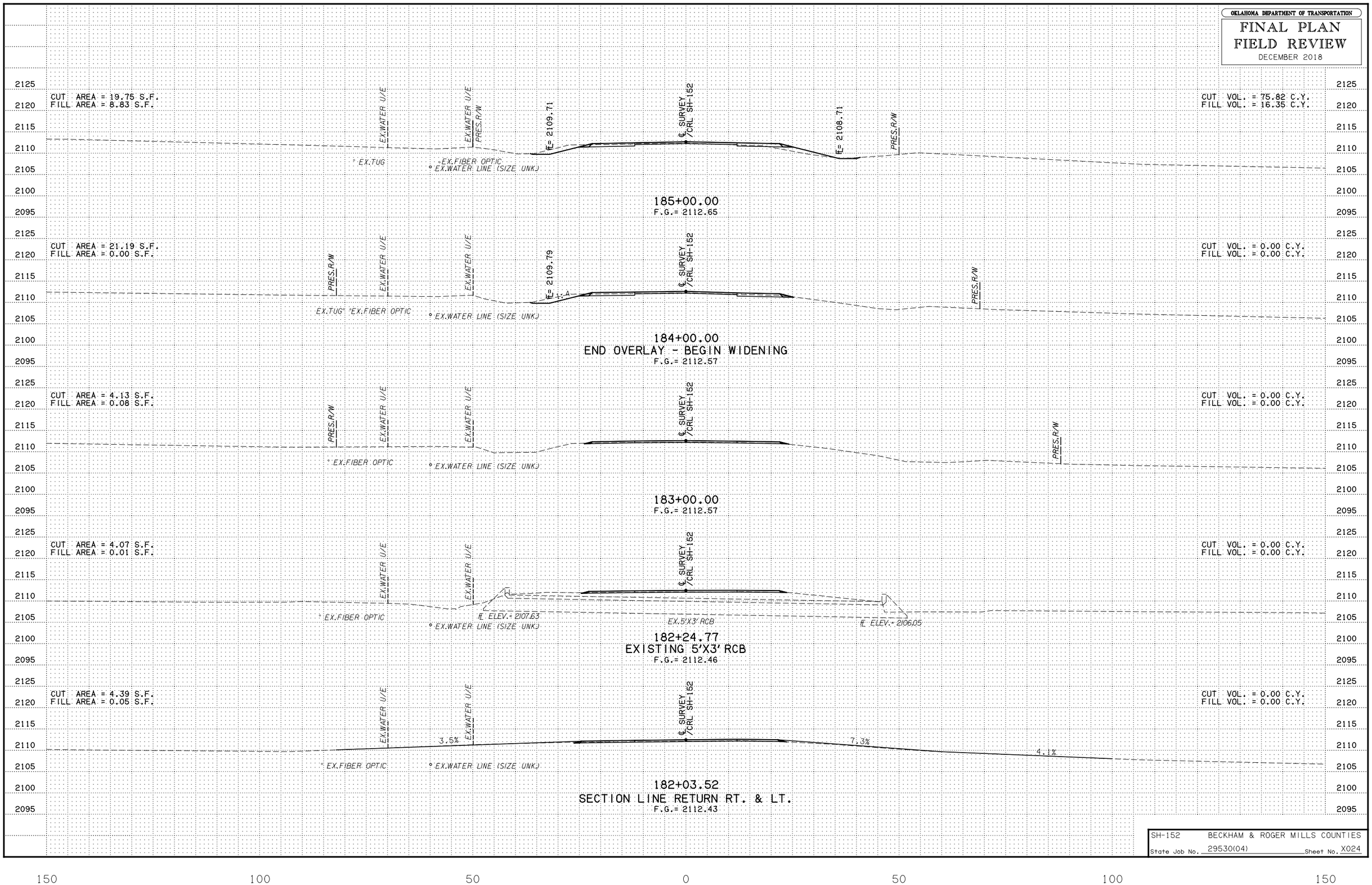
12:18:52 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CVSEC24_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



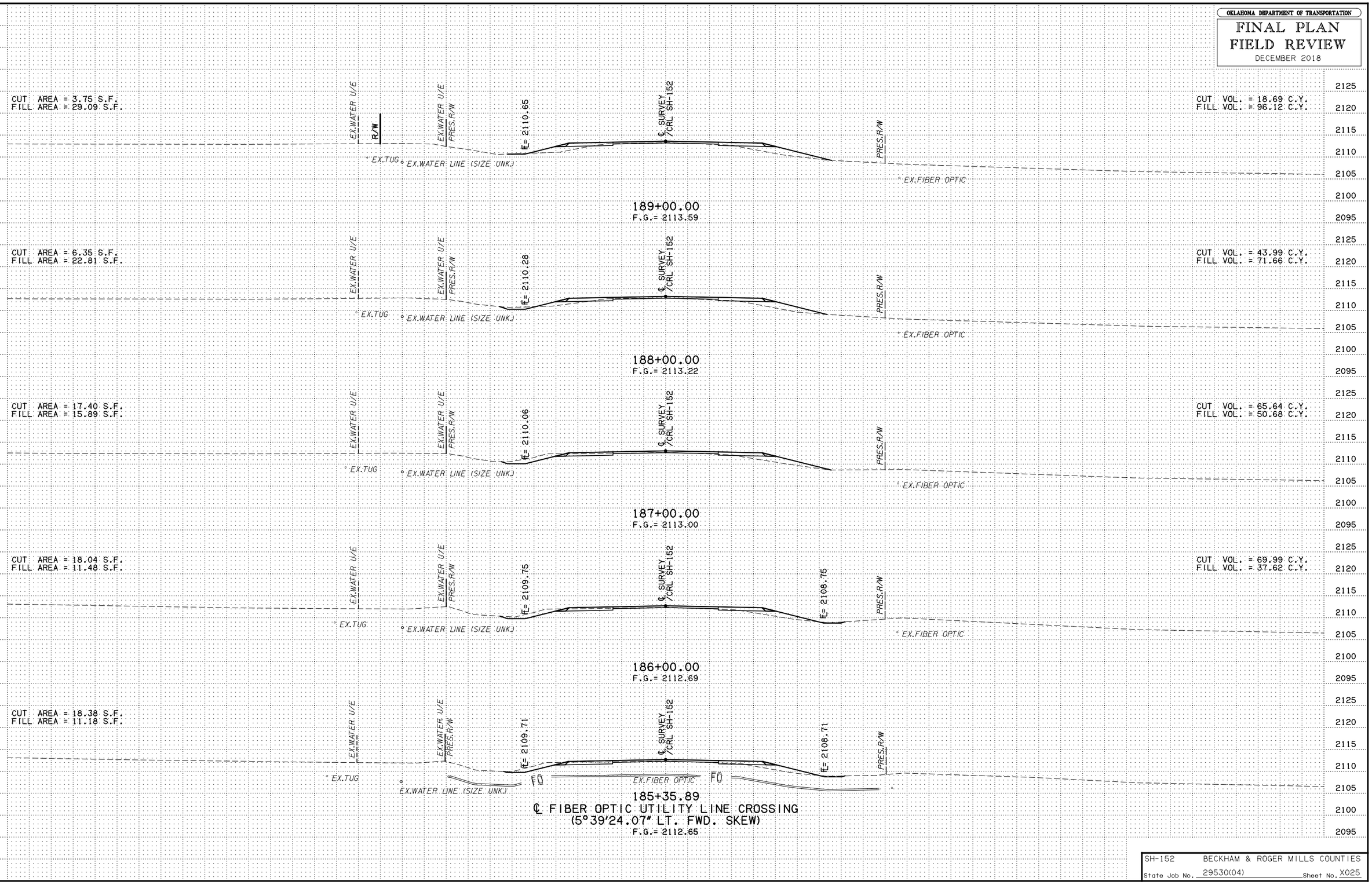
SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X024

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X025

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 6.72 S.F.
FILL AREA = 28.55 S.F.

CUT VOL. = 22.19 C.Y.
FILL VOL. = 111.67 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC
℄= 2112.95

193+00.00
F.G.= 2115.89

CUT AREA = 5.27 S.F.
FILL AREA = 31.75 S.F.

CUT VOL. = 40.35 C.Y.
FILL VOL. = 127.47 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC
℄= 2112.00

192+00.00
F.G.= 2115.07

CUT AREA = 16.52 S.F.
FILL AREA = 37.08 S.F.

CUT VOL. = 25.49 C.Y.
FILL VOL. = 148.06 C.Y.

EX.WATER U/E
R/W
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC
℄= 2110.31
1:.5

191+00.00
F.G.= 2114.51

CUT AREA = 5.15 S.F.
FILL AREA = 88.84 S.F.

CUT VOL. = 11.20 C.Y.
FILL VOL. = 79.56 C.Y.

EX.WATER U/E
R/W
EX.WATER U/E
PRES.R/W
③
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC
5.8%
1:2
10.2%
1:2
℄ ELEV. = 2109.29
℄ ELEV.= 2109.24
EX.6'X3' RCB
℄ ELEV.= 2109.07
℄ ELEV. = 2109.02

190+36.51
EXTEND EXISTING 6'X3' RCB
F.G.= 2114.24

CUT AREA = 11.40 S.F.
FILL AREA = 28.83 S.F.

CUT VOL. = 28.06 C.Y.
FILL VOL. = 107.27 C.Y.

EX.WATER U/E
R/W
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC
℄= 2111.11

190+00.00
F.G.= 2114.05

SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X026

7/27/2022 12:18:55 PM
F:\Projects\05-0552\40-Design\Microstation\SH-152\00NC\XSEC26_29530.dgn

150 100 50 0 50 100 150

7/27/2022

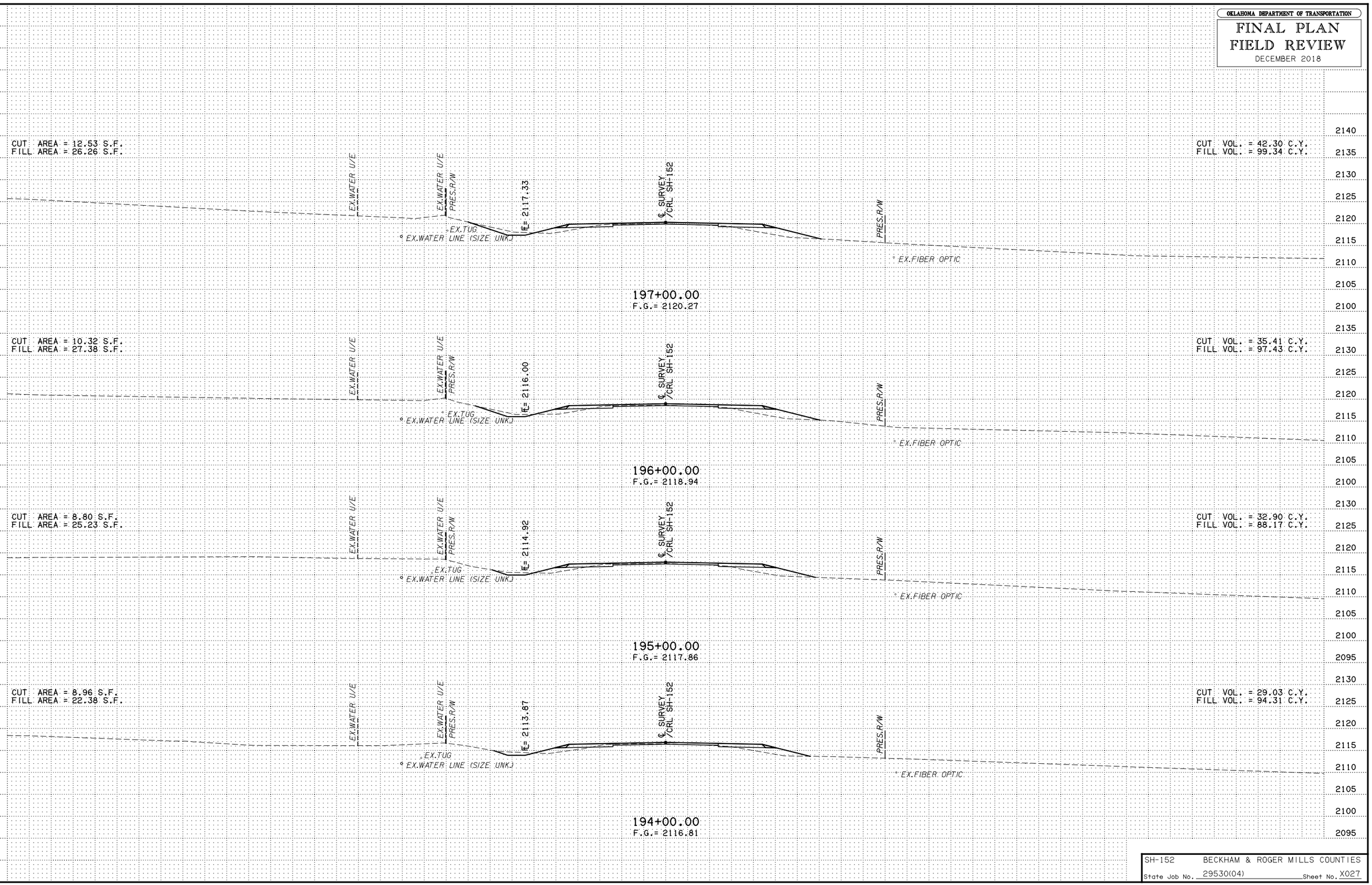
12:18:57 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC27.29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

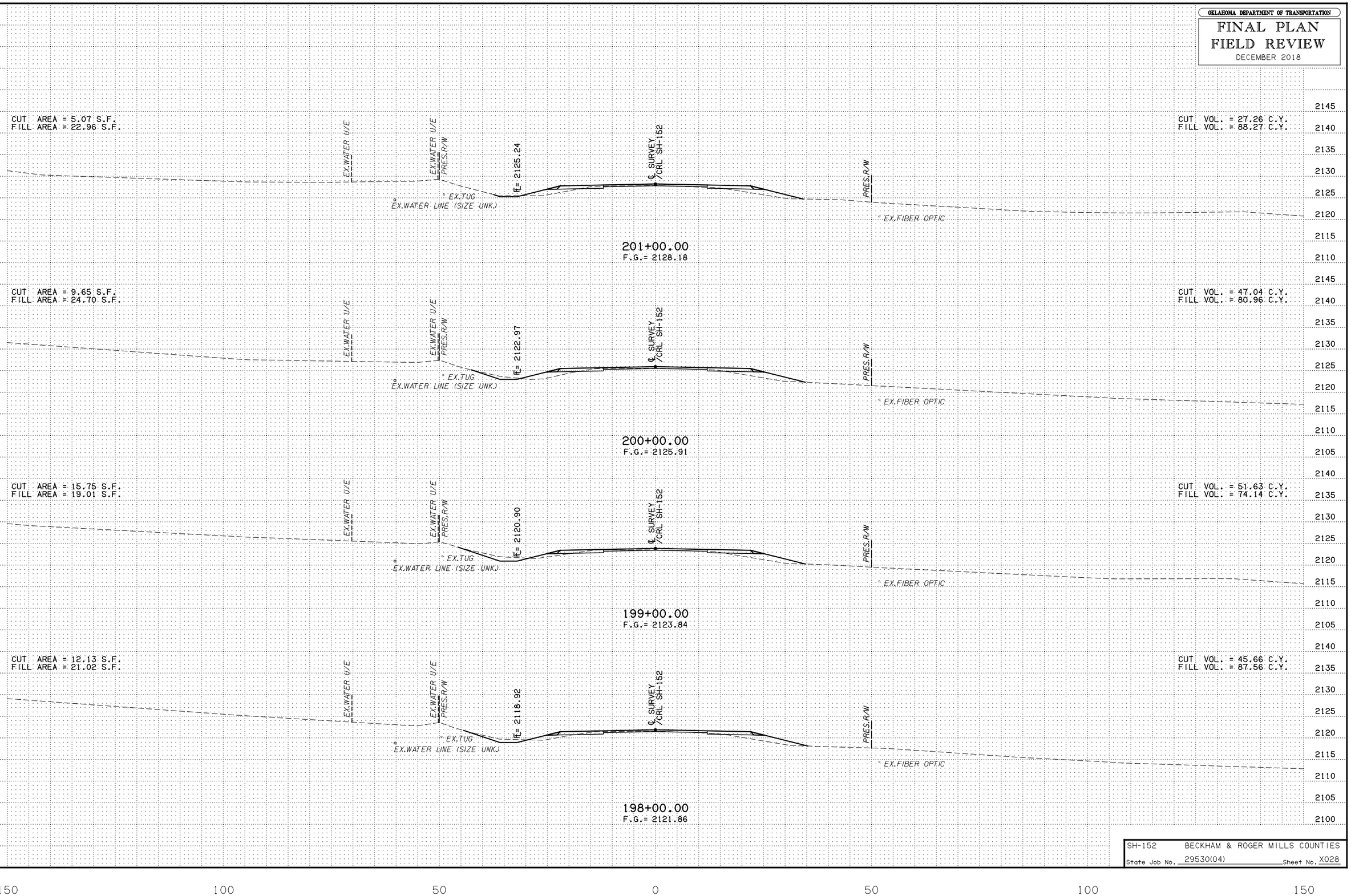


SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X027

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X028

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

205+00.00

F.G.= 2131.62

CUT AREA = 24.05 S.F.
FILL AREA = 6.03 S.F.

CUT VOL. = 83.07 C.Y.
FILL VOL. = 25.73 C.Y.

EX.WATER LINE (SIZE UNK.)
EX.TUG
EX.WATER U/E
EX.WATER U/E
PRES.R/W
1:2.5
FE= 2128.68
℄ SURVEY /CRL SH-152
FE= 2129.18
PRES.R/W
EX.FIBER OPTIC

204+00.00

F.G.= 2131.25

CUT AREA = 20.81 S.F.
FILL AREA = 7.86 S.F.

CUT VOL. = 67.61 C.Y.
FILL VOL. = 41.44 C.Y.

EX.WATER LINE (SIZE UNK.)
EX.TUG
EX.WATER U/E
EX.WATER U/E
PRES.R/W
1:2.5
FE= 2128.31
℄ SURVEY /CRL SH-152
FE= 2128.81
PRES.R/W
EX.FIBER OPTIC

203+00.00

F.G.= 2130.74

CUT AREA = 15.70 S.F.
FILL AREA = 14.52 S.F.

CUT VOL. = 51.78 C.Y.
FILL VOL. = 47.92 C.Y.

EX.WATER LINE (SIZE UNK.)
EX.TUG
EX.WATER U/E
EX.WATER U/E
PRES.R/W
1:2.5
FE= 2127.80
℄ SURVEY /CRL SH-152
FE= 2127.80
PRES.R/W
EX.FIBER OPTIC

202+00.00

F.G.= 2129.84

CUT AREA = 12.26 S.F.
FILL AREA = 11.36 S.F.

CUT VOL. = 32.09 C.Y.
FILL VOL. = 63.56 C.Y.

EX.WATER LINE (SIZE UNK.)
EX.TUG
EX.WATER U/E
EX.WATER U/E
PRES.R/W
1:2.5
FE= 2126.90
℄ SURVEY /CRL SH-152
FE= 2126.90
PRES.R/W
EX.FIBER OPTIC

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X029

7/27/2022 12:19:00 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC29_29530.dgn

150 100 50 0 50 100 150

7/27/2022

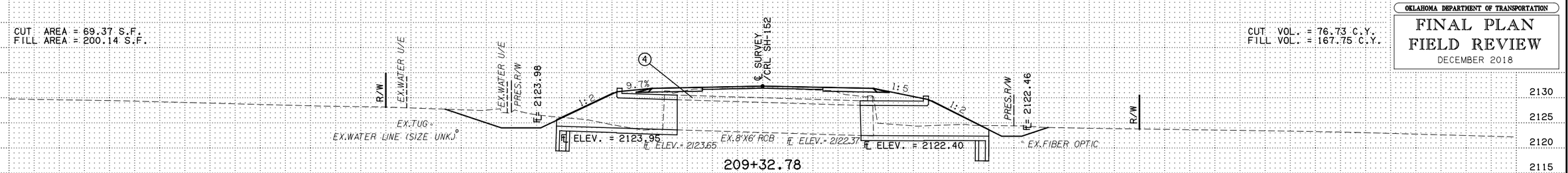
12:19:02 PM

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 69.37 S.F.
FILL AREA = 200.14 S.F.

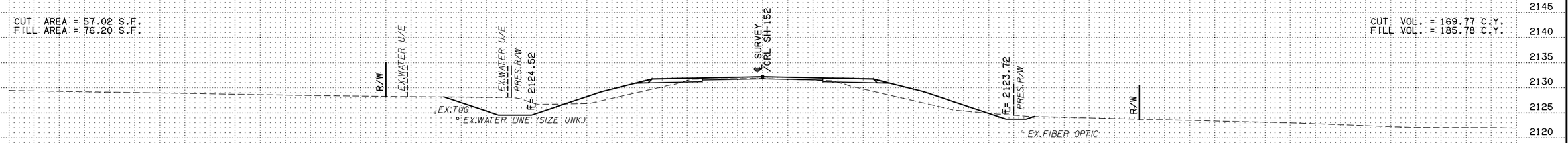
CUT VOL. = 76.73 C.Y.
FILL VOL. = 167.75 C.Y.



209+32.78
EXTEND EXISTING 8'X6' RCB
F.G.= 2132.28

CUT AREA = 57.02 S.F.
FILL AREA = 76.20 S.F.

CUT VOL. = 169.77 C.Y.
FILL VOL. = 185.78 C.Y.



209+00.00
F.G.= 2132.14

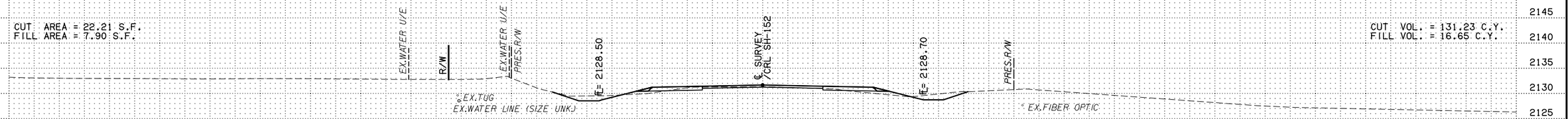
CUT AREA = 34.65 S.F.
FILL AREA = 24.11 S.F.

CUT VOL. = 105.30 C.Y.
FILL VOL. = 59.28 C.Y.

208+00.00
F.G.= 2131.90

CUT AREA = 22.21 S.F.
FILL AREA = 7.90 S.F.

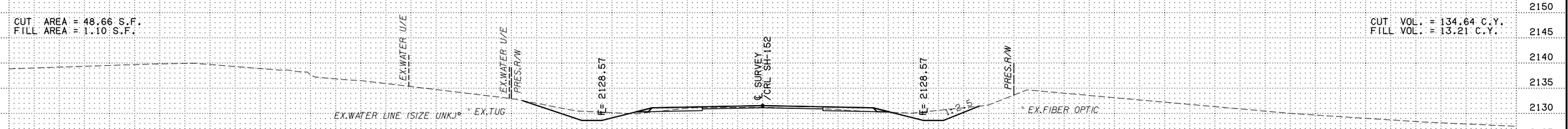
CUT VOL. = 131.23 C.Y.
FILL VOL. = 16.65 C.Y.



207+00.00
F.G.= 2131.64

CUT AREA = 48.66 S.F.
FILL AREA = 1.10 S.F.

CUT VOL. = 134.64 C.Y.
FILL VOL. = 13.21 C.Y.



206+00.00
F.G.= 2131.51

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X030

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\CrXSEC30_29530.dgn

150 100 50 0 50 100 150

7/27/2022

12:19:03 PM

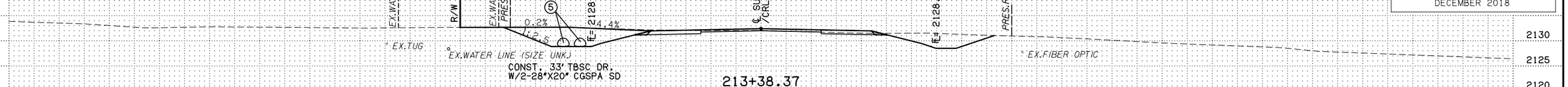
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\XSEC3L29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 123.64 S.F.
FILL AREA = 0.11 S.F.

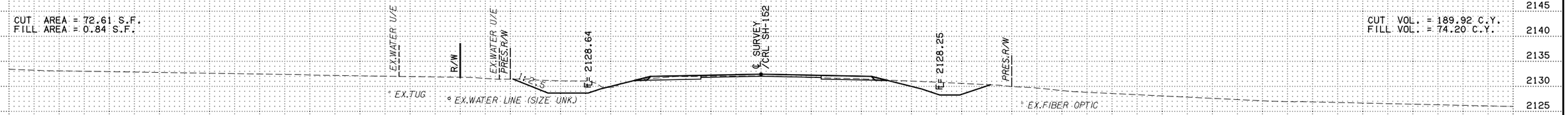
CUT VOL. = 112.26 C.Y.
FILL VOL. = 0.54 C.Y.



213+38.37
CONST. TBSC DRIVE LT.
F.G.= 2132.39

CUT AREA = 72.61 S.F.
FILL AREA = 0.84 S.F.

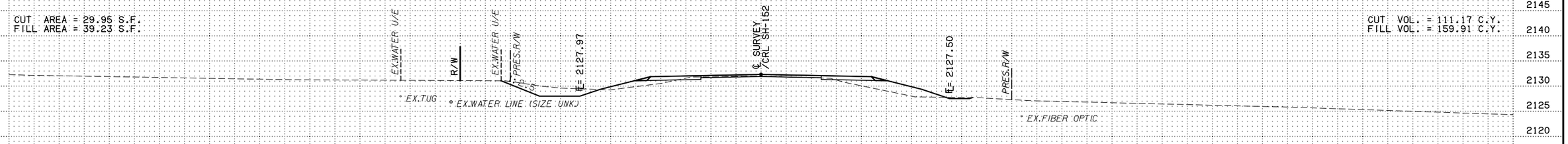
CUT VOL. = 189.92 C.Y.
FILL VOL. = 74.20 C.Y.



213+00.00
F.G.= 2132.40

CUT AREA = 29.95 S.F.
FILL AREA = 39.23 S.F.

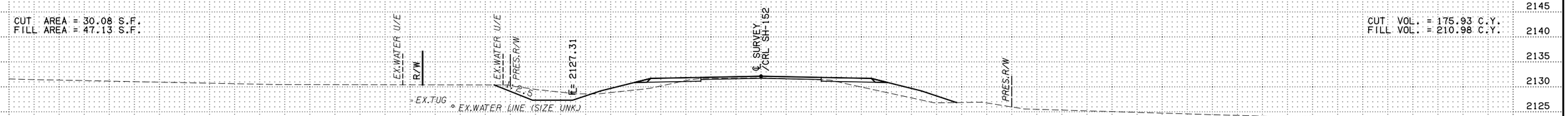
CUT VOL. = 111.17 C.Y.
FILL VOL. = 159.91 C.Y.



212+00.00
F.G.= 2132.30

CUT AREA = 30.08 S.F.
FILL AREA = 47.13 S.F.

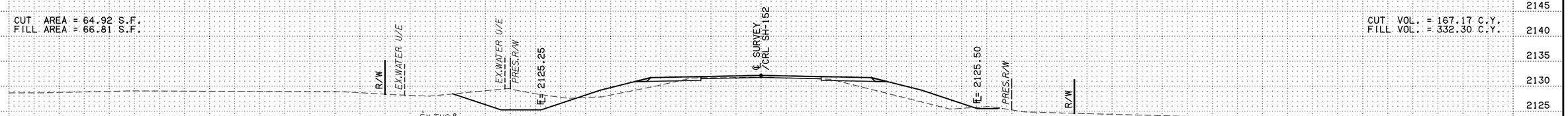
CUT VOL. = 175.93 C.Y.
FILL VOL. = 210.98 C.Y.



211+00.00
F.G.= 2132.11

CUT AREA = 64.92 S.F.
FILL AREA = 66.81 S.F.

CUT VOL. = 167.17 C.Y.
FILL VOL. = 332.30 C.Y.



210+00.00
F.G.= 2132.15

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X031

150 100 50 0 50 100 150

7/27/2022

12:19:05 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CX\SEC32_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

2150 2145 2140 2135 2130 2125 2120 2115

CUT AREA = 18.33 S.F.
FILL AREA = 17.50 S.F.

CUT VOL. = 66.27 C.Y.
FILL VOL. = 65.30 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
FE= 2130.75
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

217+00.00
F.G.= 2133.69

CUT AREA = 17.46 S.F.
FILL AREA = 17.76 S.F.

CUT VOL. = 67.03 C.Y.
FILL VOL. = 67.73 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
FE= 2130.03
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

216+00.00
F.G.= 2132.97

CUT AREA = 18.74 S.F.
FILL AREA = 18.81 S.F.

CUT VOL. = 91.58 C.Y.
FILL VOL. = 45.88 C.Y.

EX.WATER U/E
R/W
EX.WATER U/E
PRES.R/W
1:2.5
℄ SURVEY /CRL SH-152
PRES.R/W
FE= 2129.96
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

215+00.00
F.G.= 2132.82

CUT AREA = 30.71 S.F.
FILL AREA = 5.97 S.F.

CUT VOL. = 167.28 C.Y.
FILL VOL. = 6.24 C.Y.

EX.WATER U/E
R/W
EX.WATER U/E
PRES.R/W
1:2.5
℄ SURVEY /CRL SH-152
FE= 2129.30
FE= 2129.00
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

214+00.00
F.G.= 2132.52

CUT AREA = 131.02 S.F.
FILL AREA = 0.06 S.F.

CUT VOL. = 62.53 C.Y.
FILL VOL. = 0.04 C.Y.

EX.WATER U/E
R/W
EX.WATER U/E
PRES.R/W
1:2.5
℄ SURVEY /CRL SH-152
2.7%
FE= 2128.93
FE= 2128.58
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC
⑥
CONST. 56' TBSC DR. W/21"X15" CGSPA SD

213+41.65
CONST. TBSC DRIVE RT.
F.G.= 2132.38

150 100 50 0 50 100 150

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X032

7/27/2022

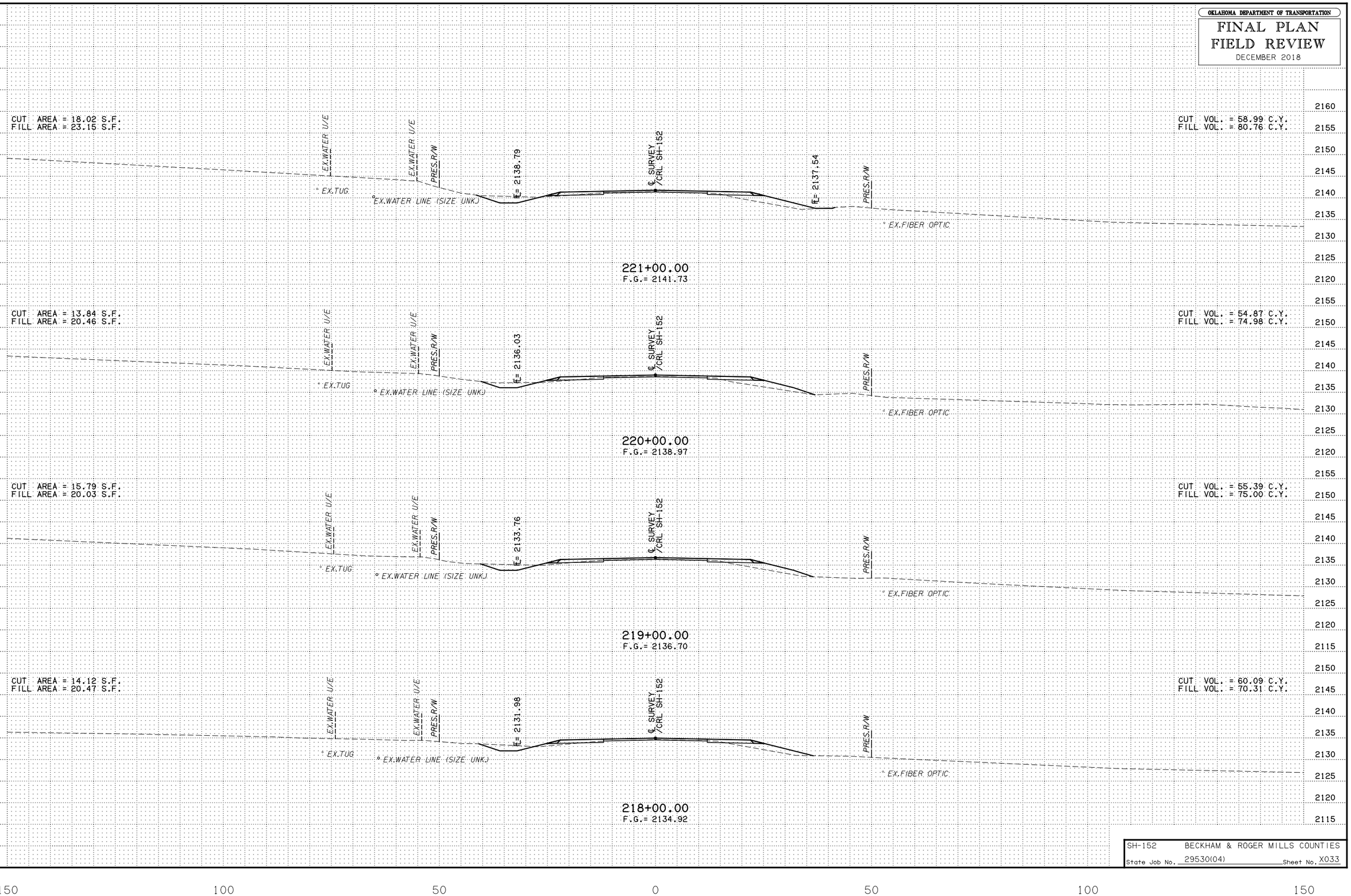
12:19:07 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CrXSEC33_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X033

7/27/2022

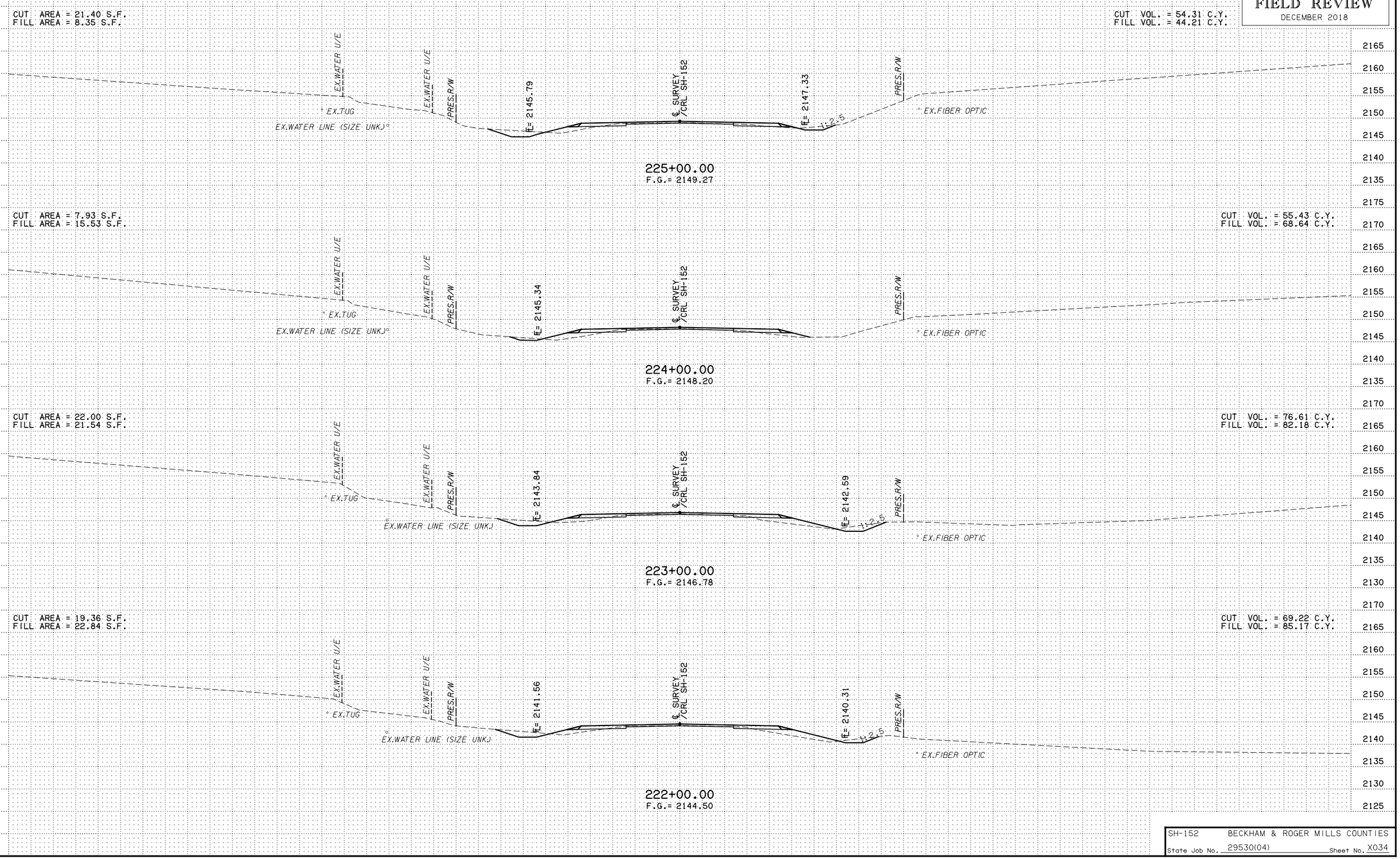
12:19:08 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\XSEC34_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X034

7/27/2022

12:9:10 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC35_29530.dgn

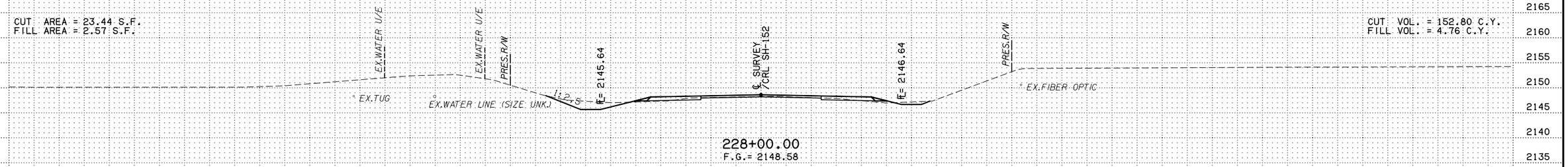
OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 23.44 S.F.
FILL AREA = 2.57 S.F.

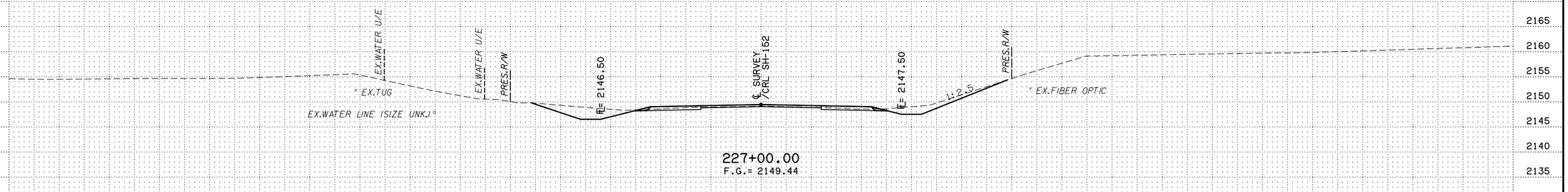
CUT VOL. = 152.80 C.Y.
FILL VOL. = 4.76 C.Y.



228+00.00
F.G.= 2148.58

CUT AREA = 59.07 S.F.
FILL AREA = 0.00 S.F.

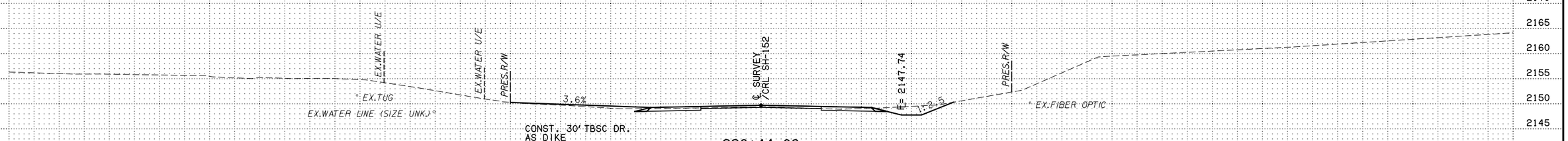
CUT VOL. = 91.46 C.Y.
FILL VOL. = 7.37 C.Y.



227+00.00
F.G.= 2149.44

CUT AREA = 29.27 S.F.
FILL AREA = 7.12 S.F.

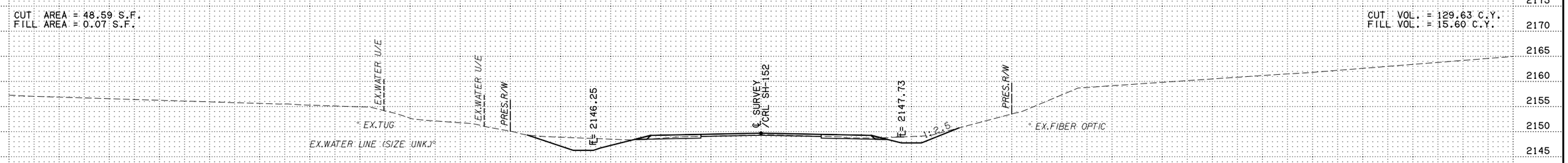
CUT VOL. = 63.57 C.Y.
FILL VOL. = 5.88 C.Y.



226+44.09
CONST. TBSC DRIVE LT.
F.G.= 2149.68

CUT AREA = 48.59 S.F.
FILL AREA = 0.07 S.F.

CUT VOL. = 129.63 C.Y.
FILL VOL. = 15.60 C.Y.



226+00.00
F.G.= 2149.67

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X035

150 100 50 0 50 100 150

7/27/2022

12:19:12 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\00N\C\XSEC36_29530.dgn

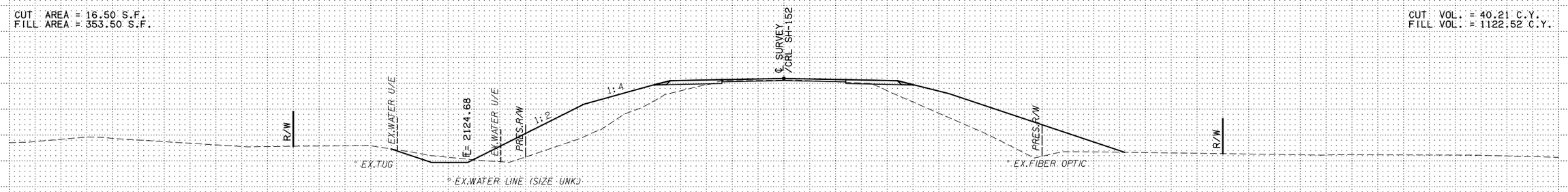
OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 16.50 S.F.
FILL AREA = 353.50 S.F.

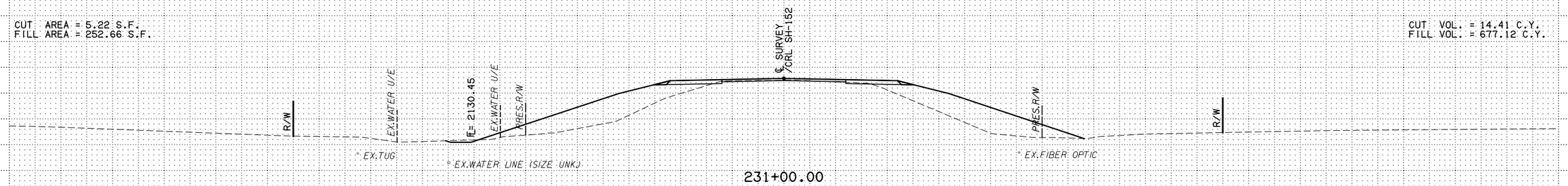
CUT VOL. = 40.21 C.Y.
FILL VOL. = 1122.52 C.Y.



232+00.00
F.G.= 2140.91

CUT AREA = 5.22 S.F.
FILL AREA = 252.66 S.F.

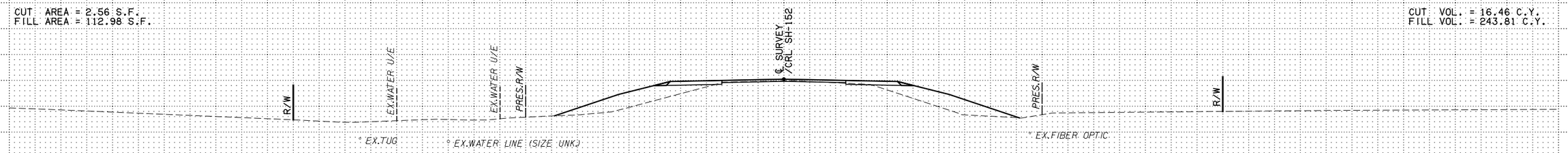
CUT VOL. = 14.41 C.Y.
FILL VOL. = 677.12 C.Y.



231+00.00
F.G.= 2142.82

CUT AREA = 2.56 S.F.
FILL AREA = 112.98 S.F.

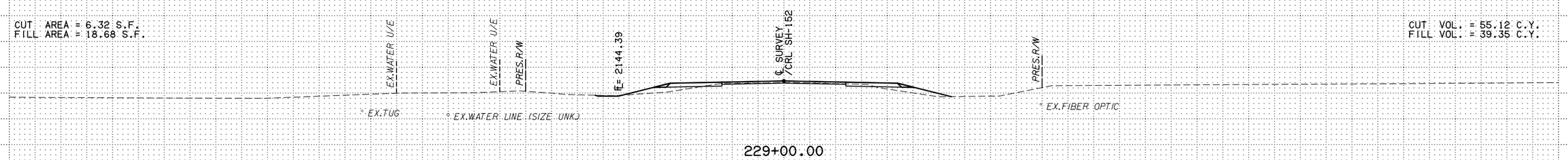
CUT VOL. = 16.46 C.Y.
FILL VOL. = 243.81 C.Y.



230+00.00
F.G.= 2145.20

CUT AREA = 6.32 S.F.
FILL AREA = 18.68 S.F.

CUT VOL. = 55.12 C.Y.
FILL VOL. = 39.35 C.Y.



229+00.00
F.G.= 2147.33

SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X036

150 100 50 0 50 100 150

7/27/2022

12:19:13 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC37_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 124.70 S.F.
FILL AREA = 87.95 S.F.

CUT VOL. = 195.52 C.Y.
FILL VOL. = 205.41 C.Y.

EX.WATER U/E
EX.WATER U/E
FL= 2132.50
℄ SURVEY /CRL SH-152
3.5%
7.6%
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.6'X3' RCB
EX.FIBER OPTIC
8
CONST. 20' ASPH. SL RETURN W/2-42" RCP SD LT
CONST. 21' ASPH. SL RETURN AS DIKE

234+68.98
CONST. SECTION LINE RETURN LT. & RT.
F.G.= 2139.05

CUT AREA = 28.37 S.F.
FILL AREA = 72.85 S.F.

CUT VOL. = 111.86 C.Y.
FILL VOL. = 560.60 C.Y.

R/W
EX.WATER U/E
EX.WATER U/E
PRES.R/W
FL= 2131.65
℄ SURVEY /CRL SH-152
1:3
PRES.R/W
R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

234+00.00
F.G.= 2139.07

CUT AREA = 32.04 S.F.
FILL AREA = 229.87 S.F.

CUT VOL. = 99.86 C.Y.
FILL VOL. = 1271.90 C.Y.

R/W
EX.WATER U/E
EX.WATER U/E
FL= 2127.20
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

233+00.00
F.G.= 2139.74

CUT AREA = 35.12 S.F.
FILL AREA = 625.56 S.F.

CUT VOL. = 18.84 C.Y.
FILL VOL. = 357.36 C.Y.

R/W
EX.WATER U/E
EX.WATER U/E
PRES.R/W
1:2
7
1:4
℄ SURVEY /CRL SH-152
1:4
PRES.R/W
1:2
R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
FL ELEV.= 2123.65
EX.10'X9' RCB
FL ELEV.= 2123.09
EX.FIBER OPTIC
FL ELEV. = 2123.84
FL ELEV. = 2122.95

232+19.71
EXTEND EXISTING 10'X9' RCB
F.G.= 2140.64

SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X037

150 100 50 0 50 100 150

7/27/2022

12:19:15 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC38_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 27.69 S.F.
FILL AREA = 14.86 S.F.

CUT VOL. = 178.82 C.Y.
FILL VOL. = 45.06 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC
E= 2137.03
E= 2137.57
1.5:1

237+00.00
F.G.= 2140.51

CUT AREA = 68.88 S.F.
FILL AREA = 9.47 S.F.

CUT VOL. = 291.45 C.Y.
FILL VOL. = 35.46 C.Y.

R/W
EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC
E= 2135.45
E= 2136.80

236+00.00
F.G.= 2139.74

CUT AREA = 119.77 S.F.
FILL AREA = 13.48 S.F.

CUT VOL. = 66.91 C.Y.
FILL VOL. = 6.75 C.Y.

R/W
EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
R/W
TUG
EX.WATER LINE (SIZE UNK)
EX.TUG
EX.FIBER OPTIC
E= 2133.22
E= 2136.28

235+16.57
℄ TELEPHONE UNDERGROUND UTILITY LINE CROSSING
F.G.= 2139.22

CUT AREA = 98.22 S.F.
FILL AREA = 8.51 S.F.

CUT VOL. = 128.06 C.Y.
FILL VOL. = 55.41 C.Y.

R/W
EX.WATER U/E
EX.WATER U/E
℄ SURVEY /CRL SH-152
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC
EX.TUG
E= 2132.88
E= 2136.17

235+00.00
F.G.= 2139.11

SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X038

150 100 50 0 50 100 150

7/27/2022

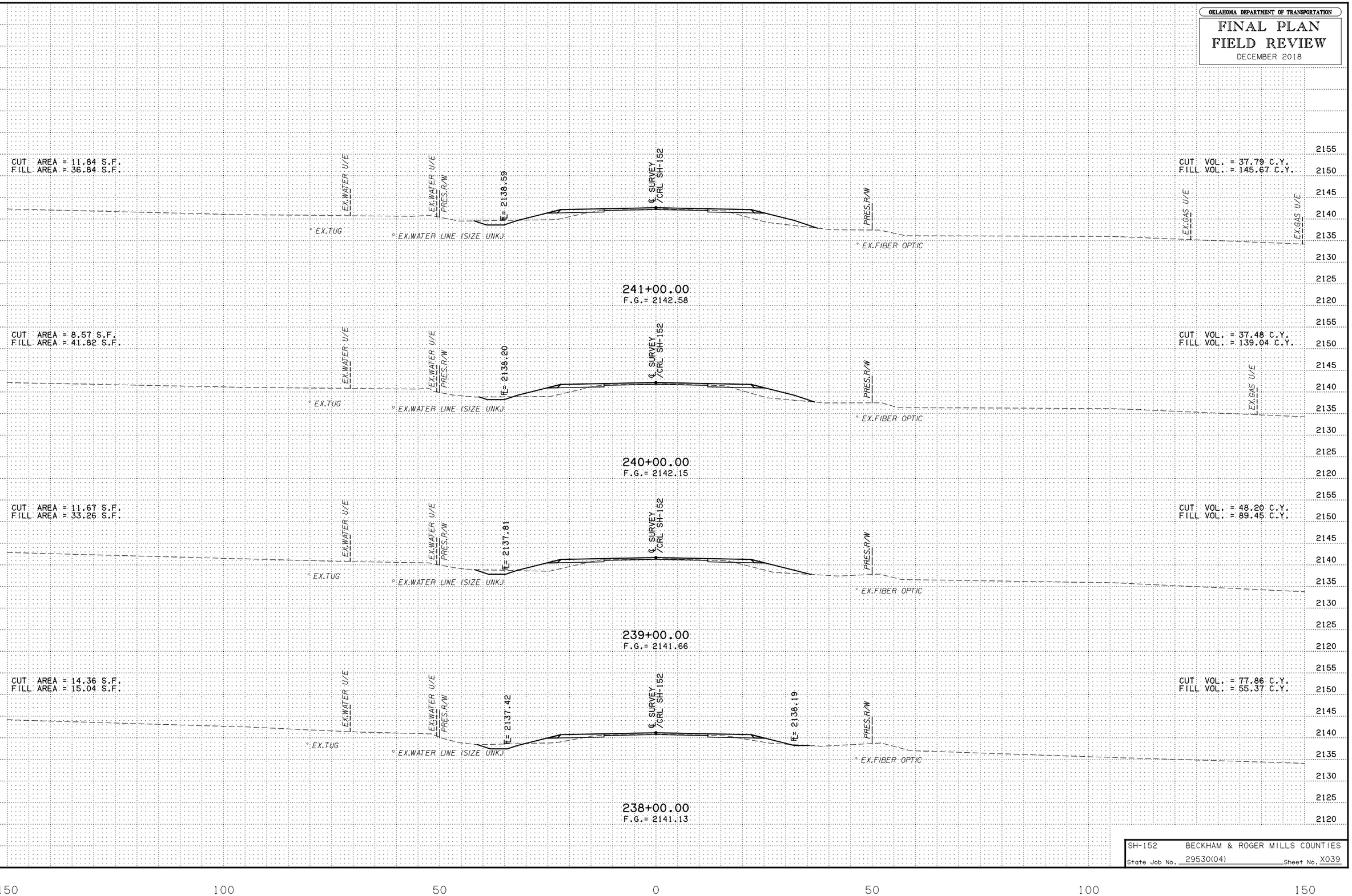
12:19:17 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC39_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X039

7/27/2022

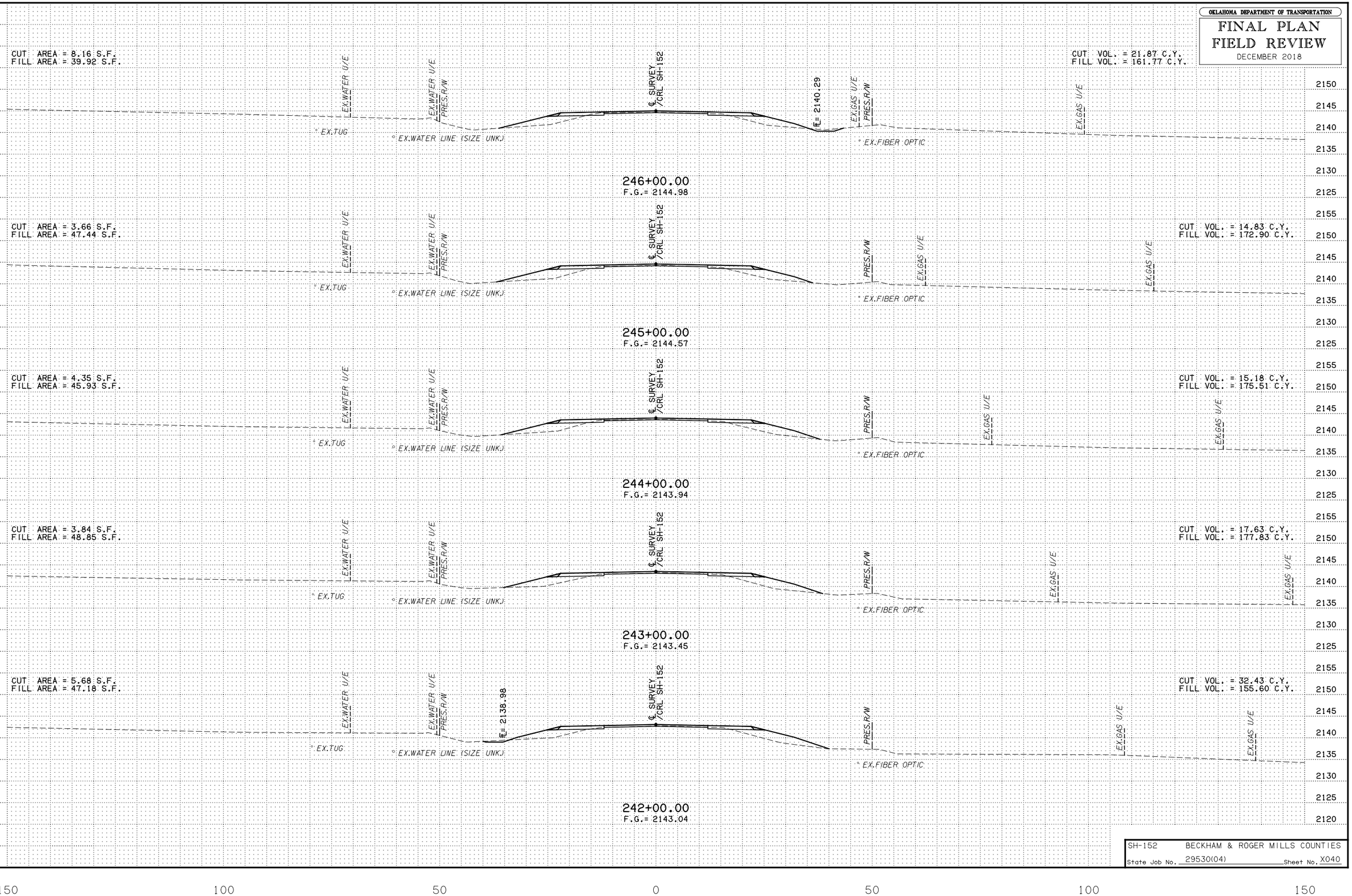
12:19:19 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\CrXSEC40_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X040

7/27/2022

12:19:20 PM

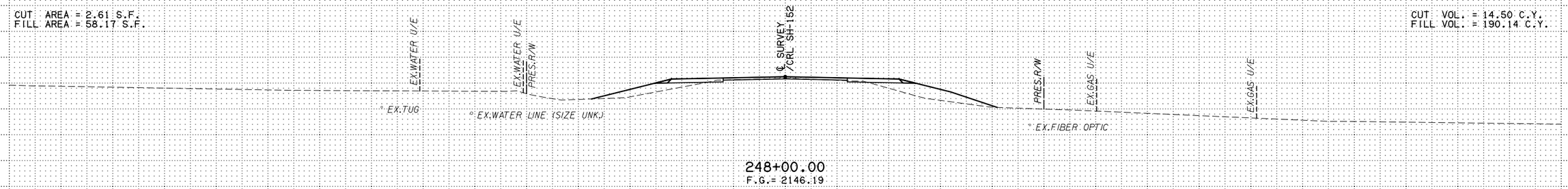
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\XSEC4L_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

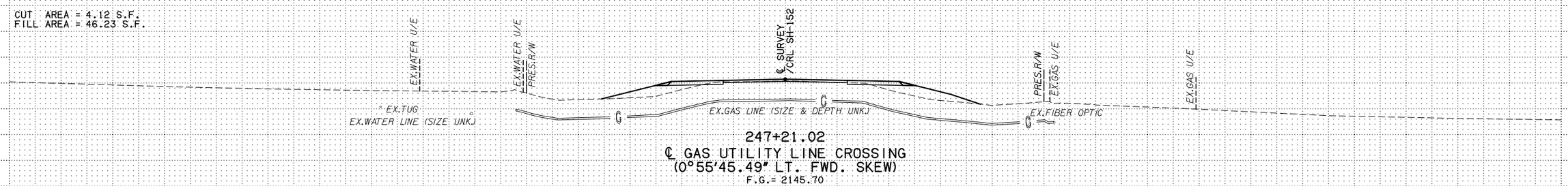
CUT AREA = 2.61 S.F.
FILL AREA = 58.17 S.F.

CUT VOL. = 14.50 C.Y.
FILL VOL. = 190.14 C.Y.



248+00.00
F.G.= 2146.19

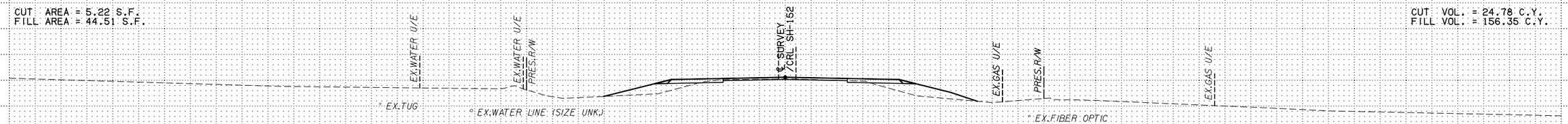
CUT AREA = 4.12 S.F.
FILL AREA = 46.23 S.F.



247+21.02
℄ GAS UTILITY LINE CROSSING
(0°55'45.49" LT. FWD. SKEW)
F.G.= 2145.70

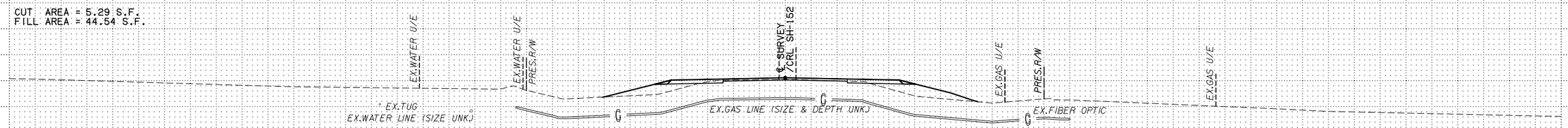
CUT AREA = 5.22 S.F.
FILL AREA = 44.51 S.F.

CUT VOL. = 24.78 C.Y.
FILL VOL. = 156.35 C.Y.



247+00.00
F.G.= 2145.56

CUT AREA = 5.29 S.F.
FILL AREA = 44.54 S.F.



246+95.53
℄ GAS UTILITY LINE CROSSING
(2°16'21.90" RT. FWD. SKEW)
F.G.= 2145.53

SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X041

150 100 50 0 50 100 150

7/27/2022

12:19:22 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC42_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

252+00.00
F.G.= 2146.85

CUT AREA = 6.78 S.F.
FILL AREA = 15.75 S.F.

CUT VOL. = 23.75 C.Y.
FILL VOL. = 128.55 C.Y.

251+00.00
F.G.= 2147.10

CUT AREA = 6.05 S.F.
FILL AREA = 53.67 S.F.

CUT VOL. = 17.55 C.Y.
FILL VOL. = 252.05 C.Y.

250+00.00
F.G.= 2147.15

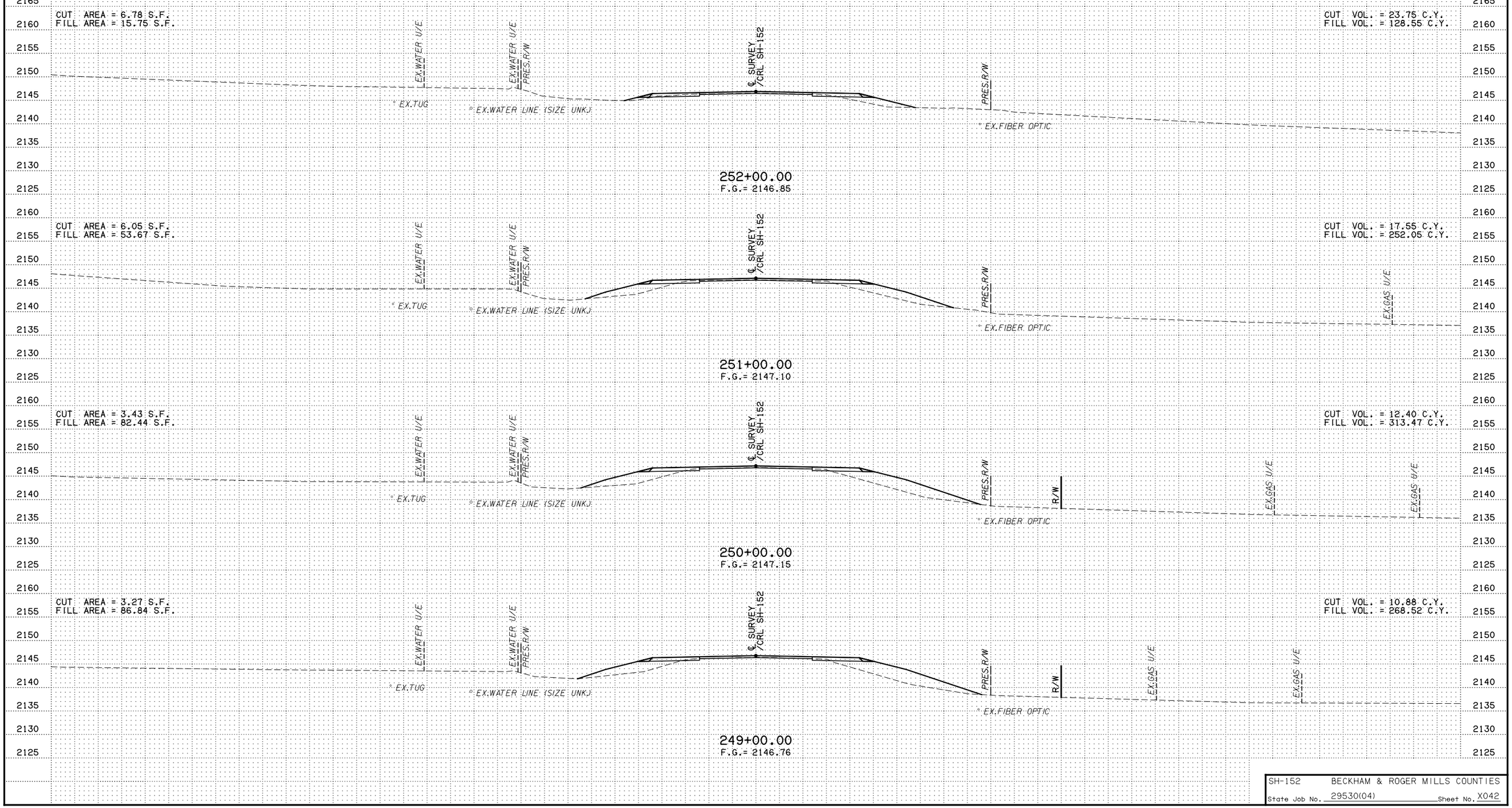
CUT AREA = 3.43 S.F.
FILL AREA = 82.44 S.F.

CUT VOL. = 12.40 C.Y.
FILL VOL. = 313.47 C.Y.

249+00.00
F.G.= 2146.76

CUT AREA = 3.27 S.F.
FILL AREA = 86.84 S.F.

CUT VOL. = 10.88 C.Y.
FILL VOL. = 268.52 C.Y.



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X042

150 100 50 0 50 100 150

7/27/2022

12:19:24 PM

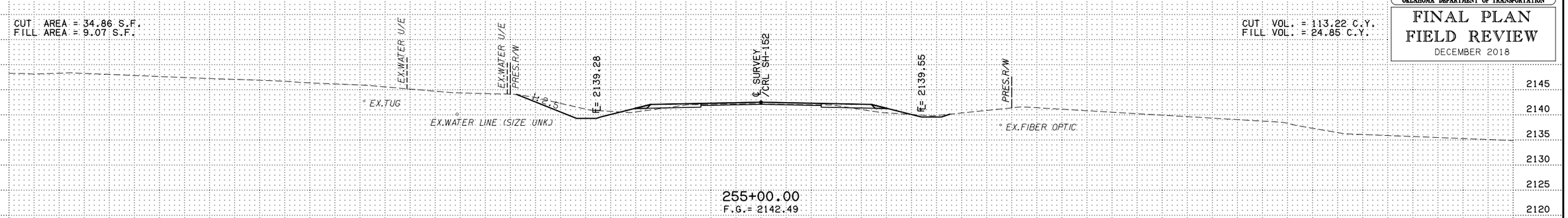
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CrossSec43_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 34.86 S.F.
FILL AREA = 9.07 S.F.

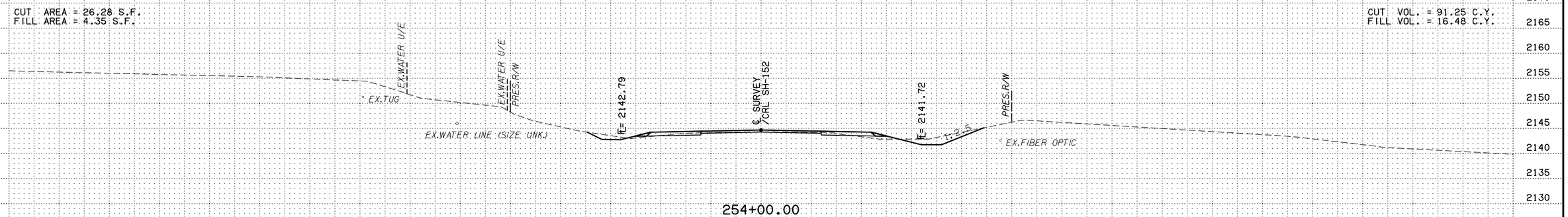
CUT VOL. = 113.22 C.Y.
FILL VOL. = 24.85 C.Y.



255+00.00
F.G.= 2142.49

CUT AREA = 26.28 S.F.
FILL AREA = 4.35 S.F.

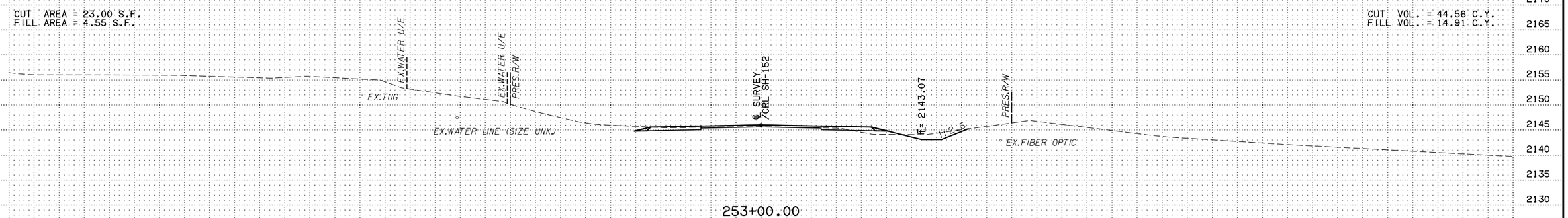
CUT VOL. = 91.25 C.Y.
FILL VOL. = 16.48 C.Y.



254+00.00
F.G.= 2144.66

CUT AREA = 23.00 S.F.
FILL AREA = 4.55 S.F.

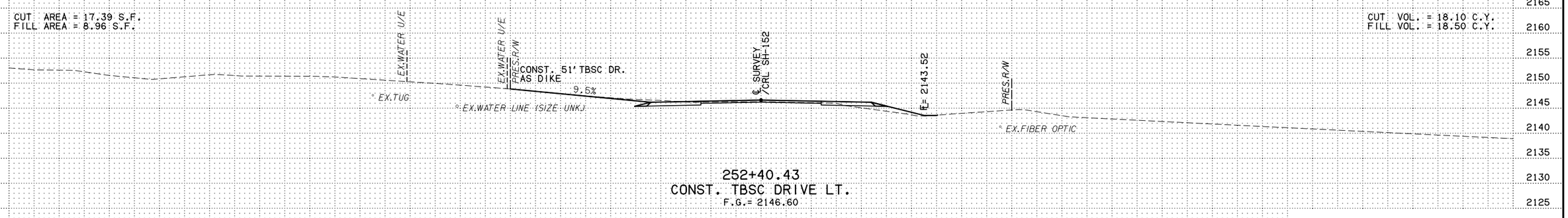
CUT VOL. = 44.56 C.Y.
FILL VOL. = 14.91 C.Y.



253+00.00
F.G.= 2146.01

CUT AREA = 17.39 S.F.
FILL AREA = 8.96 S.F.

CUT VOL. = 18.10 C.Y.
FILL VOL. = 18.50 C.Y.



252+40.43
CONST. TBSC DRIVE LT.
F.G.= 2146.60

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X043

150 100 50 0 50 100 150

7/27/2022

12:19:25 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\CVXSEC44_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 13.50 S.F.
FILL AREA = 66.60 S.F.

CUT VOL. = 34.76 C.Y.
FILL VOL. = 222.70 C.Y.

R/W
EX.WATER U/E
EX.WATER U/E
PRES.R/W
FL= 2124.75
℄ SURVEY /CRL SH-152
FL= 2124.48
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

260+00.00
F.G.= 2130.42

CUT AREA = 5.27 S.F.
FILL AREA = 53.66 S.F.

CUT VOL. = 18.95 C.Y.
FILL VOL. = 213.50 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

259+00.00
F.G.= 2132.21

CUT AREA = 4.96 S.F.
FILL AREA = 61.63 S.F.

CUT VOL. = 21.28 C.Y.
FILL VOL. = 219.36 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

258+00.00
F.G.= 2134.59

CUT AREA = 6.52 S.F.
FILL AREA = 56.83 S.F.

CUT VOL. = 87.14 C.Y.
FILL VOL. = 136.00 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
FL= 2132.25
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

257+00.00
F.G.= 2137.18

CUT AREA = 40.53 S.F.
FILL AREA = 16.61 S.F.

CUT VOL. = 139.62 C.Y.
FILL VOL. = 47.56 C.Y.

EX.CATTLE GUARD
EX.WATER U/E
EX.WATER U/E
PRES.R/W
5.0%
FL= 2135.76
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
9
CONST. 18' TBSC DR. W/21"X15" CGSPA SD
EX.FIBER OPTIC

255+97.99
CONST. TBSC DRIVE LT.
F.G.= 2140.06

SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X044

150 100 50 0 50 100 150

7/27/2022

12:19:27 PM

F:\Projects\015-0552\40-Design\Microstation\SH-52\DGN\CVSEC45_29530.dgn

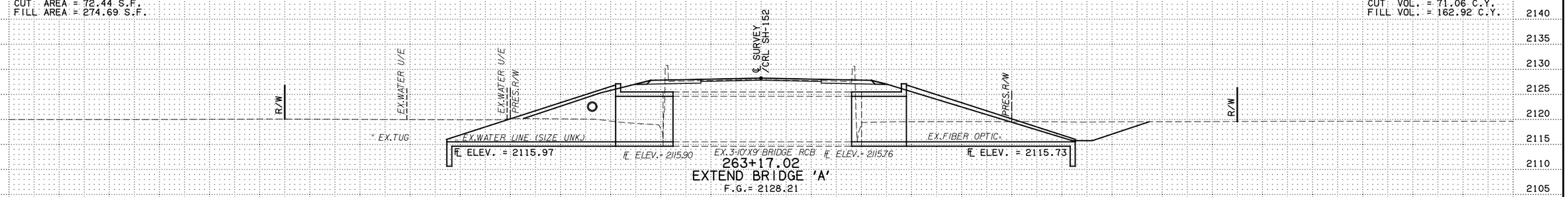
OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 72.44 S.F.
FILL AREA = 274.69 S.F.

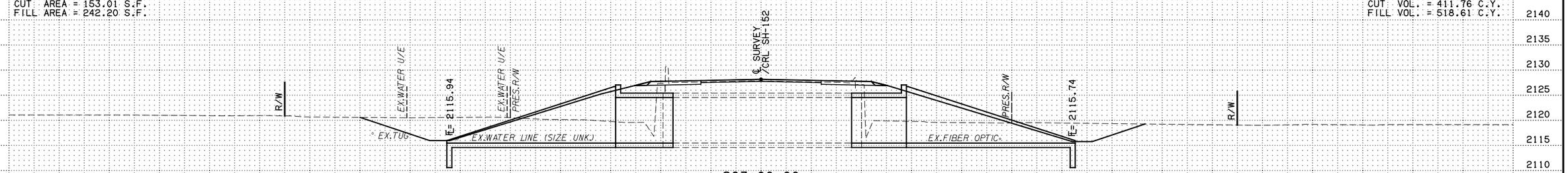
CUT VOL. = 71.06 C.Y.
FILL VOL. = 162.92 C.Y.



263+17.02
EXTEND BRIDGE 'A'
F.G.= 2128.21

CUT AREA = 153.01 S.F.
FILL AREA = 242.20 S.F.

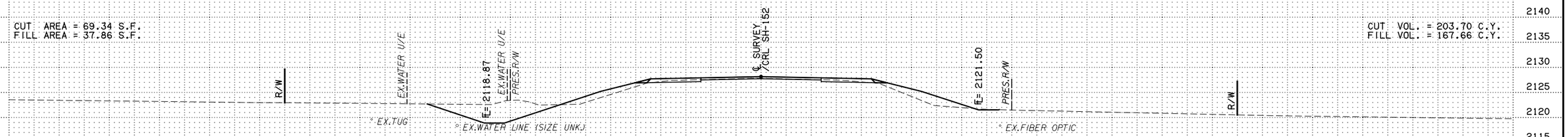
CUT VOL. = 411.76 C.Y.
FILL VOL. = 518.61 C.Y.



263+00.00
F.G.= 2128.14

CUT AREA = 69.34 S.F.
FILL AREA = 37.86 S.F.

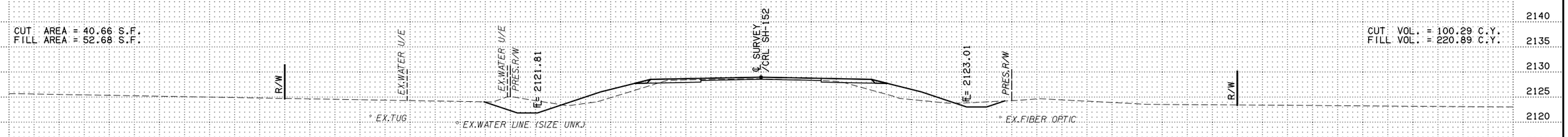
CUT VOL. = 203.70 C.Y.
FILL VOL. = 167.66 C.Y.



262+00.00
F.G.= 2128.12

CUT AREA = 40.66 S.F.
FILL AREA = 52.68 S.F.

CUT VOL. = 100.29 C.Y.
FILL VOL. = 220.89 C.Y.



261+00.00
F.G.= 2128.95

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X045

150 100 50 0 50 100 150

7/27/2022

12:19:29 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC46_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 43.37 S.F.
FILL AREA = 0.03 S.F.

CUT VOL. = 80.19 C.Y.
FILL VOL. = 1.48 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
FE 2128.78
1.2%
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
10
EX.FIBER OPTIC
CONST. 44' TBSC DR. W/21"X15" CGSPA SD

266+41.00
CONST. TBSC DRIVE RT.
F.G.= 2131.72

CUT AREA = 34.70 S.F.
FILL AREA = 1.42 S.F.

CUT VOL. = 79.36 C.Y.
FILL VOL. = 17.45 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
FE 2128.20
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC

266+00.00
F.G.= 2131.14

CUT AREA = 8.15 S.F.
FILL AREA = 8.01 S.F.

CUT VOL. = 136.98 C.Y.
FILL VOL. = 59.70 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC

265+00.00
F.G.= 2129.82

CUT AREA = 65.82 S.F.
FILL AREA = 24.23 S.F.

CUT VOL. = 212.45 C.Y.
FILL VOL. = 459.35 C.Y.

R/W
EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
FE 2119.61
R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC

264+00.00
F.G.= 2128.83

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X046

150 100 50 0 50 100 150

7/27/2022

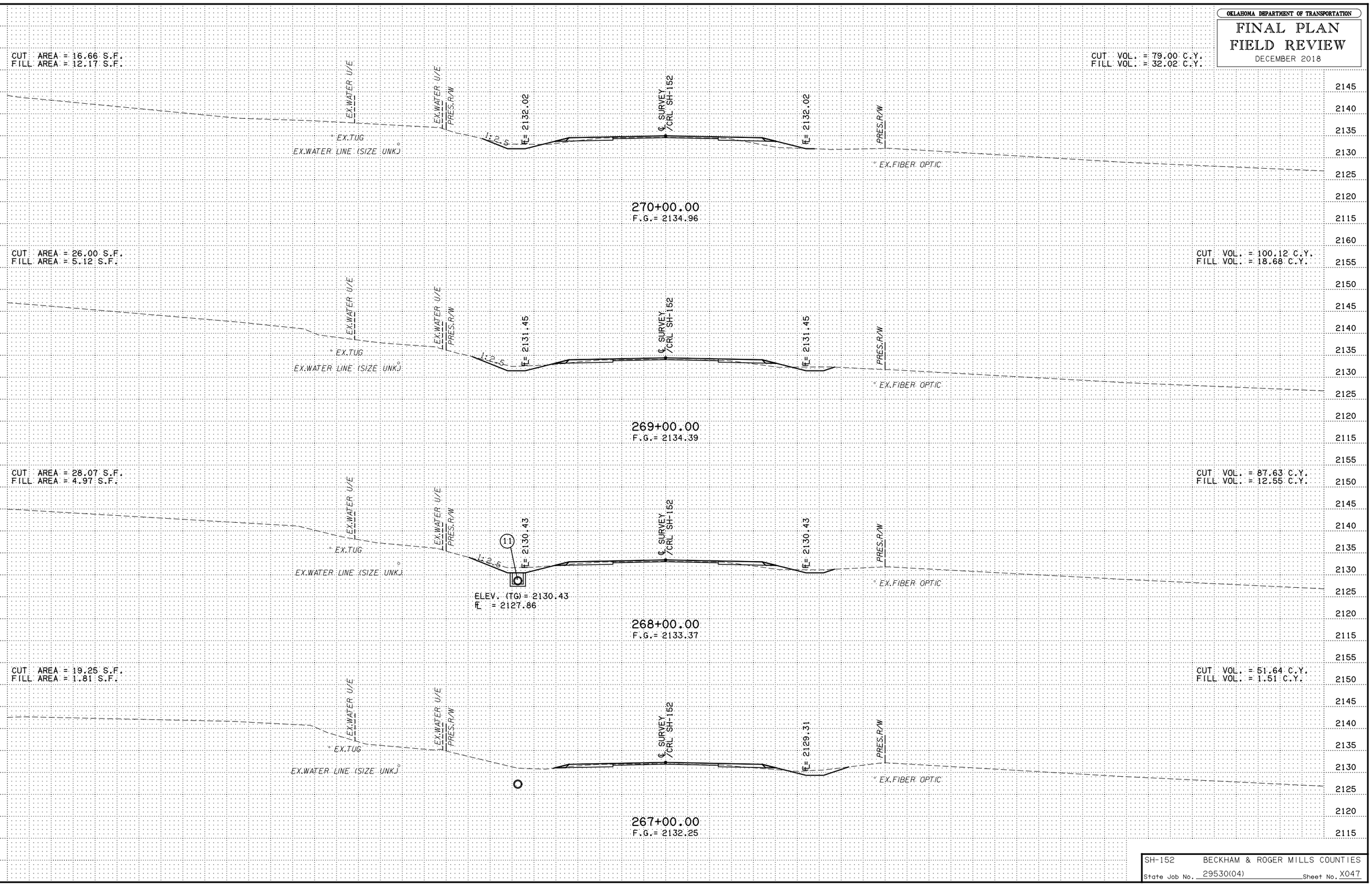
12:19:30 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC47_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X047

7/27/2022

12:19:32 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC48_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 12.63 S.F.
FILL AREA = 39.92 S.F.

CUT VOL. = 30.83 C.Y.
FILL VOL. = 68.64 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

273+00.00
F.G.= 2135.24

CUT AREA = 17.37 S.F.
FILL AREA = 26.88 S.F.

CUT VOL. = 23.43 C.Y.
FILL VOL. = 41.97 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
CONST. 35' TBSC DR. AS DIKE
4.6%
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

272+44.51
CONST. TBSC DRIVE LT.
F.G.= 2135.21

CUT AREA = 11.06 S.F.
FILL AREA = 24.04 S.F.

CUT VOL. = 56.63 C.Y.
FILL VOL. = 74.64 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

272+00.00
F.G.= 2135.19

CUT AREA = 19.52 S.F.
FILL AREA = 16.26 S.F.

CUT VOL. = 67.01 C.Y.
FILL VOL. = 52.66 C.Y.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
1:2.5
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

271+00.00
F.G.= 2135.14

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X048

150 100 50 0 50 100 150

7/27/2022

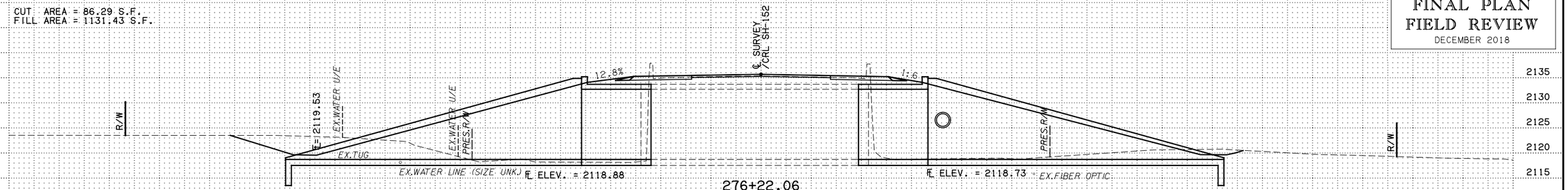
12:19:34 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC49_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

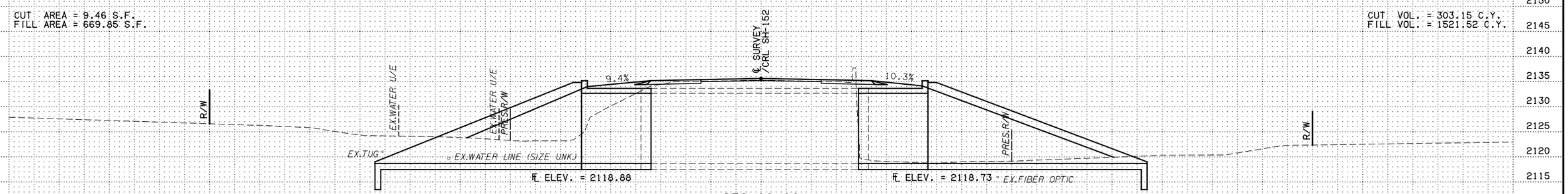
CUT AREA = 86.29 S.F.
FILL AREA = 1131.43 S.F.



276+22.06
EXTEND BRIDGE 'B'
(30° LT. FWD. SKEW)
F.G.= 2135.66

CUT AREA = 9.46 S.F.
FILL AREA = 669.85 S.F.

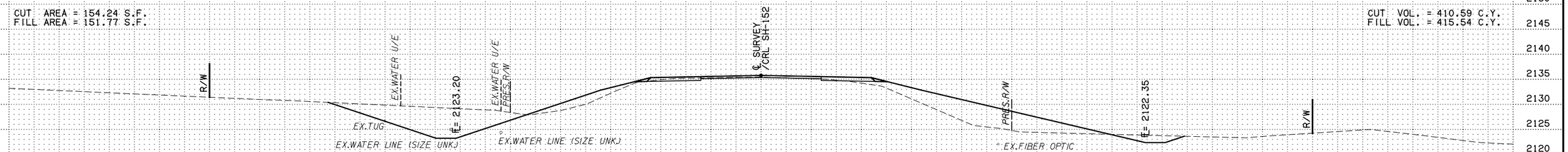
CUT VOL. = 303.15 C.Y.
FILL VOL. = 1521.52 C.Y.



276+00.00
BRIDGE 'B'
F.G.= 2135.61

CUT AREA = 154.24 S.F.
FILL AREA = 151.77 S.F.

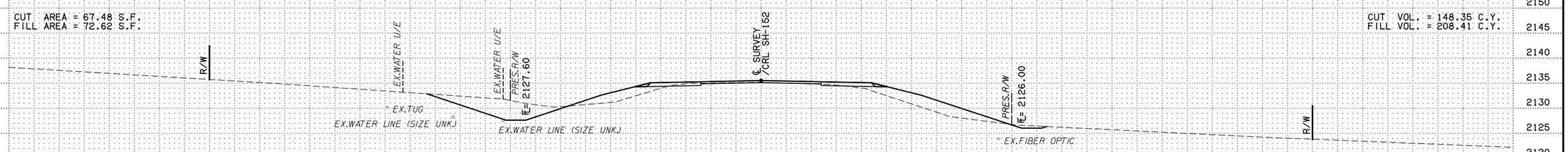
CUT VOL. = 410.59 C.Y.
FILL VOL. = 415.54 C.Y.



275+00.00
F.G.= 2135.75

CUT AREA = 67.48 S.F.
FILL AREA = 72.62 S.F.

CUT VOL. = 148.35 C.Y.
FILL VOL. = 208.41 C.Y.



274+00.00
F.G.= 2135.50

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X049

150 100 50 0 50 100 150

7/27/2022

12:19:36 PM

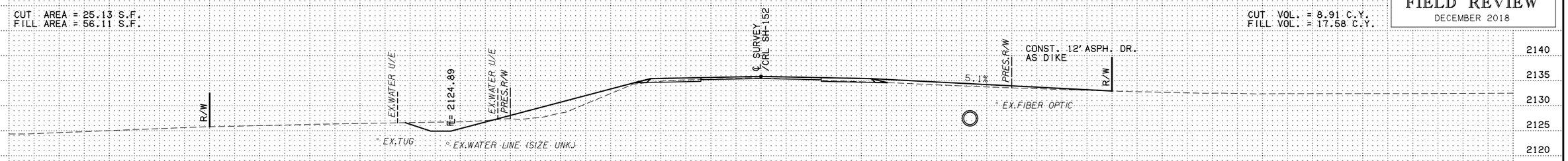
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\XSEC50_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 25.13 S.F.
FILL AREA = 56.11 S.F.

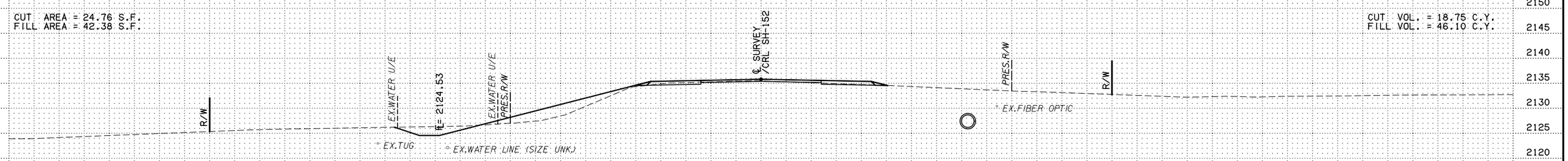
CUT VOL. = 8.91 C.Y.
FILL VOL. = 17.58 C.Y.



278+09.64
CONST. ASPH. DRIVE RT.
F.G.= 2135.83

CUT AREA = 24.76 S.F.
FILL AREA = 42.38 S.F.

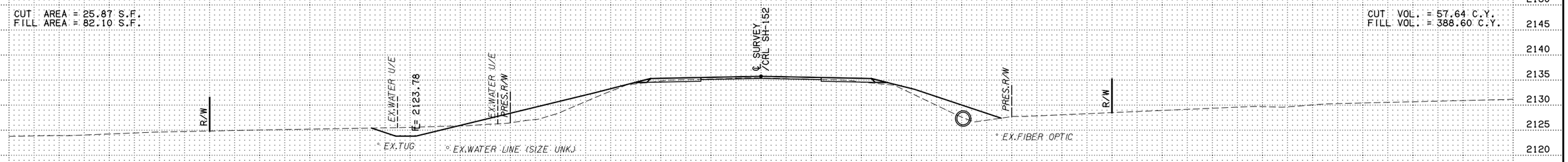
CUT VOL. = 18.75 C.Y.
FILL VOL. = 46.10 C.Y.



278+00.00
F.G.= 2135.78

CUT AREA = 25.87 S.F.
FILL AREA = 82.10 S.F.

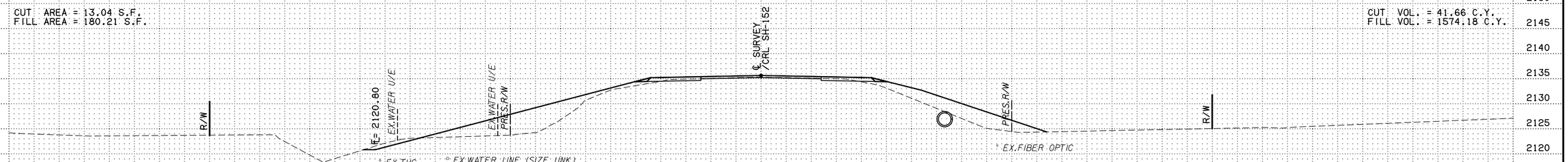
CUT VOL. = 57.64 C.Y.
FILL VOL. = 388.60 C.Y.



277+80.00
F.G.= 2135.73

CUT AREA = 13.04 S.F.
FILL AREA = 180.21 S.F.

CUT VOL. = 41.66 C.Y.
FILL VOL. = 1574.18 C.Y.



277+00.00
F.G.= 2135.61

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X050

150 100 50 0 50 100 150

7/27/2022

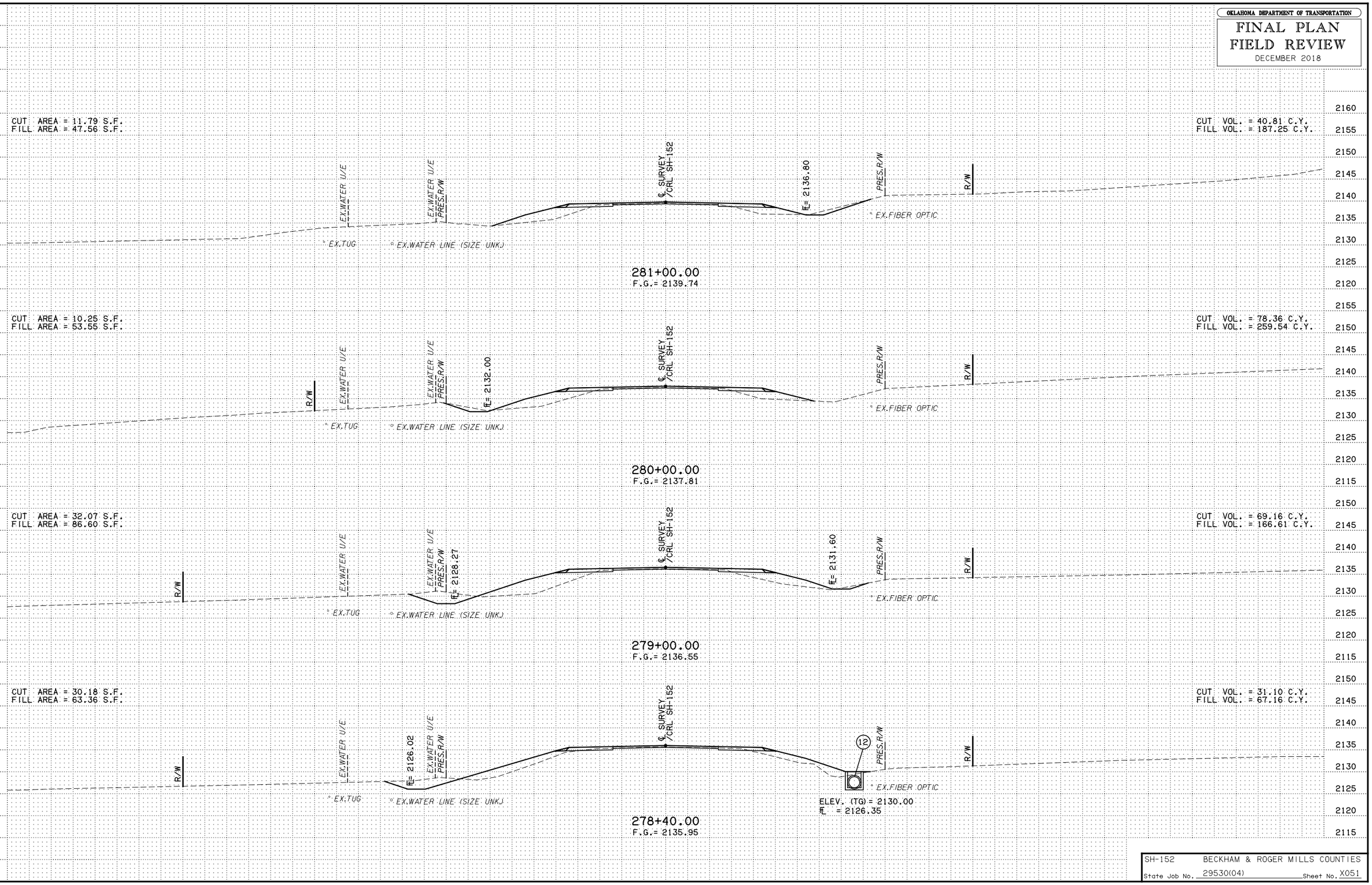
12:19:37 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CX\SEC5L29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X051

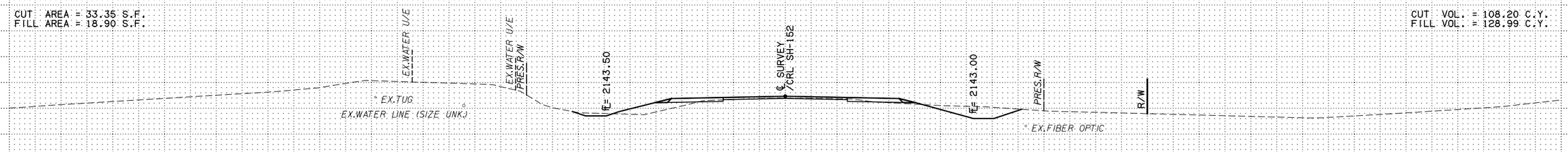
150 100 50 0 50 100 150

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 33.35 S.F.
FILL AREA = 18.90 S.F.

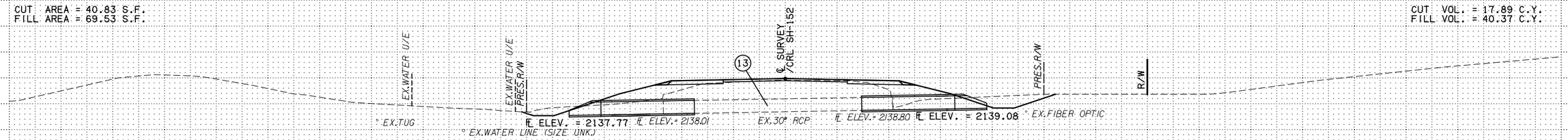
CUT VOL. = 108.20 C.Y.
FILL VOL. = 128.99 C.Y.



284+00.00
F.G.= 2147.30

CUT AREA = 40.83 S.F.
FILL AREA = 69.53 S.F.

CUT VOL. = 17.89 C.Y.
FILL VOL. = 40.37 C.Y.



283+21.23
EXTEND EXISTING 30" RCP
F.G.= 2144.84

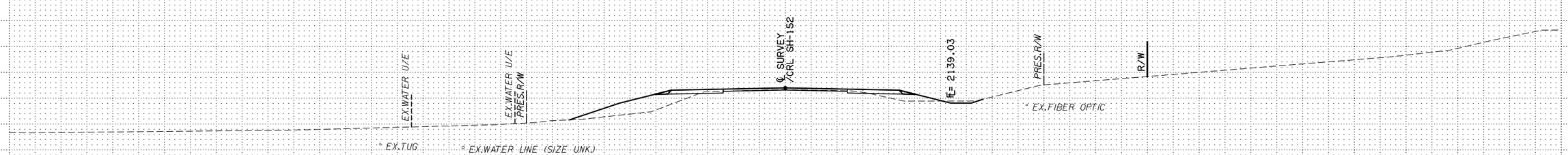
CUT AREA = 4.68 S.F.
FILL AREA = 33.15 S.F.

CUT VOL. = 20.88 C.Y.
FILL VOL. = 163.44 C.Y.

283+00.00
F.G.= 2144.22

CUT AREA = 6.59 S.F.
FILL AREA = 55.11 S.F.

CUT VOL. = 34.05 C.Y.
FILL VOL. = 190.14 C.Y.



282+00.00
F.G.= 2141.97

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X052

7/27/2022
12:19:39 PM
F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC52_29530.dgn

150 100 50 0 50 100 150

7/27/2022

12:9:41 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC53_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 38.35 S.F.
FILL AREA = 139.51 S.F.

CUT VOL. = 70.94 C.Y.
FILL VOL. = 258.59 C.Y.

℄ SURVEY
/CRL SH-152

E= 2158.13

(14)

4.0%

2.2%

PRES.R/W

EX.WATER U/E

EX.WATER U/E

EX.FIBER OPTIC

CONST. 24' ASPH. SECTION LINE
W/35"X24" CGSPA SD

EX.TUG

EX.WATER LINE (SIZE UNK)

287+63.44
CONST. ASPH. SECTION LINE RETURN RT.
F.G.= 2161.07

CUT AREA = 22.03 S.F.
FILL AREA = 80.60 S.F.

CUT VOL. = 93.74 C.Y.
FILL VOL. = 166.88 C.Y.

℄ SURVEY
/CRL SH-152

E= 2155.73

PRES.R/W

EX.WATER U/E

EX.WATER U/E
PRES.R/W

R/W

EX.FIBER OPTIC

EX.TUG

EX.WATER LINE (SIZE UNK)

287+00.00
F.G.= 2158.67

CUT AREA = 28.60 S.F.
FILL AREA = 9.51 S.F.

CUT VOL. = 102.91 C.Y.
FILL VOL. = 35.30 C.Y.

℄ SURVEY
/CRL SH-152

E= 2151.69

E= 2151.69

PRES.R/W

EX.WATER U/E

EX.WATER U/E
PRES.R/W

EX.FIBER OPTIC

EX.TUG

EX.WATER LINE (SIZE UNK)

286+00.00
F.G.= 2154.63

CUT AREA = 26.98 S.F.
FILL AREA = 9.55 S.F.

CUT VOL. = 111.72 C.Y.
FILL VOL. = 52.70 C.Y.

℄ SURVEY
/CRL SH-152

E= 2147.84

E= 2147.84

PRES.R/W

R/W

EX.WATER U/E

EX.WATER U/E
PRES.R/W

EX.FIBER OPTIC

EX.TUG

EX.WATER LINE (SIZE UNK)

285+00.00
F.G.= 2150.78

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X053

150 100 50 0 50 100 150

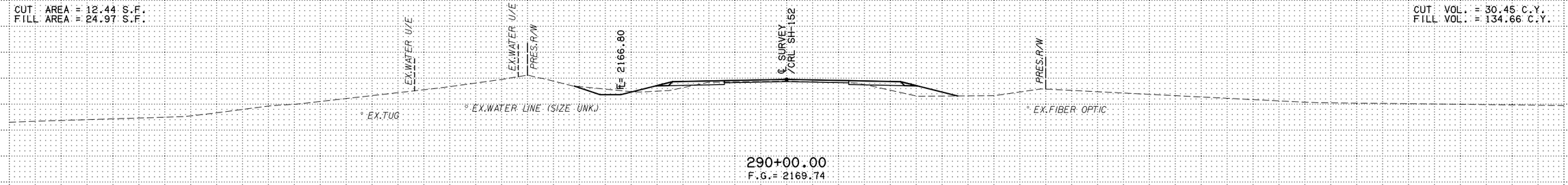
OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 12.44 S.F.
FILL AREA = 24.97 S.F.

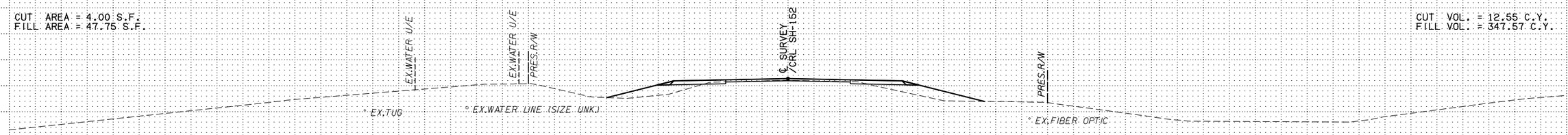
CUT VOL. = 30.45 C.Y.
FILL VOL. = 134.66 C.Y.



290+00.00
F.G.= 2169.74

CUT AREA = 4.00 S.F.
FILL AREA = 47.75 S.F.

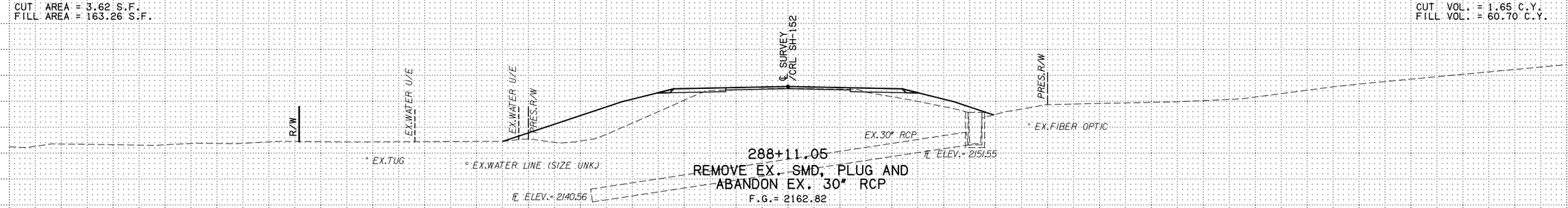
CUT VOL. = 12.55 C.Y.
FILL VOL. = 347.57 C.Y.



289+00.00
F.G.= 2166.35

CUT AREA = 3.62 S.F.
FILL AREA = 163.26 S.F.

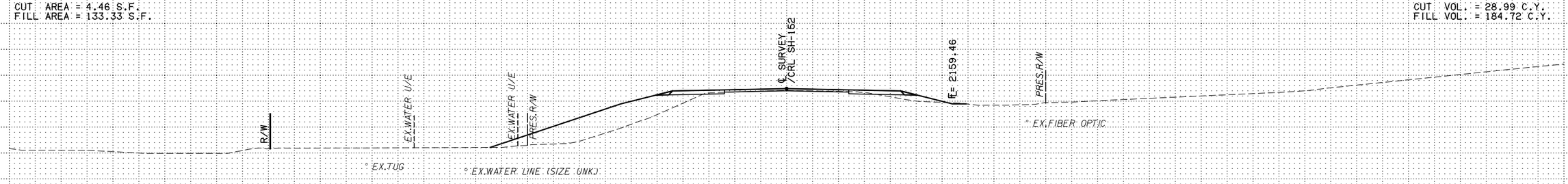
CUT VOL. = 1.65 C.Y.
FILL VOL. = 60.70 C.Y.



288+11.05
REMOVE EX. SMD, PLUG AND ABANDON EX. 30" RCP
F.G.= 2162.82

CUT AREA = 4.46 S.F.
FILL AREA = 133.33 S.F.

CUT VOL. = 28.99 C.Y.
FILL VOL. = 184.72 C.Y.



288+00.00
F.G.= 2162.40

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X054

150 100 50 0 50 100 150

7/27/2022

12:19:44 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\CVSEC55_29530.dgn

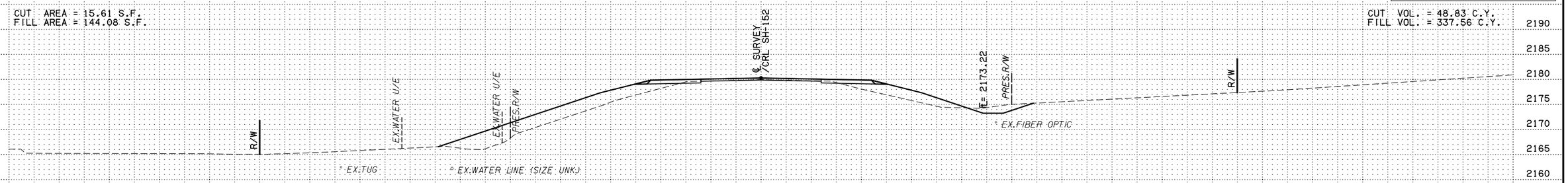
OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 15.61 S.F.
FILL AREA = 144.08 S.F.

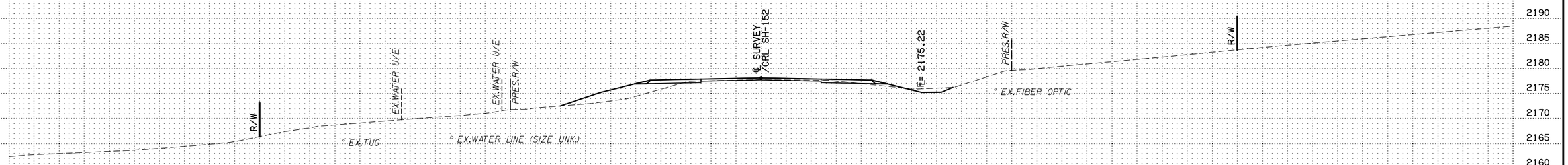
CUT VOL. = 48.83 C.Y.
FILL VOL. = 337.56 C.Y.



294+00.00
F.G.= 2180.26

CUT AREA = 10.76 S.F.
FILL AREA = 38.20 S.F.

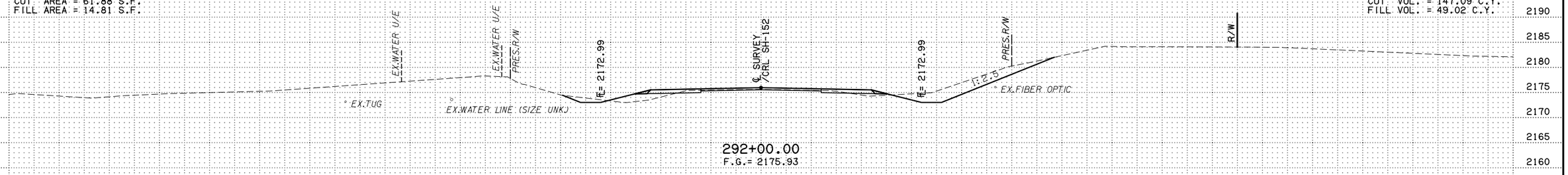
CUT VOL. = 134.50 C.Y.
FILL VOL. = 98.18 C.Y.



293+00.00
F.G.= 2178.13

CUT AREA = 61.88 S.F.
FILL AREA = 14.81 S.F.

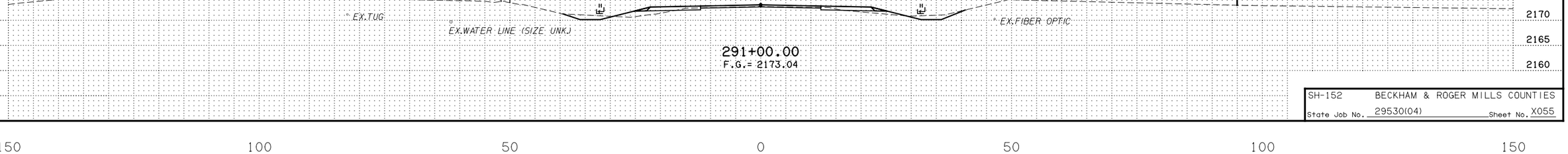
CUT VOL. = 147.09 C.Y.
FILL VOL. = 49.02 C.Y.



292+00.00
F.G.= 2175.93

CUT AREA = 17.55 S.F.
FILL AREA = 11.66 S.F.

CUT VOL. = 55.55 C.Y.
FILL VOL. = 67.83 C.Y.



291+00.00
F.G.= 2173.04

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X055

150 100 50 0 50 100 150

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 91.74 S.F.
FILL AREA = 6.70 S.F.

CUT VOL. = 327.87 C.Y.
FILL VOL. = 60.31 C.Y.

R/W | EX.WATER U/E | EX.WATER U/E | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W | R/W

EX.TUG | EX.WATER LINE (SIZE UNK.) | EX.FIBER OPTIC

℄ ELEV.= 2181.64 | ℄ ELEV.= 2181.00 | 1: 2.5

297+00.00
F.G.= 2184.58

CUT AREA = 85.31 S.F.
FILL AREA = 25.86 S.F.

CUT VOL. = 192.25 C.Y.
FILL VOL. = 173.62 C.Y.

R/W | EX.WATER U/E | EX.WATER U/E | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W | R/W

EX.TUG | EX.WATER LINE (SIZE UNK.) | EX.FIBER OPTIC

℄ ELEV.= 2178.00

296+00.00
F.G.= 2183.49

CUT AREA = 18.50 S.F.
FILL AREA = 67.89 S.F.

CUT VOL. = 49.12 C.Y.
FILL VOL. = 285.34 C.Y.

R/W | EX.WATER U/E | EX.WATER U/E | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W | R/W

EX.TUG | EX.WATER LINE (SIZE UNK.) | EX.FIBER OPTIC

℄ ELEV.= 2175.00

295+00.00
F.G.= 2182.03

CUT AREA = 16.81 S.F.
FILL AREA = 137.23 S.F.

CUT VOL. = 14.94 C.Y.
FILL VOL. = 129.61 C.Y.

R/W | EX.WATER U/E | EX.WATER U/E | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W | R/W

EX.TUG | EX.WATER LINE (SIZE UNK.) | EX.24" RCP | EX.FIBER OPTIC

℄ ELEV.= 2168.92 | ℄ ELEV. = 2168.65 | ℄ ELEV.= 2172.40 | ℄ ELEV. = 2172.81 | ℄ ELEV.= 2172.75

15

294+24.88
EXTEND EXISTING 24" RCP
F.G.= 2180.78

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X056

150 100 50 0 50 100 150

7/27/2022 12:19:46 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C_XSEC56_29530.dgn

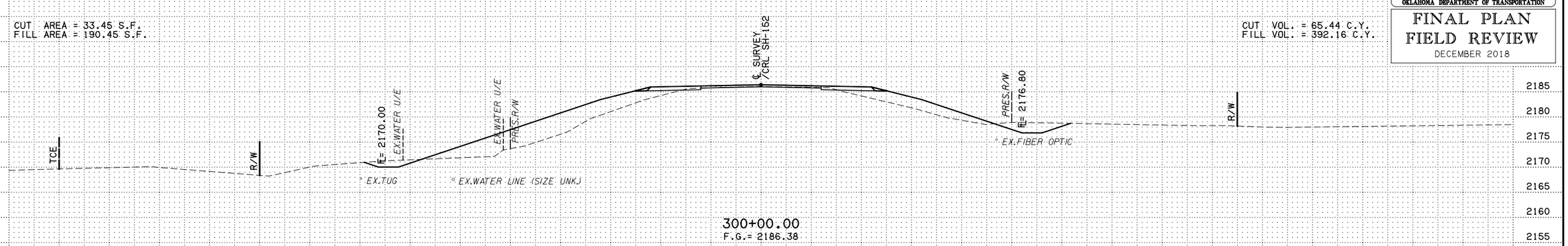
OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 33.45 S.F.
FILL AREA = 190.45 S.F.

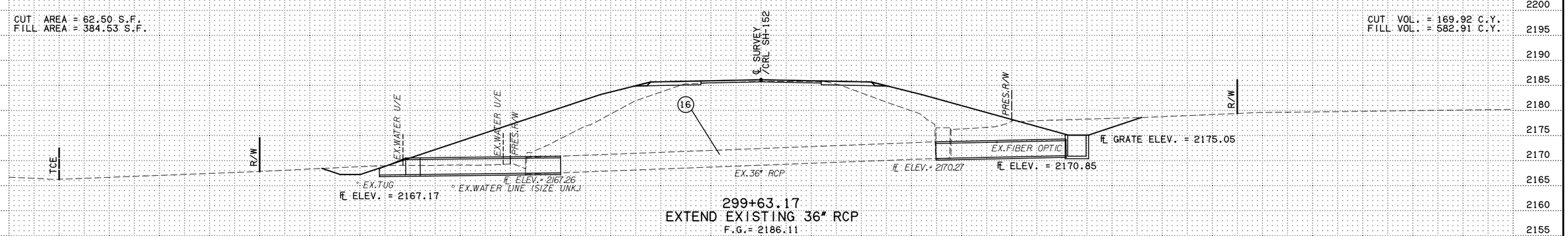
CUT VOL. = 65.44 C.Y.
FILL VOL. = 392.16 C.Y.



300+00.00
F.G.= 2186.38

CUT AREA = 62.50 S.F.
FILL AREA = 384.53 S.F.

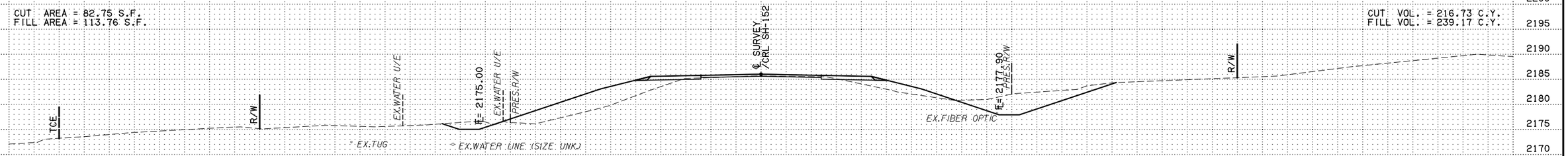
CUT VOL. = 169.92 C.Y.
FILL VOL. = 582.91 C.Y.



299+63.17
EXTEND EXISTING 36" RCP
F.G.= 2186.11

CUT AREA = 82.75 S.F.
FILL AREA = 113.76 S.F.

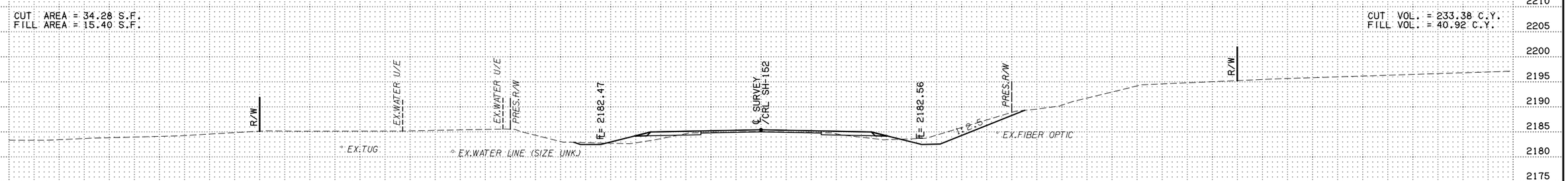
CUT VOL. = 216.73 C.Y.
FILL VOL. = 239.17 C.Y.



299+00.00
F.G.= 2186.01

CUT AREA = 34.28 S.F.
FILL AREA = 15.40 S.F.

CUT VOL. = 233.38 C.Y.
FILL VOL. = 40.92 C.Y.



298+00.00
F.G.= 2185.41

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X057

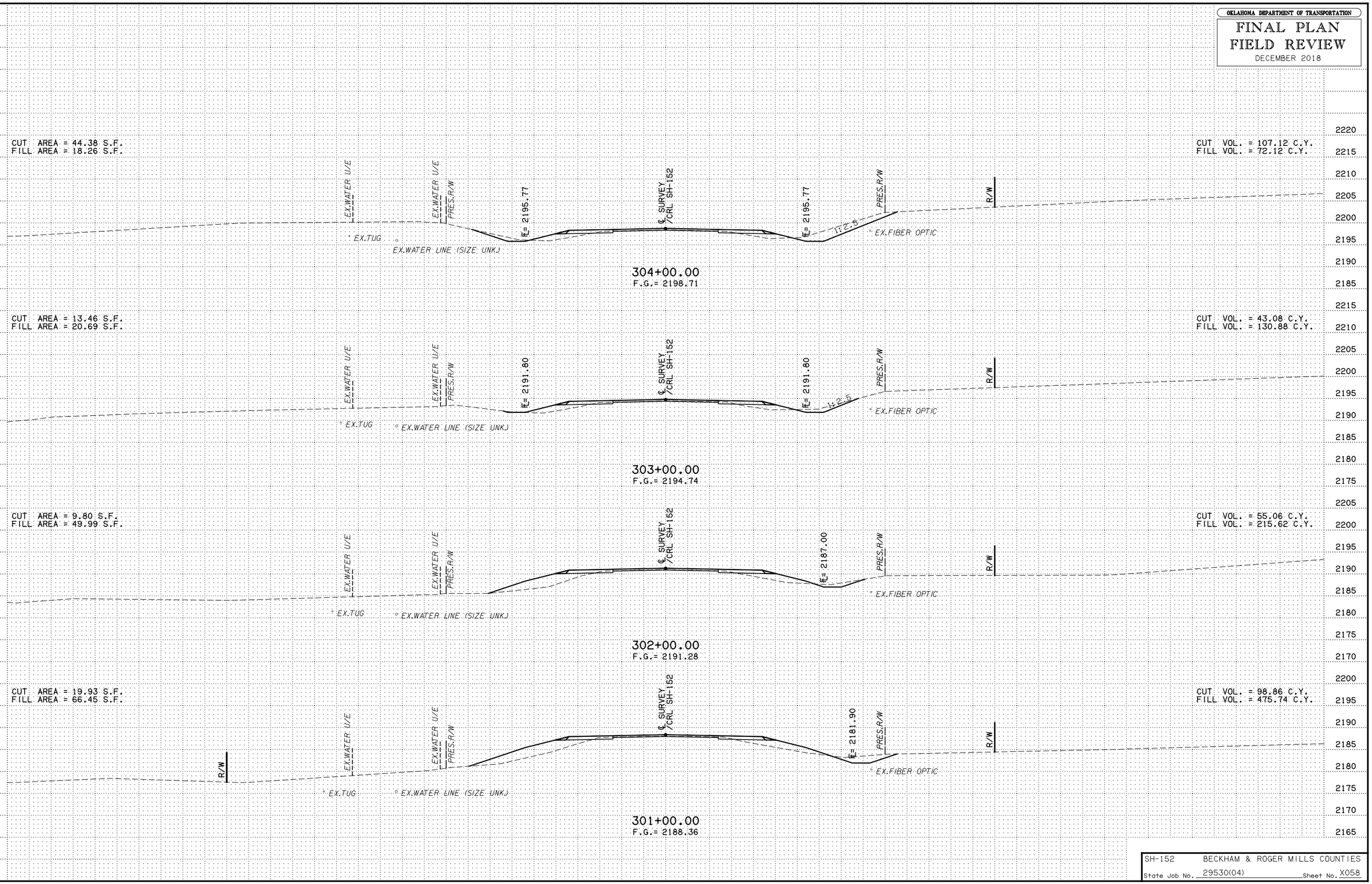
150 100 50 0 50 100 150

7/27/2022 12:19:47 PM
F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\CXSEC57_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X058

7/27/2022 12:19:49 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\CXSEC58_29530.dgn

7/27/2022

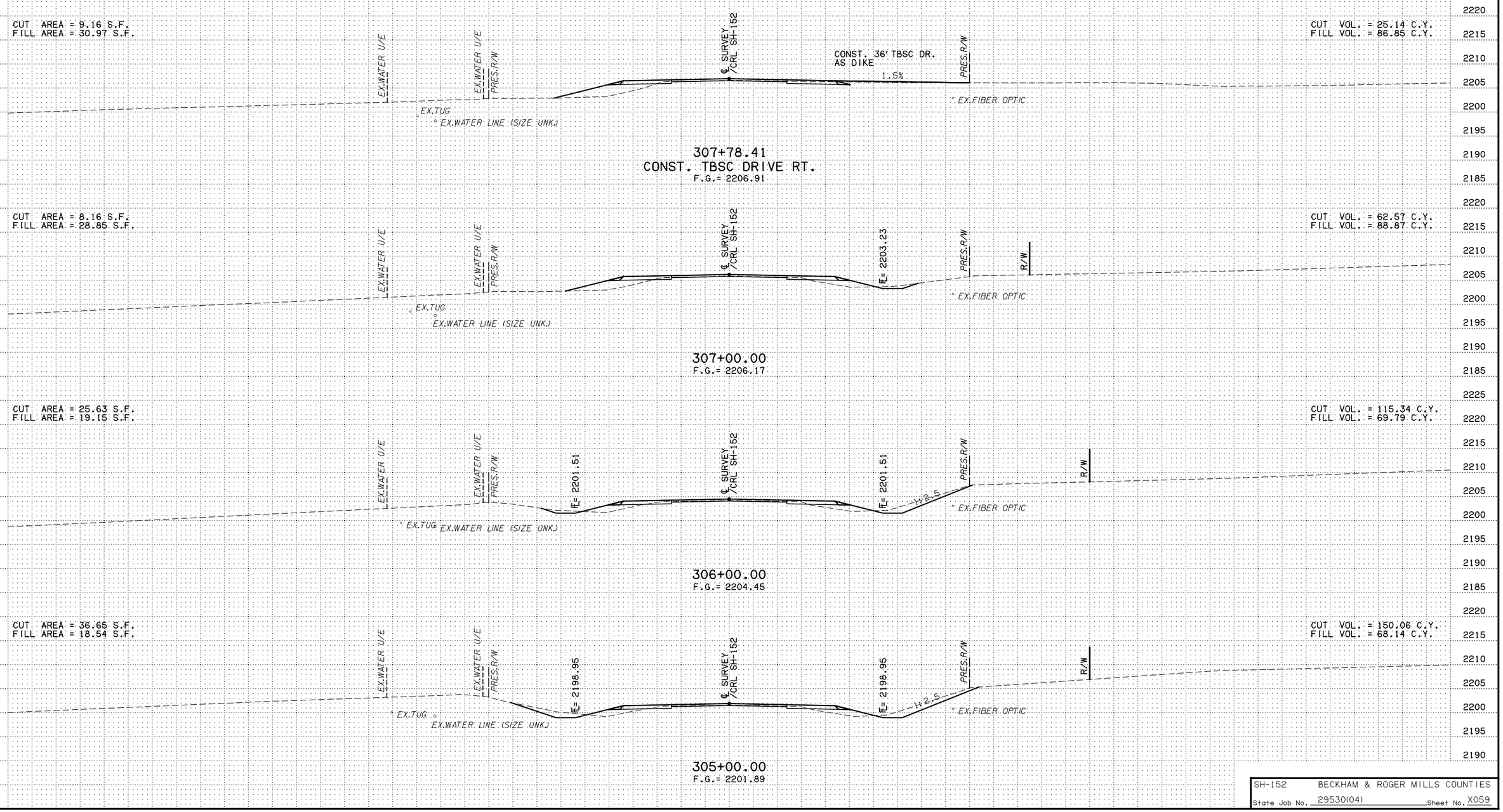
12:9:51 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC59_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



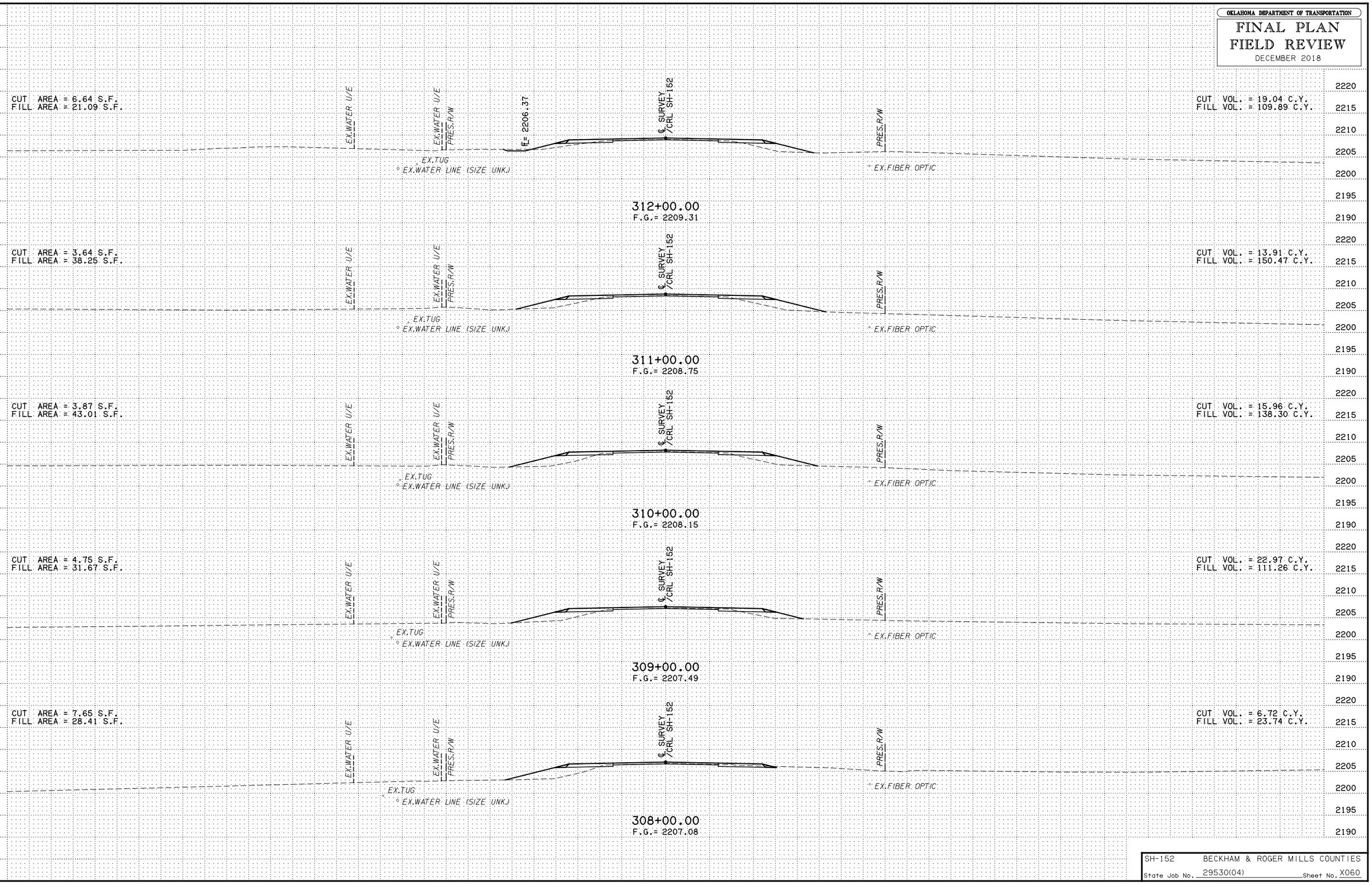
SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X059

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X060

CUT AREA = 43.02 S.F.
FILL AREA = 2.15 S.F.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
1:2
FE= 2206.92
℄ SURVEY
/CRL SH-152
FE= 2206.92
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC

CUT VOL. = 113.48 C.Y.
FILL VOL. = 19.93 C.Y.

315+00.00
F.G.= 2209.86

CUT AREA = 32.74 S.F.
FILL AREA = 11.15 S.F.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
1:2
FE= 2207.21
℄ SURVEY
/CRL SH-152
FE= 2207.21
3.1%
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
CONST. 16' TBSC DR.
AS DIKE
EX.FIBER OPTIC

CUT VOL. = 27.68 C.Y.
FILL VOL. = 4.24 C.Y.

314+19.12
CONST. TBSC DRIVE RT.
F.G.= 2210.15

CUT AREA = 45.44 S.F.
FILL AREA = 0.81 S.F.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
1:2
FE= 2207.23
℄ SURVEY
/CRL SH-152
FE= 2207.23
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC

CUT VOL. = 72.10 C.Y.
FILL VOL. = 13.66 C.Y.

314+00.00
F.G.= 2210.17

CUT AREA = 13.86 S.F.
FILL AREA = 10.42 S.F.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
CONST. 38' TBSC DR.
AS DIKE
1.3%
℄ SURVEY
/CRL SH-152
FE= 2206.95
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC

CUT VOL. = 16.48 C.Y.
FILL VOL. = 13.96 C.Y.

313+34.34
CONST. TBSC DRIVE LT.
F.G.= 2209.89

CUT AREA = 12.07 S.F.
FILL AREA = 11.53 S.F.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄ SURVEY
/CRL SH-152
FE= 2206.85
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC

CUT VOL. = 34.64 C.Y.
FILL VOL. = 60.42 C.Y.

313+00.00
F.G.= 2209.79

2225 2220 2215 2210 2205 2200 2195

150 100 50 0 50 100 150

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X061

7/27/2022 12:19:54 PM
F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC61_29530.dgn

7/27/2022

12:19:56 PM

F:\Projects\05-0552\40-Design\Microstation\SH-152\06NC\XSEC62_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

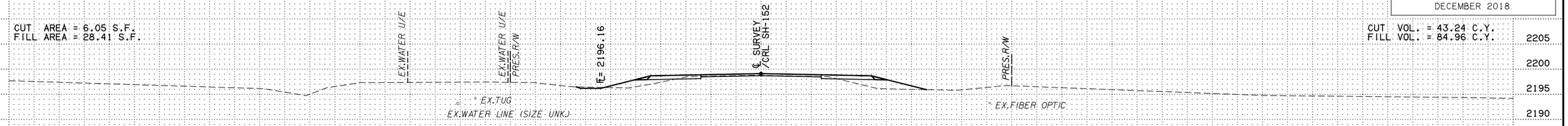
FINAL PLAN FIELD REVIEW

DECEMBER 2018

320+00.00
F.G.= 2199.10

CUT AREA = 6.05 S.F.
FILL AREA = 28.41 S.F.

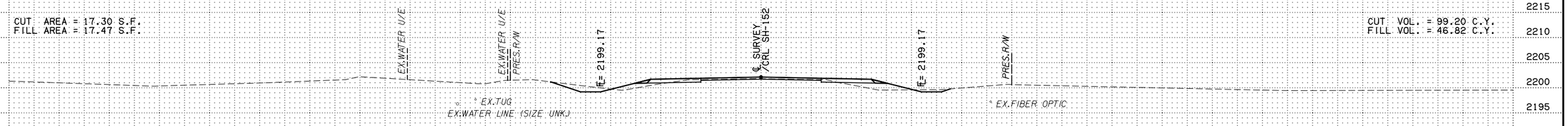
CUT VOL. = 43.24 C.Y.
FILL VOL. = 84.96 C.Y.



319+00.00
F.G.= 2202.11

CUT AREA = 17.30 S.F.
FILL AREA = 17.47 S.F.

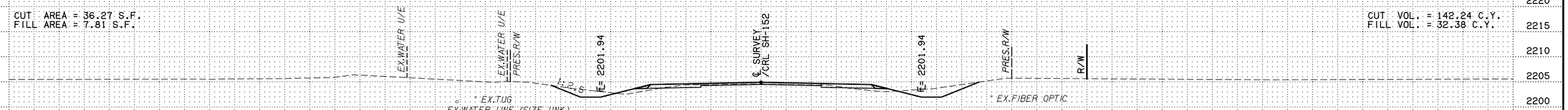
CUT VOL. = 99.20 C.Y.
FILL VOL. = 46.82 C.Y.



318+00.00
F.G.= 2204.88

CUT AREA = 36.27 S.F.
FILL AREA = 7.81 S.F.

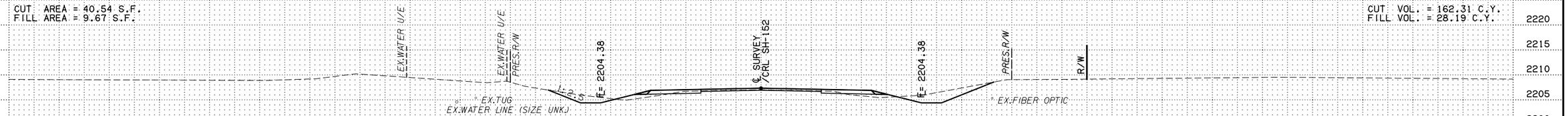
CUT VOL. = 142.24 C.Y.
FILL VOL. = 32.38 C.Y.



317+00.00
F.G.= 2207.32

CUT AREA = 40.54 S.F.
FILL AREA = 9.67 S.F.

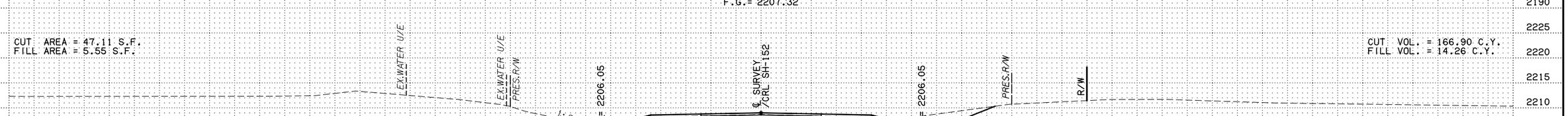
CUT VOL. = 162.31 C.Y.
FILL VOL. = 28.19 C.Y.



316+00.00
F.G.= 2208.99

CUT AREA = 47.11 S.F.
FILL AREA = 5.55 S.F.

CUT VOL. = 166.90 C.Y.
FILL VOL. = 14.26 C.Y.



SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X062

150 100 50 0 50 100 150

7/27/2022

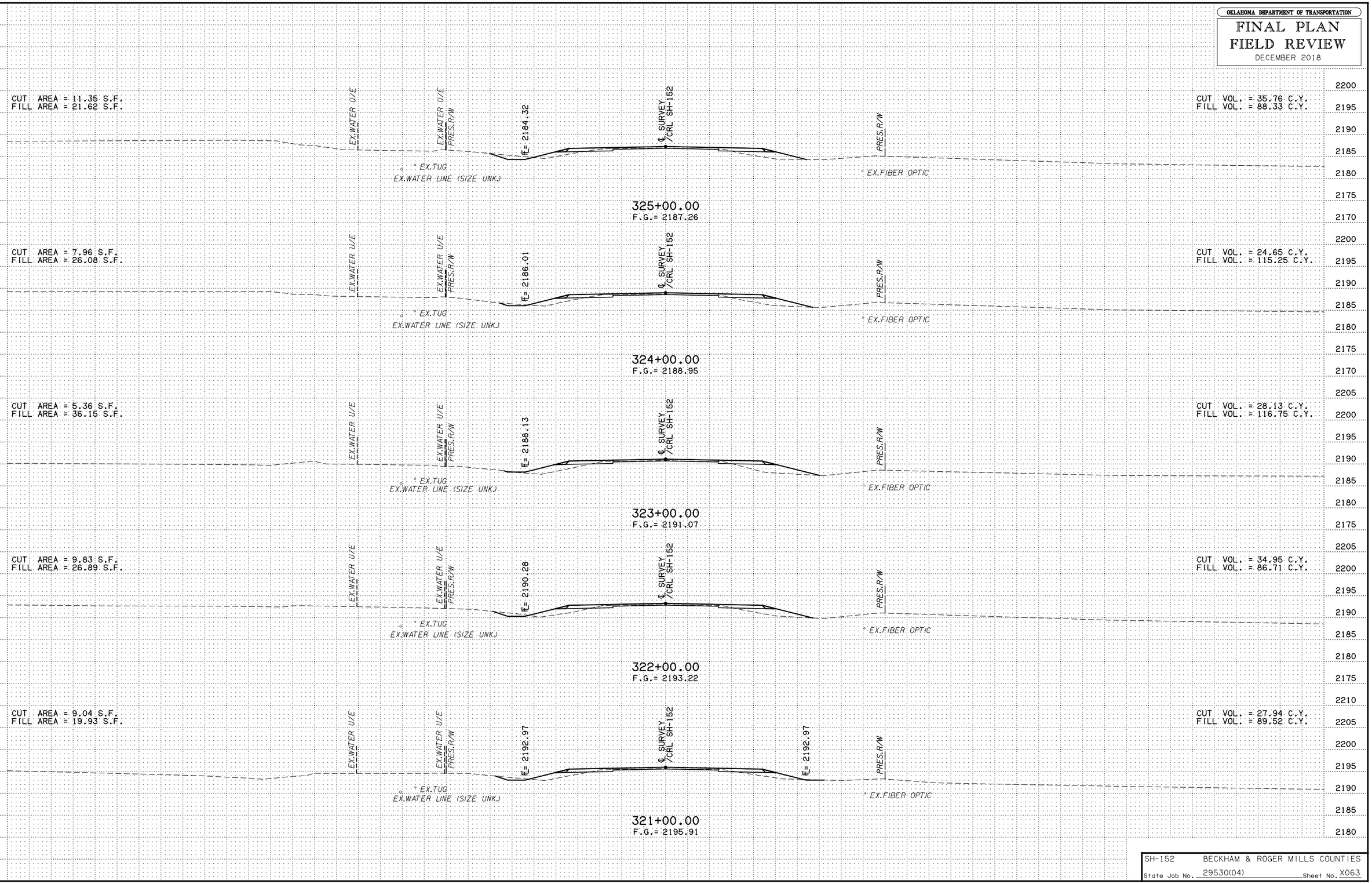
12:9:58 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CVSEC63_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018



SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X063

7/27/2022

i219559 PM

F:\Projects\015-0552\40-Design\Microstation\SH-52\DGN\C_XSEC64_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 22.88 S.F.
FILL AREA = 21.57 S.F.

EX.WATER U/E
PRES.R/W
EX.WATER U/E
℄= 2180.52
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

CUT VOL. = 108.63 C.Y.
FILL VOL. = 69.11 C.Y.

329+00.00
F.G.= 2183.46

CUT AREA = 36.97 S.F.
FILL AREA = 16.50 S.F.

EX.WATER U/E
PRES.R/W
EX.WATER U/E
℄= 2181.22
℄ SURVEY /CRL SH-152
PRES.R/W
1.0%
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

CUT VOL. = 2.70 C.Y.
FILL VOL. = 1.19 C.Y.

CONST. 18' TBSC DR.
W/2-28"X20" CGSPA SD

328+01.97
CONST. TBSC DRIVE LT.
F.G.= 2184.16

CUT AREA = 37.14 S.F.
FILL AREA = 16.19 S.F.

EX.WATER U/E
PRES.R/W
EX.WATER U/E
℄= 2181.23
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC

CUT VOL. = 103.63 C.Y.
FILL VOL. = 60.74 C.Y.

328+00.00
F.G.= 2184.17

CUT AREA = 18.82 S.F.
FILL AREA = 16.61 S.F.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄= 2182.00
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC

CUT VOL. = 58.04 C.Y.
FILL VOL. = 69.32 C.Y.

327+00.00
F.G.= 2184.94

CUT AREA = 12.52 S.F.
FILL AREA = 20.82 S.F.

EX.WATER U/E
EX.WATER U/E
PRES.R/W
℄= 2183.08
℄ SURVEY /CRL SH-152
PRES.R/W
EX.TUG
EX.WATER LINE (SIZE UNK)
EX.FIBER OPTIC

CUT VOL. = 44.20 C.Y.
FILL VOL. = 78.58 C.Y.

326+00.00
F.G.= 2186.02

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X064

150 100 50 0 50 100 150

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 21.66 S.F.
FILL AREA = 7.76 S.F.

CUT VOL. = 33.04 C.Y.
FILL VOL. = 32.35 C.Y.

EX.WATER U/E
PRES.R/W
EX.WATER U/E
℄ SURVEY /CRL SH-152
PRES.R/W
ft= 2178.41
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

333+00.00
F.G.= 2181.35

CUT AREA = 16.30 S.F.
FILL AREA = 29.40 S.F.

CUT VOL. = 32.89 C.Y.
FILL VOL. = 36.75 C.Y.

EX.WATER U/E
PRES.R/W
EX.WATER U/E
℄ SURVEY /CRL SH-152
PRES.R/W
ft= 2178.66
8.6%
EX.TUG
EX.WATER LINE (SIZE UNK.)
CONST. 16' TBSC DR. AS DIKE
EX.FIBER OPTIC

332+53.00
CONST. TBSC DRIVE RT.
F.G.= 2181.60

CUT AREA = 17.21 S.F.
FILL AREA = 8.05 S.F.

CUT VOL. = 63.81 C.Y.
FILL VOL. = 41.17 C.Y.

EX.WATER U/E
PRES.R/W
EX.WATER U/E
℄ SURVEY /CRL SH-152
PRES.R/W
ft= 2178.98
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

332+00.00
F.G.= 2181.92

CUT AREA = 17.25 S.F.
FILL AREA = 14.18 S.F.

CUT VOL. = 65.31 C.Y.
FILL VOL. = 55.91 C.Y.

EX.WATER U/E
PRES.R/W
EX.WATER U/E
℄ SURVEY /CRL SH-152
PRES.R/W
ft= 2179.44
ft= 2179.44
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

331+00.00
F.G.= 2182.38

CUT AREA = 18.01 S.F.
FILL AREA = 16.01 S.F.

CUT VOL. = 75.72 C.Y.
FILL VOL. = 69.59 C.Y.

EX.WATER U/E
PRES.R/W
EX.WATER U/E
℄ SURVEY /CRL SH-152
PRES.R/W
ft= 2179.95
EX.TUG
EX.WATER LINE (SIZE UNK.)
EX.FIBER OPTIC

330+00.00
F.G.= 2182.89

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X065

150 100 50 0 50 100 150

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

CUT AREA = 23.53 S.F.
FILL AREA = 13.75 S.F.

CUT VOL. = 91.54 C.Y.
FILL VOL. = 41.54 C.Y.

EX.WATER U/E | R/W | EX.WATER U/E | PRES.R/W | ℄= 2175.53 | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.WATER LINE (SIZE UNK.) | EX.TUG | EX.GAS LINE (SIZE UNK.) | EX.FIBER OPTIC

336+00.00
F.G.= 2178.47

CUT AREA = 25.90 S.F.
FILL AREA = 8.69 S.F.

CUT VOL. = 61.66 C.Y.
FILL VOL. = 22.31 C.Y.

EX.WATER U/E | R/W | EX.WATER U/E | PRES.R/W | ℄= 2176.95 | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.WATER LINE (SIZE UNK.) | EX.TUG | EX.GAS LINE (SIZE UNK.) | EX.FIBER OPTIC

335+00.00
F.G.= 2179.89

CUT AREA = 27.90 S.F.
FILL AREA = 6.32 S.F.

EX.WATER U/E | R/W | EX.WATER U/E | PRES.R/W | ℄= 2177.11 | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.TUG | EX.FIBER OPTIC

334+81.66
℄ WATER UTILITY LINE CROSSING
(0°55'45.49" LT. FWD. SKEW)
F.G.= 2180.05

CUT AREA = 23.44 S.F.
FILL AREA = 9.17 S.F.

CUT VOL. = 26.38 C.Y.
FILL VOL. = 8.67 C.Y.

EX.WATER U/E | R/W | EX.WATER U/E | PRES.R/W | ℄= 2177.50 | ℄ SURVEY /CRL SH-152 | 7.3% | PRES.R/W

EX.WATER LINE (SIZE UNK.) | EX.TUG | CONST. 18' TBSC DR. AS DIKE | EX.FIBER OPTIC

334+32.51
CONST. TBSC DRIVE RT.
F.G.= 2180.44

CUT AREA = 20.37 S.F.
FILL AREA = 5.23 S.F.

CUT VOL. = 77.84 C.Y.
FILL VOL. = 24.06 C.Y.

EX.WATER U/E | R/W | EX.WATER U/E | PRES.R/W | ℄= 2177.76 | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.WATER LINE (SIZE UNK.) | EX.TUG | EX.FIBER OPTIC

334+00.00
F.G.= 2180.70

2195 2190 2185 2180 2175 2170 2165

150 100 50 0 50 100 150

SH-152 BECKHAM & ROGER MILLS COUNTIES

State Job No. 29530(04) Sheet No. X066

7/27/2022 12:20:03 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\XSEC66_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 41.35 S.F.
FILL AREA = 4.89 S.F.

CUT VOL. = 69.89 C.Y.
FILL VOL. = 8.70 C.Y.

EX.WATER U/E | R/W | EX.WATER U/E | PRES.R/W | FF= 2173.97 | ℄ SURVEY /CRL SH-152 | PRES.R/W

° EX.WATER LINE (SIZE UNK.) ° EX.GAS LINE (SIZE UNK.) ° EX.FIBER OPTIC

337+00.00
F.G.= 2176.91

CUT AREA = 25.63 S.F.
FILL AREA = 13.09 S.F.

EX.WATER U/E | R/W | EX.WATER U/E | PRES.R/W | FF= 2174.45 | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.WATER LINE (SIZE UNK.)° EX.GAS LINE (SIZE UNK.) FO EX.GAS LINE (SIZE UNK.) FO EX.GAS LINE (SIZE UNK.) FO

336+69.65
℄ FIBER OPTIC UTILITY LINE CROSSING
(3°23'17.27" LT. FWD. SKEW)
F.G.= 2177.43

CUT AREA = 27.10 S.F.
FILL AREA = 13.03 S.F.

EX.WATER U/E | R/W | EX.WATER U/E | PRES.R/W | FF= 2174.48 | ℄ SURVEY /CRL SH-152 | PRES.R/W

° EX.WATER LINE (SIZE UNK.) ° EX.TUG ℄ EX.FIBER OPTIC EX.GAS LINE (SIZE & DEPTH UNK.) ° EX.FIBER OPTIC

336+69.56
℄ GAS UTILITY LINE CROSSING
(1°07'07.32" LT. FWD. SKEW)
F.G.= 2177.43

CUT AREA = 47.87 S.F.
FILL AREA = 6.22 S.F.

CUT VOL. = 8.72 C.Y.
FILL VOL. = 0.55 C.Y.

EX.WATER U/E | R/W | EX.WATER U/E | PRES.R/W | FF= 2174.69 | ℄ SURVEY /CRL SH-152 | CONST. 18' ASPH DR. AS DIKE 3.1% | PRES.R/W

° EX.WATER LINE (SIZE UNK.) ° EX.TUG ° EX.GAS LINE (SIZE UNK.) ° EX.FIBER OPTIC

336+57.70
CONST. ASPH. DRIVE RT.
F.G.= 2177.63

CUT AREA = 50.42 S.F.
FILL AREA = 0.03 S.F.

CUT VOL. = 72.45 C.Y.
FILL VOL. = 13.50 C.Y.

EX.WATER U/E | R/W | EX.WATER U/E 19% | PRES.R/W 0% | FF= 2174.77 5.1% | ℄ SURVEY /CRL SH-152 | PRES.R/W

EX.TUG ° EX.WATER LINE (SIZE UNK.) (18) ° EX.GAS LINE (SIZE UNK.) ° EX.FIBER OPTIC

CONST. 18' ASPH DR.
W/2-36"X22" RCPA SD

336+52.91
CONST. ASPH. DRIVE LT.
F.G.= 2177.71

SH-152	BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04)	Sheet No. X067

7/27/2022

12:20:06 PM

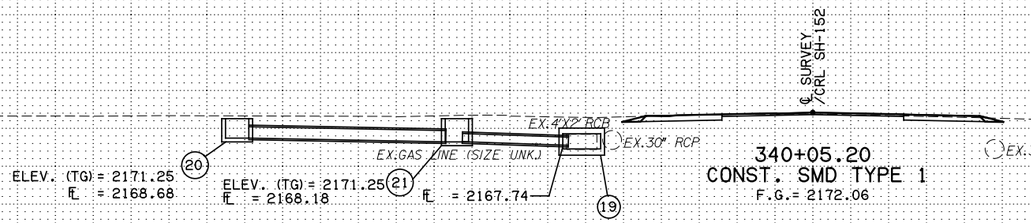
F:\Projects\05-0552\40-Design\Microstation\SH-152\DGN\C\XSEC68_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

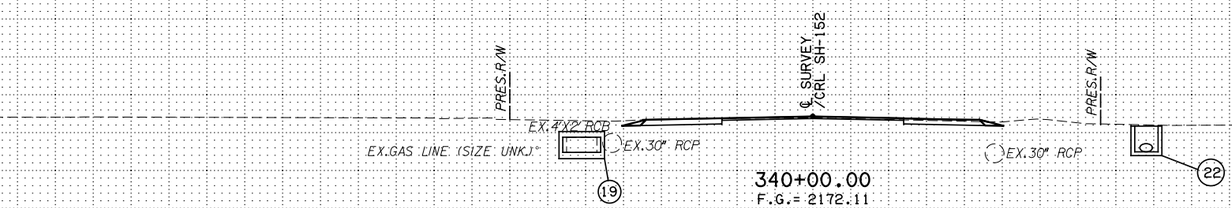
CUT AREA = 19.37 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 3.76 C.Y.
FILL VOL. = 0.00 C.Y.



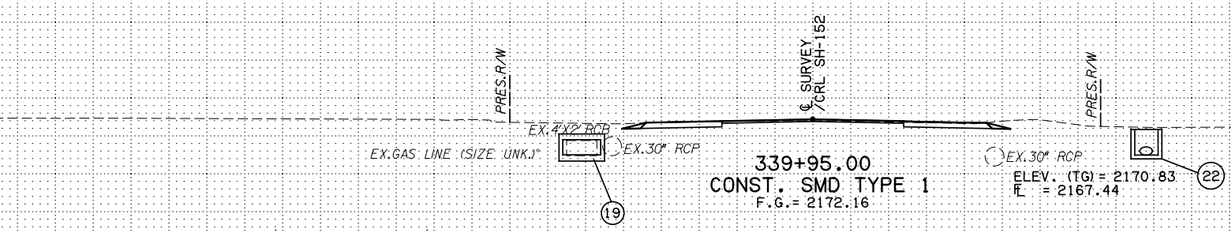
CUT AREA = 19.68 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 3.98 C.Y.
FILL VOL. = 0.00 C.Y.



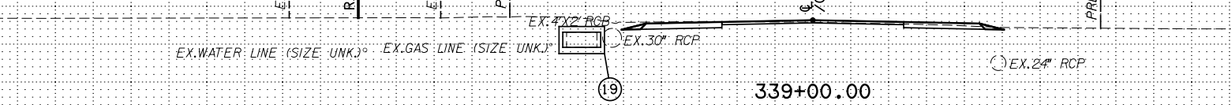
CUT AREA = 23.34 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 78.78 C.Y.
FILL VOL. = 0.00 C.Y.



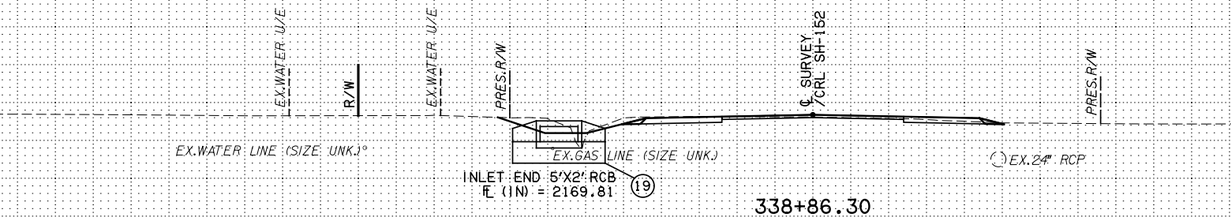
CUT AREA = 21.43 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 13.63 C.Y.
FILL VOL. = 0.59 C.Y.



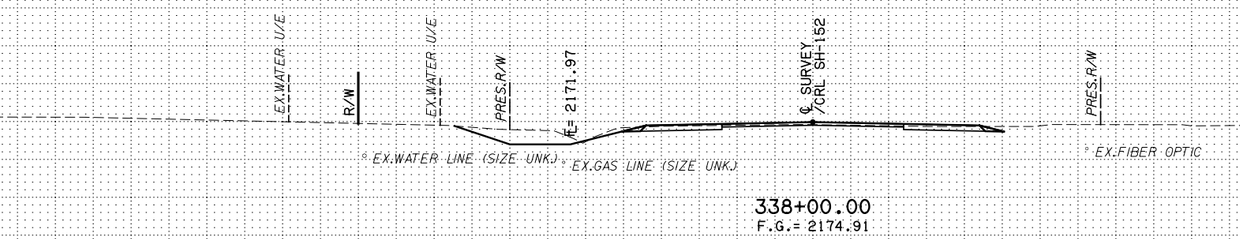
CUT AREA = 32.31 S.F.
FILL AREA = 2.33 S.F.

CUT VOL. = 117.38 C.Y.
FILL VOL. = 3.98 C.Y.



CUT AREA = 41.14 S.F.
FILL AREA = 0.16 S.F.

CUT VOL. = 152.75 C.Y.
FILL VOL. = 9.35 C.Y.



SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X068

150 100 50 0 50 100 150

7/27/2022

12:20:08 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSEC69_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

2185 2180 2175 2170 2165 2160 2155

CUT AREA = 24.17 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 4.57 C.Y.
FILL VOL. = 0.00 C.Y.

R/W | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W | R/W

EX.4'X2' RCB
EX.GAS LINE (SIZE UNK.)
EX.30" RCP
EX.24" RCP
19
23

341+00.00
F.G.= 2170.82

CUT AREA = 25.22 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 54.38 C.Y.
FILL VOL. = 0.95 C.Y.

R/W | PRES.R/W | ℄ SURVEY /CRL SH-152 | PRES.R/W | R/W

EX.4'X2' RCB
EX.GAS LINE (SIZE UNK.)
EX.30" RCP
EX.INLET
19
23

340+95.00
CONST. SMD TYPE 1
F.G.= 2170.92

ELEV. (TG) = 2170.20
℄ W = 2166.44
℄ E = 2165.89

CUT AREA = 22.76 S.F.
FILL AREA = 0.84 S.F.

CUT VOL. = 22.32 C.Y.
FILL VOL. = 0.44 C.Y.

℄ SURVEY /CRL SH-152

EX.4'X2' RCB
EX.GAS LINE (SIZE UNK.)
EX.30" RCP
EX.30" RCP
19

340+33.81
SH-152/SH-30 INTERSECTION
F.G.= 2171.76

CUT AREA = 18.40 S.F.
FILL AREA = 0.00 S.F.

℄ SURVEY /CRL SH-152

ft. ELEV.= 2168.95
EX.18" RCP
END UNKNOWN EX.4'X2' RCB
EX.GAS LINE (SIZE UNK.)
EX.30" RCP
EX.30" RCP
EX.18" RCP
END UNKNOWN
ft. ELEV.= 2167.42
19

340+14.10
EXISTING 18" RCP
(1°43'20.97" LT. FWD. SKEW)
F.G.= 2171.97

CUT AREA = 18.85 S.F.
FILL AREA = 0.00 S.F.

℄ SURVEY /CRL SH-152

EX.4'X2' RCB
EX.GAS LINE (SIZE UNK.)
EX.GAS LINE (SIZE UNK.)
EX.30" RCP
EX.30" RCP
19

340+09.39
F.G.= 2172.02

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X069

150 100 50 0 50 100 150

7/27/2022

12:20:10 PM

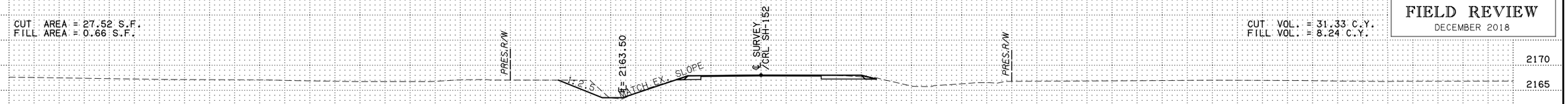
F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\C\XSEC70_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT AREA = 27.52 S.F.
FILL AREA = 0.66 S.F.

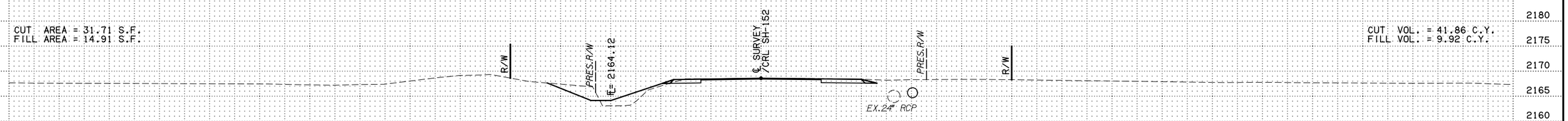
CUT VOL. = 31.33 C.Y.
FILL VOL. = 8.24 C.Y.



342+28.56
END SH-152 CONSTRUCTION JP# 29530(04)
F.G.= 2168.01

CUT AREA = 31.71 S.F.
FILL AREA = 14.91 S.F.

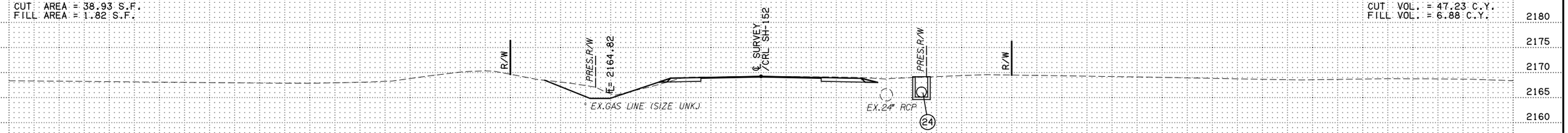
CUT VOL. = 41.86 C.Y.
FILL VOL. = 9.92 C.Y.



342+00.00
F.G.= 2168.55

CUT AREA = 38.93 S.F.
FILL AREA = 1.82 S.F.

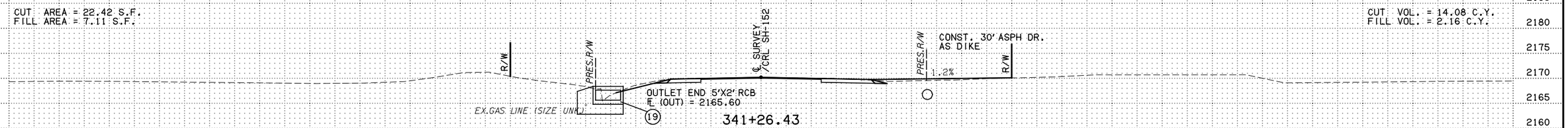
CUT VOL. = 47.23 C.Y.
FILL VOL. = 6.88 C.Y.



341+68.00
CONST. SMD TYPE 1
F.G.= 2169.21

CUT AREA = 22.42 S.F.
FILL AREA = 7.11 S.F.

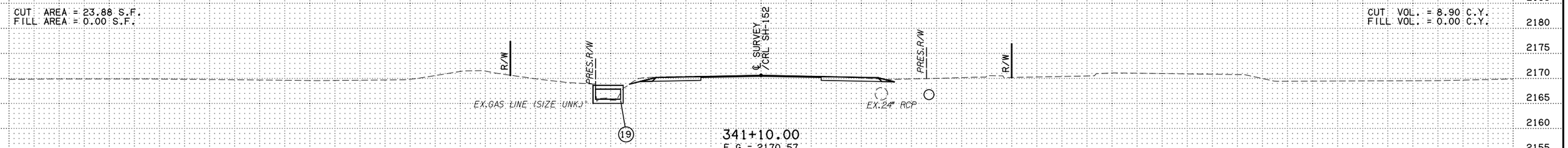
CUT VOL. = 14.08 C.Y.
FILL VOL. = 2.16 C.Y.



341+26.43
CONST. 5'X2' RCB OUTLET LT. AND ASPH. DRIVE RT.
F.G.= 2170.16

CUT AREA = 23.88 S.F.
FILL AREA = 0.00 S.F.

CUT VOL. = 8.90 C.Y.
FILL VOL. = 0.00 C.Y.



341+10.00
F.G.= 2170.57

SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X070

150 100 50 0 50 100 150

7/27/2022

12:20:01 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CXSECTL29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN FIELD REVIEW

DECEMBER 2018

2185 2180 2175 2170 2165 2160 2155

CUT ARE= 7.08 S.F.
FILL ARE= 9.38 S.F.

CUT VOL. = 24.23 C.Y.
FILL VOL. = 13.17 C.Y.

0.3% 1.1%

℄ SURVEY SH-30

EX.GAS LINE (SIZE & DEPTH UNK.)
EX.30" RCP

14+75.30
℄ EXISTING 30" RCP
F.G.= 2171.44

CUT ARE= 5.64 S.F.
FILL ARE= 2.01 S.F.

R/W PRES.R/W ℄ SURVEY SH-30 PRES.R/W PRES.R/W

0.7% 1.4% 1.3% 1.7%

EX.GAS LINE (SIZE & DEPTH UNK.)

(21) (22) (23)

14+59.85
CONST. SMD-TYPE 1 LT. & RT.
(5°40'28.71" RT. FWD. SKEW)
F.G.= 2171.35

ELEV. (TG) = 2170.83
℄ E = 2167.44

ELEV. (TG) = 2170.20
℄ W = 2166.44
℄ E = 2165.89

ELEV. (TG) = 2169.15
℄ W = 2165.09

CUT ARE= 10.30 S.F.
FILL ARE= 0.07 S.F.

CUT VOL. = 31.26 C.Y.
FILL VOL. = 0.13 C.Y.

PRES.R/W ℄ SURVEY SH-30 PRES.R/W

2.0% 2.0%

EX.GAS LINE (SIZE & DEPTH UNK.)

14+00.00
F.G.= 2171.35

CUT ARE= 6.58 S.F.
FILL ARE= 0.00 S.F.

CUT VOL. = 3.13 C.Y.
FILL VOL. = 0.00 C.Y.

PRES.R/W ℄ SURVEY SH-30 PRES.R/W

0.9% 0.8% 1.8% 2.2%

EX.GAS LINE (SIZE & DEPTH UNK.)

13+00.00
F.G.= 2171.80

CUT ARE= 7.45 S.F.
FILL ARE= 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

PRES.R/W ℄ SURVEY SH-30 PRES.R/W

0.9% 1.7% 2.2%

EX.GAS LINE (SIZE & DEPTH UNK.)

12+87.95
BEGIN SH-30 CONSTRUCTION JP# 29530(04)
F.G.= 2171.82

150 100 50 0 50 100 150

SH-30
SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X071

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT ARE= 6.37 S.F.
FILL ARE= 1.26 S.F.

℄ ELEV. HDWLL
= 2169.81

0.7%

℄ ELEV. BEND
= 2169.75

18

℄ ELEV. = 2167.74

℄ ELEV. = 2167.24

℄ SURVEY
SH-30

0.2%

2.0%

2.5%

EX.GAS LINE (SIZE & DEPTH UNK)

℄ ELEV. = 2165.60

15+30.41
CONST. 5'X2' RCB
F.G.= 2171.58

CUT VOL. = 4.13 C.Y.
FILL VOL. = 0.30 C.Y.

CUT ARE= 5.99 S.F.
FILL ARE= 1.12 S.F.

℄ SURVEY
SH-30

0.1%

2.0%

EX.GAS LINE (SIZE & DEPTH UNK)
EX.30" RCP

15+26.37
℄ EXISTING 30" RCP
F.G.= 2171.58

CUT ARE= 9.50 S.F.
FILL ARE= 0.00 S.F.

CUT VOL. = 0.00 C.Y.
FILL VOL. = 0.00 C.Y.

SH-152

℄ SURVEY
SH-30

1.1%

1.3%

SH-152

EX.GAS LINE (SIZE & DEPTH UNK)

15+11.99
END SH-30/SH-152 INTERSECTION
F.G.= 2171.52

CUT ARE= 4.51 S.F.
FILL ARE= 0.37 S.F.

CUT VOL. = 2.72 C.Y.
FILL VOL. = 2.29 C.Y.

SH-152

℄ SURVEY
SH-30

1.0%

1.0%

1.2%

1.4%

SH-152

EX.GAS LINE (SIZE & DEPTH UNK)

14+87.99
BEGIN SH-30/SH-152 INTERSECTION
F.G.= 2171.52

SH-30
SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X072

150 100 50 0 50 100 150

7/27/2022

12:20:15 PM

F:\Projects\015-0552\40-Design\Microstation\SH-152\DGN\CVSEC73_29530.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FINAL PLAN
FIELD REVIEW
DECEMBER 2018

CUT ARE= 7.18 S.F.
FILL ARE= 0.00 S.F.

CUT VOL. = 28.27 C.Y.
FILL VOL. = 0.00 C.Y.

PRES.R/W | 0.1% | ℄ SURVEY SH-30 | 0.9% | 2.4% | PRES.R/W

EX.GAS LINE (SIZE & DEPTH UNK.) * EX.GAS LINE (SIZE & DEPTH UNK.)

17+00.00
END SH-30 CONSTRUCTION JP# 29530(04)
F.G.= 2171.51

CUT ARE= 8.09 S.F.
FILL ARE= 0.00 S.F.

CUT VOL. = 6.99 C.Y.
FILL VOL. = 0.01 C.Y.

PRES.R/W | 0.5% | ℄ SURVEY SH-30 | 1.3% | 2.7% | PRES.R/W

* EX.GAS LINE (SIZE & DEPTH UNK.)

16+00.00
F.G.= 2171.54

CUT ARE= 7.65 S.F.
FILL ARE= 0.03 S.F.

CUT VOL. = 7.94 C.Y.
FILL VOL. = 0.41 C.Y.

PRES.R/W | 0.6% | 0.6% | ℄ SURVEY SH-30 | 1.4% | 2.7% | PRES.R/W

(19) * EX.GAS LINE (SIZE & DEPTH UNK.)

ELEV. (TG) = 2171.25
℄ E = 2168.68

15+76.00
CONST. SMD-TYPE 1
F.G.= 2171.56

CUT ARE= 7.21 S.F.
FILL ARE= 0.73 S.F.

CUT VOL. = 3.17 C.Y.
FILL VOL. = 0.41 C.Y.

R/W | PRES.R/W | 0.1% | 0.6% | ℄ SURVEY SH-30 | 1.7% | 2.5% | PRES.R/W

(20) * EX.GAS LINE (SIZE & DEPTH UNK.)

ELEV. (TG) = 2171.25
℄ E = 2168.18

15+47.14
CONST. SMD-TYPE 1
F.G.= 2171.57

CUT ARE= 6.65 S.F.
FILL ARE= 1.04 S.F.

CUT VOL. = 1.97 C.Y.
FILL VOL. = 0.34 C.Y.

0.9% | ℄ SURVEY SH-30 | 0.3% | 2.1% | PRES.R/W | 2.3%

EX.GAS LINE (SIZE & DEPTH UNK.)

15+34.80
℄ GAS UTILITY LINE CROSSING
F.G.= 2171.58

SH-30
SH-152 BECKHAM & ROGER MILLS COUNTIES
State Job No. 29530(04) Sheet No. X073

150 100 50 0 50 100 150